# TABLE OF CONTENTS

1.0 Executive Summary ................................................................. 1

2.0 Table of Recommendations ..................................................... 2

3.0 Introduction .............................................................................. 3

3.1 Audit Process ........................................................................... 3

3.2 Management Unit Description ................................................ 3

3.3 Current Issues ......................................................................... 5

3.4 Summary of Consultation and Input to Audit.......................... 6

4.0 Audit Findings .......................................................................... 7

4.1 Commitment ........................................................................... 7

4.2 Public Consultation and Aboriginal Involvement...................... 7

4.3 Forest Management Planning .................................................. 9

4.4 Plan Assessment and Implementation ....................................... 12

4.5 System Support ...................................................................... 12

4.6 Monitoring ............................................................................. 12

4.7 Areas of Concern .................................................................... 12

4.8 Harvest .................................................................................. 13

4.9 Silviculture ............................................................................ 13

4.10 Forest Management Plan ......................................................... 9

4.11 Areas of Concern .................................................................. 12

4.12 Harvest ................................................................................ 13

4.13 Silviculture .......................................................................... 13

4.14 Plan Assessment and Implementation ..................................... 12

4.15 System Support ..................................................................... 12

4.16 Monitoring ............................................................................ 12

4.17 Compliance ............................................................................ 16

4.18 Annual Reports ....................................................................... 17

4.19 Achievement of Management Objectives and Forest Sustainability .......................................................... 17

4.20 Contractual Obligations .......................................................... 20

4.21 Conclusions and Licence Extension Recommendation ......... 21

Appendix 1 – Recommendations .................................................. 23

Appendix 2 – Management Objectives Tables ............................... 29

Appendix 3 – Compliance with Contractual Obligations ................ 33

Appendix 4 – Audit Process ............................................................ 35

Appendix 5 – List of Acronyms ....................................................... 42

Appendix 6 – Audit Team Members and Qualifications ................. 43
LIST OF TABLES

Table 1. Summary table of recommendations. ............................................................................. 2
Figure 1. Map of the Martel Forest in Northeastern Ontario (provided by MNR). ..................... 4
Table 2. Managed Crown Productive Forest Units (Area & Percentage). ................................. 5
Table 3. Forest renewal treatments (planned and actual) expressed as a ratio of harvest area 2007 - 2012. .............................................................................................................. 15
Table 4. Compliance inspections carried out by the company and MNR and their results ..... 17

LIST OF FIGURES

Figure 1. Map of the Martel Forest in Northeastern Ontario (provided by MNR). ..................... 4
Figure 2: Planned versus actual forest renewal treatments ................................................................. 16
1.0 EXECUTIVE SUMMARY

This report presents the findings of an Independent Forest Audit (IFA) of the Martel Forest (SFL #550390) conducted by KBM Forestry Consultants Inc. for the period April 1, 2007 to March 31, 2012. This audit assessed the forest management activities of Tembec and the Ontario Ministry of Natural Resources (MNR), Chapleau District.

The audit conformed to the requirements of the 2012 Independent Forest Audit Process and Protocol (IFAPP) prepared by the MNR. The IFA process is based on an extensive evaluation of eight basic audit principles. Each principle has associated criteria, which are examined in detail to determine whether the management of the Forest was in compliance with provincial legislation, regulations and policies that were in effect during the audit term.

The audit team reviewed documentation prior to the site visit. The team also spent a week in Chapleau, including two field days where they toured the Forest by road and by air and met with the Local Citizens’ Committee (LCC) and representatives of local Aboriginal communities. Some follow-up meetings and interviews were completed after the site visit.

The audit team found that management of the Forest was generally in compliance with the legislation, regulations and policies that were in effect during the audit term and that the company complied with the terms and conditions of the Sustainable Forest Licence (SFL). Some areas of improvement were noted and in total, the audit team made two recommendations directed to Chapleau District MNR related to public consultation and one recommendation directed to Tembec related to slash management.

This audit resulted in the following findings:

- Forest management planning activities during the audit term adhered to the Forest Management Planning Manual (FMPM) requirements;
- The LCC was properly constituted and provided advice on forest management planning and implementation;
- Local Aboriginal communities are sharing in the benefits of resource management and the company is making ongoing efforts to build productive working relationships;
- Identified non-timber values (e.g. fisheries, wildlife, cultural) were adequately protected through sound planning and proper implementation of Area of Concern prescriptions;
- Efforts were made to accommodate other forest uses (traplines, tourism, recreation);
- Environmental impact is being minimized through careful planning and operations;
- The forest structure, composition and pattern objectives are generally being met or will likely be met over the long term;
- Forest renewal programs are at pace with harvest levels and achieving the desired results for the most part; and,
- The company met its contractual obligations under the Sustainable Forest Licence.

On the basis of these findings, it was recommended that the Sustainable Forest Licence (SFL #550390) be extended for a further five years.

Laird Van Damme, M.Sc.F., R.P.F.

Lead auditor on behalf of the audit team
2.0 TABLE OF RECOMMENDATIONS

Recommendations are numbered with reference to IFAPP numbering system.

Table 1. Summary table of recommendations.

<table>
<thead>
<tr>
<th>Recommendation on Licence Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation 8.2.7¹:</td>
</tr>
<tr>
<td>The audit team concludes that management of the Martel 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 SFL held by Tembec. Forest sustainability is being achieved, as assessed through the IFAPP. The audit team recommends that the Minister extend the term of SFL #550390 for a further five years.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendations Directed to SFL/District MNR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation 2.1.1.1:</td>
</tr>
<tr>
<td>The LCC, in cooperation with Chapleau District MNR, should expand its recruitment efforts and focus on diversifying the Committee’s membership.</td>
</tr>
</tbody>
</table>

| Recommendation 2.5.1.1:                     |
| Chapleau District MNR should review its consultation approach with First Nations communities which have interests on the Martel Forest to assess whether the level and type of communications with respect to forest management is satisfactory. |

| Recommendation 4.4:                        |
| Tembec should reduce the impact of slash on the Martel Forest to be consistent with its corporate policies and the FMP slash management strategy. Tembec should report results of its slash management efforts in the Annual Reports. |

<table>
<thead>
<tr>
<th>Recommendations Directed to Regional/ Corporate MNR</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

Note: Recommendations are numbered to cross reference the IFAPP procedure.
3.0 INTRODUCTION

3.1 Audit Process

KBM Forestry Consultants conducted an independent forest audit on the Martel Forest (the Forest) as required under the Crown Forest Sustainability Act (S.O. 1994, c. 25 sec 26(3)) (CFSA) and EA Declaration Order MNR 71-2 condition #28. The audit assessed the implementation of the 2006-2026 Forest Management Plan (FMP) for the period April 1, 2007 to March 31, 2011 as well as the planning of the 2011-2021 FMP and the first year of its implementation (i.e. April 1, 2011 to March 31, 2012). The on-site portion of the audit occurred from September 24-28, 2012 inclusive with document examination and interviews taking place prior, during, and subsequent to this period.

IFAs are guided by a set of eight principles as described in the Independent Forest Audit Process and Protocol (IFAPP). The following sections that describe audit findings are organized by each principle.

The report is intended to honour the need for accountability to the public regarding the management of its forests, and to provide general and technical feedback to SFL holders, MNR personnel and other key users of the Forest. The main body of the report is developed to inform the public. Technical details are provided in appendices to help the licensee and MNR develop action plans.

Recommendations arise from audit team observations of material non-conformances, or may be developed to address situations in which the audit team identifies a significant lack of effectiveness in forest management activities. All recommendations made in this report are described in Appendix 1 and summarized above in Section 2. A review of the achievement of objectives is summarized in Appendix 2 and contractual obligations are found in Appendix 3. More detailed information on the audit process is provided in Appendix 4. A list of acronyms is presented in Appendix 5. Audit team members and their qualifications are presented in Appendix 6.

3.2 Management Unit Description

The Martel Forest is part of the Ministry of Natural Resources Chapleau Administrative District, Northeast Region. The present management unit boundaries of the Martel Forest (Figure 1) were established on March 23, 2006 when the former Superior Forest and J.E. Martel Forest were formally amalgamated. These two forests had been managed under two separate SFLs prior to the 2006 FMP. The Superior portion of the Forest has been managed under its own forest management plans, while the Martel portion of the Forest has most recently been managed with the neighbouring Pineland Forest as part of the 2001-2021 Pineland-Martel Forest Management Plan. Prior to 2001, the Martel portion was managed under its own forest management plans.

In March 2005, Domtar permanently closed its mill in Chapleau and an announcement was made that the J.E. Martel Forest SFL would be transferred to Tembec and that there were plans to formally amalgamate the Superior and J.E. Martel forests and to administer a single SFL for the combined unit. On February 28th, 2008, a single SFL was issued for the newly-amalgamated Martel Forest.
The total productive forest for all ownerships equals 1,008,412 hectares. Of this area 864,078 hectares is managed Crown productive forest. The area in Provincial Parks and Conservation Reserves totals 139,995 hectares. There has been little change in ownership on the Martel Forest from the 2006 FMP until now.

There are 15 forest units (Table 2), of which 14 will have active forest management treatments applied. The non-managed forest unit (BOG – lowland black spruce bog, site class 4) is defined primarily for habitat area tracking purposes.
Table 2. Managed Crown Productive Forest Units (Area & Percentage).

<table>
<thead>
<tr>
<th>Forest Unit</th>
<th>Area</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red, White Pine Shelterwood (PW1)</td>
<td>1,709</td>
<td>0.2</td>
</tr>
<tr>
<td>Red, White Pine Seedtree/Clearcut (PRW)</td>
<td>4,324</td>
<td>0.5</td>
</tr>
<tr>
<td>Other Hardwood (OH1)</td>
<td>18,105</td>
<td>2.1</td>
</tr>
<tr>
<td>Spruce Bog (BOG)</td>
<td>1,313</td>
<td>0.2</td>
</tr>
<tr>
<td>Black Spruce Lowland (SB1)</td>
<td>54,851</td>
<td>6.3</td>
</tr>
<tr>
<td>Jack Pine (PJ1)</td>
<td>90,961</td>
<td>10.5</td>
</tr>
<tr>
<td>Lowland Conifer (LC1)</td>
<td>75,323</td>
<td>8.7</td>
</tr>
<tr>
<td>Pine-Spruce (PJ2)</td>
<td>55,663</td>
<td>6.4</td>
</tr>
<tr>
<td>Spruce-Pine (SP1)</td>
<td>71,070</td>
<td>8.2</td>
</tr>
<tr>
<td>Spruce-Fir (SF1)</td>
<td>45,686</td>
<td>5.3</td>
</tr>
<tr>
<td>Poplar (PO1)</td>
<td>74,695</td>
<td>8.6</td>
</tr>
<tr>
<td>Birch-Poplar (BW1)</td>
<td>113,672</td>
<td>13.2</td>
</tr>
<tr>
<td>Jack Pine Mixed (MW1)</td>
<td>60,746</td>
<td>7.0</td>
</tr>
<tr>
<td>Spruce-Poplar Mixed (MW2)</td>
<td>67,549</td>
<td>7.8</td>
</tr>
<tr>
<td>Birch Mixed (MW3)</td>
<td>128,412</td>
<td>14.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>864,078</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The local economy has a very high dependency on the Martel Forest. The sawmilling operations of Tembec (Chapleau sawmill) combined with the logging and forest management operations represents one of the largest employment sectors in Chapleau.

There are five Aboriginal communities with interests on the Martel Forest, including:

- Brunswick House First Nation
- Chapleau Cree First Nation
- Chapleau Ojibwe First Nation
- Michipicoten First Nation
- Missanabie Cree First Nation

Resource-based tourism is also an important industry in the Chapleau area. There are 48 tourism establishments on the Martel Forest of which 37 are registered with the Ministry of Tourism. The District has 87 designated tourism lakes. The list of lakes was established over 25 years ago in the District Land Use Guidelines (1983), which outline (along with the Crown Land Use Atlas) what type of activities are permitted on and around the lakes.

### 3.3 Current Issues

The audit focused on the following high priority aspects of current issues as determined through consultation with the auditees and a review of the 2006 and 2011 FMPs:
• Utilization, including low hardwood utilization given the lack of hardwood markets in the 2006 FMP; and,
• Access and tourism prescriptions: In both the 2006 and 2011 FMPs, there were concerns regarding access in the vicinity of tourism lakes, which led to the formal Issue Resolution (IR) process being implemented to resolve these. Prescriptions were developed accordingly.

In addition, issues identified by local First Nations were as follows:

• Lack of regard or understanding of First Nations values and their protection, including insufficient funds for values mapping and cultural understanding of the values’
• Lack of regard for the effects of forestry on tralines’
• Concerns raised regarding cedar harvesting and management – currently in litigation, specifically around the cedar wood supply tendering process;
• Concerns regarding the management of the Forest not being sustainable – too much being disturbed in addition to specific concerns with monoculture silviculture, rutting, and roadside utilization;
• Concern with the use of herbicides to control competing vegetation;
• Concern that past and current forestry practices have led to decline in the moose population (and other wildlife species) in the area;
• Opposed to the use of parks and protected area landscapes within the larger landscape calculations within the FMP;
• MNR not undertaking enough compliance inspections of forestry operations;
• Northeast Superior Regional Chiefs’ Forum (NSRCF) – Do not like the forestry framework in Ontario (CFSA, Forest Management Planning Manual, etc.); and,
• NSRCF – would like to manage the entire area within the Chapleau Crown Game Preserve and change the entire forest management framework in Ontario.

Issues identified by the public were of two types, : 1) site specific, and linked to specific forest management practices, or 2) landscape level, based on certain land-use values. The former was addressed by examining specific sites to ensure the protection of values like bear bait sites and water bodies were accounted for by properly planning, marking and following prescriptions for areas of concern (AOCs) identified in the plan. The land use issues are reviewed in section 4.3 of this audit report (Forest Management Planning).

3.4 Summary of Consultation and Input to Audit

KBM used several different strategies for engaging input to the audit process. Letters were mailed to numerous stakeholders advising of the audit and included a one-page survey. The survey was also available to the general public on the KBM website (www.kbmrg.com).

Newspaper ads were published in three area newspapers (Chapleau Express, Wawatay and Algoma News Review) prior to the pre-audit meeting advising the public of the upcoming audit, identifying the purpose of the audit and inviting the public to submit comments to the LCC Chair or directly to KBM.

Letters were sent to five Aboriginal communities on the contact list, inviting them to participate in the IFA for the Martel Forest. The letter explained that their input is welcomed and encouraged them to contact KBM if they wished to participate in the audit or if they required more information before making a decision. The Chapleau Métis Council was also contacted to inform them of the audit process and solicit their input. Phone calls were made to community representatives and in-person interviews were conducted. In addition, the Lead Auditor accepted an invitation by the NSRCF to meet with the Chiefs of
the six First Nations\(^2\) that comprise the organization to discuss their concerns. Four of the six First Nation communities represented on the NSRFC have direct interests on the Martel Forest: the Chapleau Cree, Missanabie Cree, Michipicoten and Brunswick House First Nations.

KBM developed a questionnaire that was circulated to planning team members to assess their perceptions regarding the effectiveness of the planning process. The results of the survey provided additional focus to the IFAPP prescribed interview procedures.

A more detailed description of consultation and input to the audit is included in Appendix 4.

4.0 AUDIT FINDINGS

4.1 Commitment

The Province has documented its commitment to sustainable forestry principally through the CFSA. MNR maintains a public website where these commitments are available.\(^3\) Tembec holds the SFL for the Martel Forest and has taken further steps to voluntarily certify all of their operations to the international Forest Stewardship Council (FSC) third-party forest certification standard. In complying with provincial laws and policies and taking the extra step to certify their operations, Tembec has demonstrated a commitment to sustainable forest management.

4.2 Public Consultation and Aboriginal Involvement

The MNR met its commitments to public consultation as described in the 2009 Forest Management Planning Manual FMPM. A key aspect of public consultation is the establishment and participation of a LCC.

The LCC for the Martel Forest was established over a decade ago by the District Manager and has functioned as a standing committee since that time. One of the ongoing challenges identified in interviews was LCC membership and attendance. The LCC indicated that efforts are being made to accommodate members’ schedules by experimenting with different meeting times and days to find a solution.

With respect to the composition of the LCC, half of the current membership has a direct affiliation with the forest industry in Chapleau. The need to diversify the Committee’s membership was noted in a meeting attended by the auditors and in the LCC minutes. For example, there was a recommendation from the LCC to the District Manager to try to get participation from the remote tourism industry. The LCC minutes also noted the lack of First Nation participation.

MNR and the LCC indicated that recruitment efforts had been made but that it was challenging to increase the membership in a small community like Chapleau. However, it is possible to recruit new members from farther afield with the approval of the District Manager. It is recommended that the LCC, in cooperation with MNR, renew its recruitment efforts and with a focus on diversifying its membership (Appendix 1).

During the audit week, the audit team had the opportunity to participate in an LCC meeting. A discussion with the LCC that explored various topics identified a lack of clarity amongst members regarding the

\(^2\) Chapleau Cree, Missanabie Cree, Michipicoten, Brunswick House, Pic Mobert, Horne Payne First Nations

reimbursement of expenses. According to some members, they had not been reimbursed to date by MNR for expenses related to participation in LCC meetings. Other members indicated that they were opposed to payment for expenses. The MNR responded that it was unaware of an issue regarding expenses, but would act in accordance with the Terms of Reference, which state: “LCC members are reimbursed by MNR for reasonable out-of-pocket expenses in connection with their participation.” The current membership is comprised mainly of local residents, so it is not a significant issue for most participants. However, it is relevant for any members who have to travel to meetings and it may become relevant if recruitment efforts identify new members outside of the community of Chapleau. Removing any potential barriers to participation may assist in the Committee’s recruitment efforts.

There are five First Nations that have interests on the Martel Forest, as listed in section 3.2. Of those, the Chapleau Ojibwe First Nation, Chapleau Cree First Nation, and Misanabie Cree First Nation provided input to the audit.

Tembec has been actively making efforts to build its working relationships with local Aboriginal communities. This includes opportunities for employment in Tembec facilities, in-kind support for community projects, invitations to training events and participation of Tembec staff at community events. These efforts are ongoing and have improved working relationships. The company’s work, along with MNR’s initiatives, was properly documented in District Reports (as per MOE Terms and Conditions; #34).

As part of the FMP process, the MNR has a duty to consult with First Nations and ensure that the forest management planning process includes proper documentation and protection for identified Aboriginal values. Each FMP requires the development of an Aboriginal Background Information Report (ABIR) to document Aboriginal values on the forest. For the 2011-2021 FMP, four communities worked together to produce a joint report (Missanabie Cree, Chapleau Cree, Brunswick House and Michipicoten) and Chapleau Ojibwe First Nation produced its own report.

Interviews confirmed that ABIRs were completed with assistance and funding from MNR. However, it was also noted that the current FMP approach to values protection does not always adequately capture some (e.g. area-based) values like burial sites or sacred areas. Some observed that First Nations have a fundamentally different understanding of what constitutes sustainable use of the forest resource and expressed a frustration with the limited scope of the forest management planning process.

In this respect, several communities (including some with interests on the Martel Forest) had come together to form the Northeast Superior Regional Chiefs’ Forum to address land and resource issues at a regional level. The lead auditor met with the NSCRF by request to discuss some of the issues of concern. Among other things, these included: the poor state of social well-being of First Nations communities and the lack of benefit derived from forest management; the intensive nature of forestry activities on the Martel Forest, including the use of herbicides; and the lack of decision-making authority that the First Nations have over management activities that impact their treaty rights. The NSCRF continues to engage with MNR and Tembec on these matters, although there remains a difference of opinion regarding the sustainability of the current forest management approach.

The FMP planning process does offer an opportunity for the continued exchange of information and perspectives on forest management decisions. Three communities had representatives that participated on the last planning team, although they noted the process was so technical at times that it was difficult to understand the information presented.
In a previous planning cycle (development of the 2006 FMP), MNR had established a “First Nations Task Team”, which was identified as a best practice in the preceding IFA. The Task Team had since evolved into the Chapleau Area Aboriginal Resource Team (CAART). While not specifically mandated to function as a forest management planning committee, the CAART did provide an opportunity to review FMP material and discuss other resource management issues in the District. The CAART met quite frequently from 2008-2010 (e.g. during the preparation of the 2011-2021 Martel FMP). Following completion of the Martel FMP, CAART activity dropped to one meeting in 2011 and none in 2012. This was attributed in part to funding and staffing constraints at Chapleau District MNR.

While the CAART is not part of a formal forest management consultation approach, it did provide a useful venue for communication. It was observed that “day-to-day” communications with MNR had decreased since the completion of the 2011-2021 FMP, although communities continue to receive the required FMP notifications. While MNR is still meeting its legal requirements to communicate with First Nations on forest management issues, the suspension of CAART activity has reduced the frequency and effectiveness of those communications. In light of the lack of funding for the CAART, it is suggested that Chapleau District MNR review its consultation approach to assess whether the level and type of communications with respect to forest management is satisfactory (see also recommendation 2.5.1.1, Appendix 1).

Section 35(2) of the Constitution Act, 1982 defines Aboriginal as “Indian, Inuit and Métis peoples of Canada”. At the time the 2011-2021 FMP was being prepared, the Métis Nation of Ontario (MNO) contacted MNR to request a seat on the planning team as a rights-bearing community on the Martel Forest. MNR responded to several letters from the MNO and the Historic Sault Ste. Marie Traditional Territory Consultation Committee (most recently in August of 2011) with offers to meet with the MNO and/or the Committee to discuss Métis interests on the Forest and to establish the basis for the rights assertions (i.e. as per the Powley test, a 2003 case in which the Supreme Court set out the basic means to identify Métis rights-holders). Interviews with MNR and a representative of the MNO suggest that the definition of Métis interests on the Martel Forest is an ongoing process to which MNR is responding as required.

4.3 Forest Management Planning

Forest Management Plan

Planning Team

Survey results, interviews with representatives of MNR, Tembec and the LCC show that the planning team had sufficient representation of interests, skills and resources in developing the forest management plan.

2011 FMP Development and Content

The development of the 2011-2021 Forest Management Plan met the requirements of the 2009 Forest Management Planning Manual. The document is thorough and well written. The MNR draft plan review had a small number of required alterations. Although the plan was submitted several days late, the plan generally progressed along the required timelines.

On other forests, the planning team terms of reference is updated as certain plan components are finalized in order to demonstrate how timelines have been met and to improve project management in future plans. Tembec should consider this approach in future plans.
The main documents and all supporting documents are rich in content and considerable effort went into making the document easy to read. Noteworthy are the efforts made to show how public input into the desired forest condition section of the plan was supported by plan objectives.

There was clear evidence of professionalism and dedication exhibited by all members of the planning team. This reflects favourably upon Tembec and MNR as organizations that care about the Forest and support their professional staff even under the most difficult financial challenges to the forest industry seen in Ontario in recent years.

The most recent forest resources inventory (FRI) on the Martel Forest was completed in 1995. This inventory was based on aerial photography acquired in the summer of 1992. The inventory was updated using actual depletion records based upon supplemental aerial photography for all areas harvested between 1995 and 2008, the year the planning process began the analysis in support of the Long Term Management Direction (LTMD).

A new enhanced forest resources inventory (eFRI) is planned to be completed by 2017 from broadly banded digital resolution imagery acquired in 2008. The schedule will support the development of the 2021 plan, although the imagery will be somewhat outdated. MNR had initially planned ten-year cycles for the new eFRIs, but this will not be the case. Although the current program is has had delays, it will produce better information than has traditionally been delivered by FRI because of the improved image quality.

MNR placed a focus on values updating during planning. Survey areas were prioritized based on 2006 contingency areas, unidentified nests and preliminary 2011 harvest allocations. Three stick nest surveys and a moose aquatic feeding area (MAFA) survey were conducted during separate flights. The status of stick nests in particular can change and new nests appear as old ones fall into disuse; thus the need for current information. During operations, company staff also played a role in identifying new values or updating existing values information. MNR maintains the information digitally. Point specific values such as nests, MAFAs, water courses, and cottages were protected by applying appropriate AOC prescriptions.

Habitat modeling was conducted to ensure habitat for selected wildlife species, including martens, remained above acceptable lower limits. Moose emphasis areas were also identified, base on direction in the Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales (Stand and Site Guide). Twelve species at risk (SAR) were listed as being relevant to the Martel Forest based on range data. Bald eagles are known to occur on the Forest; nests are mapped and an AOC prescription is in place. The FMP calls for prescriptions to be developed and implemented for any remaining SAR, should their presence be confirmed on the Forest.

The 2011-2021 FMP planning team worked on developing prescriptions to mitigate the effects of forestry operations on tourism lakes. The plan features an AOC prescription (FMP Table 10, AOC 6) developed to address some of the long-standing conflicts between remote based tourism and forestry. Chapleau District MNR presented a draft prescription for remote tourism lakes, which consists of a 120 metre reserve, a 400 metre no roads zone and a 1000 metre road decommissioning zone (all extending from the lake), as well as viewscape protection and a harvest timing restriction within 1000 metre of the lake.

Tembec and MNR made concerted efforts to work with tourism outfitters during planning, including offering opportunities for Resource Stewardship Agreements (RSAs) to tourism operators. No RSAs have been negotiated to date, due to lack of uptake from operators on the Forest. The company and MNR also communicated closely with operators during the development of prescriptions for tourism lakes. Because many scheduled allocations in the 2011-2021 FMP are located near lakes, the company reviewed these with the outfitters and developed lake-specific directions where appropriate. Despite these efforts, the FMP did go into the IR process over concerns brought forward by a remote tourism operator. Further refinements to lake-specific prescriptions were made to address the concerns raised, averting further progression of the IR to a bump-up request (i.e. request for an individual Environmental Assessment).
Interviews with a sample of tourism operators reflect the ongoing frustration with the impacts of forestry activities on their business interests. This is a common challenge in many areas of the province, where tourism and forestry overlap as land uses with different requirements. This is particularly true where maintaining a remote quality is important. Under these circumstances, the planning team was successful in addressing these land use issues to the extent that is possible within the scope of the FMP process.

**Model Development and Application Leading to Long Term Management Direction**

The determination of sustainability and setting the LTMD for the Forest is an iterative process of public engagement and analysis using decision-support tools including the MNR’s Strategic Forest Management Model (SFMM). The planning team took full advantage of all resources and decision support tools developed by MNR’s science-based institutions (e.g. Centre for Northern Forest Ecosystem Research) and the Forestry Research Partnership (FRP). SFMM was used for scoping runs. Then Patchworks (a sustainable forest management optimization model) was calibrated, based on some of these runs, and a strategic LTMD was developed using the Patchworks model. Additional elements were considered such as road maintenance costs to create an operational LTMD.

The planning team invested considerable time and effort in calibrating the models, applying them and interpreting outputs. Plan text and tables provided a consistent and accurate description of model inputs and outputs. Plan text and associated documents (e.g. analysis package) accurately described the model assumptions and results from iterative cycles of analysis. The result is a very thorough documentation of scoping analysis and investigation of individual objectives leading to the LTMD for the Forest, as required under the FMPM (2009). The package also included novel ways of presenting large amounts of information (e.g. time series tables showing ratios of cover and serial stages by planning terms across several scenarios). This approach is among the most thoughtful and detailed analyses of forest management options among those reviewed by the audit team members over the last 15 years in Ontario.

**Operational Planning**

A few other forest management planning processes in Ontario have included supplemental analysis, using tools like Patchworks, to develop better operational plans. The 2011 FMP for the Martel Forest represents one of the more successful applications of spatially explicit forest planning using Patchworks and shows the strongest linkages between strategic and operational planning. Some excellent examples of this linkage between operational and strategic planning include:

- Forest silviculture intensity zones;
- Block size distribution targets, minimum road maintenance and road construction costs across all future terms to minimize “area high grading” and to better consolidate harvest patches;
- Operational deferrals;
- Identification of Large Landscape Patches – Moose Emphasis Area identified by MNR biologists where tracked in the analysis; and,
- Marten guidelines were met using dynamic boundaries across the simulated time horizon that helped minimize the negative impacts on wood supply associated with traditional constraints using SFMM.

Harvest area selection criteria were well documented and designed to help address challenges of low harvest utilization on the management unit. The criteria provided for continuity of harvest blocks, utilized existing access, and improved block size. The audit team has recommended the use of tools like Patchworks on previous audits and suggests MNR encourage the use of these tools in future plans on other forest management units.
The plan also incorporated a procedure to follow when hardwood markets are limited (modified utilization). These measures helped mitigate the negative effects of depressed markets and low timber prices on harvest utilization and forest renewal programs.

**Annual Work Schedules**

Annual Work Schedules (AWSs) were developed in a manner consistent with the operational planning elements of both the 2006 and 2011 FMPs and met the requirements of the FMPM.

**4.4 Plan Assessment and Implementation**

**Access**

The Martel Forest is well accessed network of primary and branch roads and, as a result, its road construction program is relatively small and its road maintenance program relatively high. Roads and watercrossings are monitored in accordance with the company’s compliance plan. The plan calls for issues to be reported using the FOIP system and MNR approval to be sought before repair work is done.

Twenty road and water crossings of 162 installed during the audit period were examined from the air and on the ground. All had been built, maintained and/or removed in accordance with the FMP. The watercrossings that were inspected were of a high standard. All of the culverts were of proper size and placement, in good condition, properly installed and with stable banks, well armored with rip-rap. The removals showed proper water diversion, stable banks and no evidence of soil movement into the water.

No environmental impacts were noted by the audit team at any of the audited water crossings. The standards of culvert installation were very high. One portable bridge had road sand covering the deck, although none was entering the water. This bridge was missing three of its four corner hazard markers but the bridge location was quite obvious and the bridge itself was slated for removal. The company representatives were not aware of the situation, which they said would be corrected with the bridge’s imminent, scheduled removal. One forestry aggregate pit had not been cleared and sloped as per requirements. Tembec is planning corrective actions to address the current deficiency.

Tembec has made efforts to be pro-active on decommissioning roads in access-sensitive areas (e.g. with high tourism values) and is experimenting with different strategies to determine which methods are most effective for restricting access to remote tourism lakes. As one example viewed by the audit team, Tembec created berms and piled slash at near Bonar and Schewabic Lake to discourage road use. This treatment appeared to be effective.

Three of the water crossings examined in the field were installed using MNR roads funding and all were constructed to a high standard. The company invoices were examined and were of sufficient detail to allow MNR to determine whether the billing was correct. The invoice provided the road name, crossing number, equipment, machine hours and rates and a company signature.

**Areas of Concern**

AOCs are identified during the planning process to protect specific values such as MAFAs, riparian zones or features that have or potentially have cultural heritage significance. AOCs have specific prescriptions depending upon the value of interest. AOCs are clearly marked on operational planning maps and on the ground by using ribbons. All AOCs examined by the audit team were consistent with the FMPM and standards in applicable planning guides. The AOCs appear to be effective in protecting the values identified in the plan and concerns raised by the public to the attention of the audit team.
**Harvest**

Most harvest operations on the Forest are done full-tree by feller-bunchers and grapple skidders. Only a small number of the sampled locations were cut-to-length with the slash left at the stump. In the case of full-tree operations, the trees are de-limbed and topped at roadside and the slash is left or piled. During the audit period, most tree-length slashing was done at roadside, which resulted in a number of relatively minor compliance issues. This is discussed in more detail in Section 4.8 (Contractual Obligations).

With the closure of St. Mary's Paper and others such as Terrace Bay Pulp Inc, disposal of softwood pulpwood and chips has become a serious issue on the Martel Forest and across northern Ontario. In 2009/2010, Tembec's Chapleau sawmill was idled for five weeks. Poplar utilization, which makes up one quarter of the available harvest volume, suffered due to the closure of the Grant Forest Products oriented strand board plant in Timmins and the Weyerhaeuser plant in Wawa.

In 2007, the company amended the FMP and in 2011 wrote its new FMP using modified poplar utilization standards, in keeping with MNR Northeast Region guidelines. It did this in order to allow the mixedwood harvest to continue and the Columbia commitment for poplar veneer to be met. The audit team found the company to be operating in accordance with these modified standards. The low level of poplar utilization did not limit reforestation programs. Blocks that were site-prepared were planted with adequate numbers of seedlings. The block scheduled for natural regeneration showed sufficient stocking and growth of desired species.

The *Forest Management Guide for Natural Disturbance Pattern Emulation* and more recently the Stand and Site Guide require large, live wildlife trees to be left following harvest. Field observations during the audit noted that on sites where operators had a choice between leaving hardwood (principally poplar) and conifer, most of the residual stems left following harvest were hardwood. Hardwoods are preferred over jack pine or black spruce for the large, live component; however, the potential useful life of large, live hardwood trees left following harvest is greatly shortened when follow-up herbicide treatments occur within the first few years after harvest. Conifer trees are typically unaffected by the herbicide spray. Leaving a component of large, live conifer trees, in particular white spruce, would assist in meeting the intent of the guides of having a compliment of live trees that will decline over an extended period of time, thus increasing their value to wildlife. The audit team suggests that the company consider this tree retention strategy during harvest planning and operations.

The last Martel IFA included a recommendation on regenerating areas that had not been replanted following slash pile burning. Over the years slash has turned up repeatedly in IFA recommendations provincially. Roadside slash continues to be an issue because of the cost and difficulty in reducing it. Roadside slash is identified as an issue for several reasons, including the loss it causes to productive forest area, its unsightliness, potential fire hazard, the harmful effect on forestry’s image and the long-term nature of its effects. The impediments to slash disposal are the high cost of piling and the difficulty in obtaining MNR permission for burning un-piled slash. The Stand and Site Guide describes best practices for slash management; there are no provincial standards. However, the Martel FMP has a slash management strategy and a related corporate policy. Hence, the audit team recommends that Tembec reduce the impact of slash on the Forest to be consistent with the FMP and with its own corporate policy (Appendix 1).

**Silviculture**

Tembec's forest renewal program is being implemented in a manner that is consistent with the FMP and is effective in supporting plan objectives. Tembec has experienced silviculture staff. Prescriptions are carefully matched to site conditions and planned intensity levels. Operations show good oversight and the resulting forests are fully stocked and growing well.
In the 2011 Auditor General of Ontario’s Annual Report\(^4\), a concern was raised that:

On average, between the 2004/05 and 2008/09 fiscal years, only about a third of the area targeted for regeneration either naturally or by direct seeding or planting was prepared and/or subsequently tended. Moreover, the average decreased over that five-year period. In accordance with the CFSA, all Crown forests are subjected to an Independent Forest Audit (IFA) once every five years. Several of the more recent IFA reports completed in the 2008 and 2009 calendar years expressed concern about inadequate site preparation or about non-existent or inadequate tending practices that were leading to reductions in growth, yield, and stand densities, as well as to an increase in the time required for stands to reach free-to-grow status (meaning that the trees are free of insects, diseases, and high levels of competing vegetation).

The situation is less dire than reported by the Auditor General when the declines renewal treatments take into account declines in harvest rates. Table 3 shows that the forest renewal program is consistent with the planned program when pro-rated to the rate of harvest with some variances. For example, the planned program forecasted 36% of harvested area would be planted. The actual level of achievement is 53% of the areas harvested, significantly higher than planned.

The Martel forest renewal program for 2007 to 2012 was compared to the provincial program for total treatment areas from 2001 to 2010, as published in annual reports provided by MNR. There are no declines in tending and site preparation when pro-rated against harvest levels at the provincial level and on the Martel Forest. The Martel program has similar ratios for forest renewal treatments compared to the Provincial benchmark for all aspects of its forest renewal program (Table 3).

Table 3. Forest renewal treatments (planned and actual) expressed as a ratio of harvest area 2007 - 2012⁵.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Martel Forest 2007-2012</th>
<th>Province of Ontario 2001-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planned Area⁶ (ha)</td>
<td>Actual Area (ha)</td>
</tr>
<tr>
<td>Natural</td>
<td>28,333</td>
<td>16,228</td>
</tr>
<tr>
<td>Seeding</td>
<td>1,709</td>
<td>2,044</td>
</tr>
<tr>
<td>Planting</td>
<td>17,078</td>
<td>10,035</td>
</tr>
<tr>
<td>Site Preparation</td>
<td>15,779</td>
<td>8,249</td>
</tr>
<tr>
<td>Tending</td>
<td>22,763</td>
<td>17,700</td>
</tr>
<tr>
<td>Harvest</td>
<td>47,009</td>
<td>19,050</td>
</tr>
</tbody>
</table>

The area reported in Table 3 as natural regeneration and plantations is higher than planned in part as a result of area carried forward from the previous plan period. The treatment areas in the annual reports vary from year to year in response to variable harvest rates. Over the five year period, the renewal treatment activities are consistent with planned levels in the Forest. Figure 2 compares total planned and actual renewal treatment area. These area ratios are not pro-rated to harvest area and are based upon the total areas being planned and reported for natural regeneration, seeded and planted treatments. Most planted and seeded areas are site prepared and then tended so these areas were not included in this analysis to avoid "double counting".

---

⁵ Developed from Annual Report data
⁶ The planned area is a weighted average of the last four years of the 2006 FMP and the first year of the 2011 FMP.
⁷ The planned treatment area divided by the planned harvest area
⁸ The actual treatment area divided by the actual harvest area
There were two issues related to chemical tending on the Martel Forest. The first is lack of treatment efficacy on some blocks seen by the audit team. Tembec is aware of the problem and corrective actions are in place. The overall program including re-treated areas appeared to be effective in controlling competing vegetation.

The second issue is opposition to the use of herbicides from the public and First Nations. There was a request made by a stakeholder to the Ministry of Environment for an Individual Environmental Assessment related in part to herbicide use on the 2006 FMP. In an effort to address the second issue, Tembec has developed a vegetation management alternatives program to reduce herbicide use, which is also consistent with their FSC certification requirements. The audit team suggests that Tembec consider additional options for reducing herbicides that include mounding and simultaneous site preparation and seeding of jack pine.

### 4.5 System Support

MNR and Tembec have excellent systems in place producing reliable records and documents. Both organizations maintain Geographic Information Systems (GIS) and record data consistent with the Forest Information Manual (FIM). MNR maintains a forest information portal to allow for data exchange and document control.

MNR also maintains a website that provides forest management plans and reports to the public. The website did not have copies of signed and certified cover pages although the documents were the same as the approved ones. Tembec and MNR could readily produce all the documents required by the audit team including FMP certification pages.

The audit protocol related to human resources system support was not selected under the audit plan for review in this term.

### 4.6 Monitoring

**Compliance**

Table 4 shows the number of compliance inspections carried out by the company and MNR during the audit period and the results.

The audit team found the company to have a comprehensive compliance program, including a strong education and prevention program. Detailed records document the company’s compliance inspectors’ training. The training and associated program was found to be effective in ensuring a high rate of compliance with the planning and regulatory requirements. Only one instance of non compliance was observed by the audit team, in an active forest operation aggregate pit where set back distances to trees was inadequate. Corrective actions will be taken as part of Tembec’s compliance program.
The audit team examined five MNR compliance plans and year-end reviews. It is clear from these documents and through interviews with MNR staff that the District is actively monitoring the company’s operations and FOIP Reports.

### Table 4. Compliance inspections carried out by the company and MNR and their results

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total # of Inspections</th>
<th>In Compliance</th>
<th>Non-Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>61</td>
<td>60</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>59</td>
<td>58</td>
<td>1</td>
</tr>
<tr>
<td>2009</td>
<td>38</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>61</td>
<td>56</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>219</td>
<td>212</td>
<td>7</td>
</tr>
<tr>
<td>Harvest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>101</td>
<td>98</td>
<td>3</td>
</tr>
<tr>
<td>2008</td>
<td>84</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>2009</td>
<td>34</td>
<td>34</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>62</td>
<td>59</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>281</td>
<td>271</td>
<td>10</td>
</tr>
<tr>
<td>Renewal &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>523</td>
<td>505</td>
<td>18</td>
</tr>
</tbody>
</table>

**Silviculture**

Tembec has a silviculture monitoring program in place consisting of ground-based plot surveys and aerial ocular surveys using helicopters. This is a common approach in Ontario. The rate of surveys is keeping up with rate of harvest. The Free to Grow (FTG) survey descriptions of forest cover were in agreement with observations made by the audit team.

**Annual Reports**

Annual reports are prepared by Tembec and meet FMPM requirements. As was the case with the 2011 FMP, these documents are prepared to very high standard reflecting favourably upon both organizations and the professionalism of their staff.

### 4.7 Achievement of Management Objectives and Forest Sustainability

The low rate of harvest during the full term of the 2006 FMP compromises the rate at which the desired forest condition will be reached. The situation is based upon globally significant market forces and is not
a reflection of the forest manager’s skills or resources. However, wood supply and socio-economic plan objectives were not met. The protection of other forest values was achieved through planning and implementation of AOC prescriptions.

Looking forward, the broad forest cover, seral stage and landscape pattern objectives set in the 2011 FMP are similar to the previous FMP. Additional analysis with decision support tools (e.g. Patchworks) suggests that these objectives are achievable and will promote the development of the desired future forest condition. The plan is following the prescribed landscape pattern through the harvest allocation process. Seral stage representation is driven by the harvest rate, which although lower than planned, actually reduces pressure on some older forest seral stages that were identified as “pinch points” in the Analysis Package.

A key factor in meeting plan objectives related to forest composition is a successful reforestation program. The Year Ten Annual Report for the Plan Period 2006 to 2011 summarizes regeneration success and silvicultural success as follows:

- 62,867 ha identified in the five annual work schedules for survey;
- 53,690 ha (85%) were surveyed;
- 48,640 (91%) were harvested and 9% (5,050 ha) were natural disturbances;
- 51,846 hectares (97%) were successfully regenerated;
- 1,838 ha (3%) required follow up tending, planting or more time in order to meet the height requirements; and,
- 29,567 ha (57%) of the successfully regenerated area matched the projected forest unit and is therefore deemed a “silviculture success” under the FMPM. The remaining 43% is successfully regenerated but may or may not produce a future forest condition that is consistent with planned objectives.

The above success rates are typical for the boreal forest but might appear low to the public. The audit team has made recommendations on previous audits to Corporate MNR about the need to improve upon the reporting of silviculture success under the current FMPM. The successful outcome of a silviculture treatment in terms of meeting plan objectives could include several forest units of similar compositional/functional characteristics but this is not accounted for under the current reporting system. The MNR has undertaken extensive reviews on silviculture effectiveness measurement and reporting practices that should improve the reporting of silvicultural success in the future.

In the meantime, the audit team considers the pre-harvest forest condition, the forest renewal practices/outcomes and the likely future forest condition at each sample site and compares these general trends to the plan. In this forest, and consistent with most forests reviewed by the audit team, the forest management program appears to be maintaining conifer composition and broad forest cover type diversity.

The underlying data quality in Ontario’s forest management program is steadily improving. The FIM and GIS technology advances are having a positive impact. For this reason the audit team was able to investigate trends further using data from the Year Ten Annual Report Data Package and the two Forest Management plans (2006 and 2011).

This analysis was used as a further check on forest compositional trends observed by the audit team in the field. Lowland conifer forests are emerging as mixed conifers (LC1) due to an increase in larch and cedar. Over time these forests may succeed back into spruce dominated lowland types (SB1) that currently dominate lowland conifer sites. The broad ecological function and the representation of Conifer Lowland cover types (LC1 and SB1 combined) is likely not at risk. The trends in the data also show an increase in SF1, an upland spruce fir forest unit. Some SB3 lowland was likely misclassified in the FRI and is now reclassified as upland forest.
Larch appears to be recovering from periodic outbreaks of larch sawfly that had decimated this species in the past. Although this may create forests more consistent with the pre-industrial condition, larch volumes may be higher and spruce volumes lower than forecasted in the plan.

The forest units reported in the annual reports are organized into four broad forest cover types as follows:

1) Conifer Lowland (LC1 and SB1)
2) Conifer Upland (SF1, SP1, Pj2, Pj1)
3) Mixedwood (MW1, MW2, MW3)
4) Hardwood (PO1, BW1)

Conifer Upland forest cover types are forecasted to increase in both FMPs (FMP 2006 Table 11; FMP 2011 Table 5) and this trend is supported by the Free to Grow survey trends. However, the rate of increase is less than forecasted. The forecasted desired forest condition of decreased representation of mixedwood types is at odds with the FTG survey results and is worth revisiting in the next forest management plan.

The above trends are subject to significant levels of inherent uncertainty given the survey methods in use and the dynamic changes in natural succession over long periods of time. For example, a forest declared FTG to one forest unit in this term under review may change over time to another forest unit in ways that are more consistent (or not) with the plan objectives than the current snapshot of FTG results would indicate. These changes will be detected by successive forest resource inventories and enhanced annual reports as part of the adaptive management process that underlies forest management planning in Ontario. Adjustments will be made accordingly by future planning teams.

The analysis of forest development trends has always suffered from changing reporting standards, map projections, forest classification systems (e.g. FRI) and management unit boundaries. Nonetheless, the planning team has used these data to the fullest extent possible along with input from science-based institutions and regional experts in developing its 2011 FMPM. These inputs are reflected in the forecasted changes in forest cover that differ between 2006 and 2011.

As more data becomes available and if the trend of increasing representation of mixedwoods is verified and deemed to be undesirable, some significant changes to the forest renewal program will be required. These changes may include a need for increased site preparation, prescribed fire and more tending. This may be at cross-purposes to FSC accreditation and the interest expressed by First Nations in reducing herbicide tending unless cost effective alternatives to herbicides can be found. Furthermore, the recession has had an impact upon the long-term viability of forest renewal suppliers, such that finding the skills, let alone the funds, for an expanded program if required will become even more challenging than they are today.

These significant issues will be the subject of review in the next Year Three Annual Report. Given the professionalism exhibited by MNR and Tembec staff during the audit term, there is no doubt this analysis will be done with due care. Hence, there are no recommendations from the audit team at this time.

Appendix 2 provides a tabular analysis of the audit team’s assessment of progress toward achieving the objectives set in the 2006-2026 FMP. Given the inherent uncertainty in the FRI, FTG survey methods as described above, the underlying uncertainty of the projections made in the plan using SFMM/Patchworks, the audit team must take these factors into account and determine if the plan objectives are being met or in many cases with long term objectives, the likelihood of being met. The general consensus among team members is that the objectives are being or will likely be met in all material aspects, with some concerns noted above and in Appendix 2.

---

Based upon the above trends and analyses, the audit team concludes that forest sustainability is being achieved, as assessed through the Independent Forest Audit Process and Protocol. The audit team also concurs with the observations and comments of the author of the most recent Year Ten Annual Report that the forest sustainability criteria are being met.

Not everyone agrees with these assessments of forest sustainability, including some local stakeholders interviewed who provided feedback on the impacts of forestry on their traplines and wildlife on the Forest. The NSRCF expressed grave concerns about forest sustainability on the Martel Forest (see Section 3.3). There are concerns over how objectives are set and the forest practices that are associated with meeting these objectives. A more natural/traditional approach is desired from their perspective. Some options were discussed and included a greater role for prescribed fire and mechanical mounding to reduce reliance on herbicides. Another option would be to rely on more natural processes to seed pine and encourage natural regeneration rather than planting pine. Finding ways to generate value added businesses from the Forest (e.g. blueberries) rather than reliance on conventional forest products was another interest expressed by the Chiefs. There was also discussion about novel ways of using GIS and computer simulation of habitat supply models to illustrate in a map series what traditional knowledge can offer compared to conventional Western science-based models.

The Chiefs intentions are to pursue an eSFL to better facilitate the above goals through more creative planning, operating and monitoring (e.g. auditing) procedures under NSRCF community control. A blue ribbon panel of scientists and managers is being assembled to help position the NSCF for an expanded role in forest management.

For the purposes of this audit, the performance of MNR and the SFL holder are the sole criteria used to make recommendations to the Minister about licence conditions. These findings are described in the following section.

### 4.8 Contractual Obligations

The previous IFA had seven recommendations, all of which were directed to MNR. MNR has acted upon these recommendations and the outcomes appear to be effective for those recommendations over which they had direct control (e.g. #4 values mapping, #5 access controls and #6; staffing). Recommendations (1 & 2) to change the EA process were not acted upon by the Ministry of the Environment and appeared to be beyond the scope of the audit. Recommendation 3 related to archeological potential was acted upon and used in the 2011 FMP.

One issue was raised during the audit related to wasteful practices. Section 4.4 of the SFL commits the company to not conduct wasteful practices as described in the Forest Operations and Silviculture Manual or the Scaling Manual. Leaving merchantable timber of any length after operations are complete is defined as a wasteful practice by the scaling manual. In the case of spruce, jack pine and balsam fir, this means leaving a felled tree with a top diameter of 10 cm or more, outside bark.

Meeting this requirement has become more difficult with the closure of St. Mary’s Paper, which accepted softwood pulpwood from the Martel, and others accepting Tembec chips. In 2009/2010, the Tembec’s Chapleau sawmill was idled for five weeks due to a surplus of chips.

The leaving of merchantable material has been reported by both company and MNR cut inspectors during the audit period. The usual problem is truck trims (the practice of trimming tree-length to the maximum load length allowed for highway trucking) or slasher tailings, in which material larger than 10 cm is left in the slash piles. The company and MNR have met several times on the issue, to reduce its occurrence.

The audit team investigated the issue, both in the field and in a visit to Tembec’s Chapleau log yard. In the field, the incidence of over-size tops in the slash at roadside was found to be small. Tops greater than 10cm could be found, but not in large numbers and not widespread around the Forest.
Tree-length top size was examined in the yard, even though these trees did not necessarily come from the Martel Forest or from the audit period. The audit team surmised that if the company had a policy of large topping, this would show up in their wood deliveries.

This did not bear out in investigations in the log yard. While some tops larger than Scaling Manual standards were found, the audit team concluded that this was not a deliberate, systemic practice on the part of Tembec but rather the result of operator decisions. If there was a pattern, it was that generally top size is related to tree size, with only the largest trees having over-size tops. The audit team concluded that although there are some utilization challenges, Tembec is meeting these challenges and utilization problems are within acceptable limits.

Based on the available evidence, the audit team concludes that Tembec has met all of its contractual obligations. The previous IFA had the same conclusion, with all seven recommendations being directed to MNR, which has since taken corrective action on all of the recommendations. Tembec and MNR are to be commended for such a positive record of achievement.

4.9 Conclusions and Licence Extension Recommendation

Considering the evidence collected and described above, the audit team concludes that Tembec, in partnership with MNR, has delivered a cost-effective forest management program that is consistent with the license obligations, MNR’s policies and the following IFAPP principles:

- **Commitment**
  - Tembec has taken steps above and beyond the legal requirements for forest management (e.g. FSC certification) and is deemed by IFAPP to conform to the principle of commitment. Although not a focal point of this audit, MNR’s commitment to forest sustainability is clearly stated in its public policy documents.

- **Public Consultation and Aboriginal Involvement**
  - The LCC is performing effectively in its role but recruitment efforts should be enhanced (Recommendation 2.1.1.1).
  - Interviews with First Nations Chiefs and other community representatives suggest that Tembec and MNR adequately met their obligations to offer opportunities to share in the benefits of forest management on the Martel Forest. There may be an outstanding issue regarding the status of the local Métis community that remains to be clarified. There are two recommendations to continue the progress in addressing various issues (Recommendations 2.5.1.1).

- **Forest Management Planning**
  - All aspects of forest management planning were completed to a very high professional standard and featured in-depth analysis and strong linkages between strategic direction and operational reality. All members of the planning team and interested parties are to be commended for their efforts.

- **Plan Assessment and Implementation**
  - The plan is being implemented properly and various programs are in place that effectively supports the plan objectives.
  - Actual harvest rates are well below planned rates due to significant decline in market demand. The planned forest renewal program is being implemented at a scale that is proportional to the rate of harvest.
AOC prescriptions are being followed and are protecting the forest values identified in the planning process.

Tembec should monitor its slash management program and assess progress in order to be consistent with the FMP and its own corporate policies (Recommendation 4.4).

- System Support
  - MNR and Tembec have excellent systems in place, producing reliable records and documents.

- Monitoring;
  - Tembec and MNR have effective compliance and forest renewal programs in place.
  - MNR is working at improving its forest renewal program monitoring procedures and reporting systems.

- Achievement of Management Objectives and Forest Sustainability
  - The forest structure, composition and pattern objectives are generally being met or will likely be met over the long term. However, the rate of expected change and direction are not entirely consistent with the plan due to globally significant market forces that have reduced the harvest rate. Forest renewal programs are in pace with harvest levels and achieving the desired results for the most part. Some trends of increased mixed wood cover over time are noteworthy for future plans. These forest cover objectives are the most significant because structure, composition and pattern are essential elements of forest ecosystem function.
  - The protection of other forest values is being achieved through planning and implementation of AOC prescriptions.
  - The audit team concurs with the plan author’s assessment of forest sustainability in the current plan and the Year Ten Annual Report while recognizing the different views held by First Nations and other interested parties.

The audit team concludes that:

Management of the Martel 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 Tembec. 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 #550390 for a further five years.
APPENDIX 1 – RECOMMENDATIONS

Independent Forest Audit – Record of Finding
Recommendation 2.1.1.1

Principle 2: Public Consultation and Aboriginal Involvement
Criteria 2.1: Local Citizens Committee (LCC)

Procedure
1. Assess establishment of the LCC. This will involve a review of the terms of reference and LCC minutes, compared to the applicable FMPM requirements.
2. Review and assess whether the LCC met the purposes and conducted its activities in accordance with the applicable FMPM.

Background Information and Summary of Evidence:

An LCC for the Martel Forest was established over a decade ago by the District Manager and has functioned as a standing committee since that time. The LCC has a Terms of Reference that describes its purpose and functions. Discussions at a meeting during the audit week suggest that not all LCC members are familiar with the contents of that Terms of Reference and that they have not been updated or reviewed since early 2010¹⁰ (e.g. they do not reflect the current membership nor indicate when members joined or left the LCC).

Membership and Attendance

One of the main challenges identified by interviewees was LCC membership and attendance. Regarding attendance, for the two meetings held in 2012 only three of six members were present. The previous years’ minutes also show low attendance. Given that meetings are infrequent outside the planning cycle (two meetings per year in 2011 and 2012), it should be possible to schedule a time that all members can participate. The LCC is making an effort to accommodate member’s schedules by trying different meeting times and dates.

Membership has dropped off from a high of 10 or 11 (it is not clear from the minutes or terms of reference exactly how many members there were at any given time) to a current low of six members. MNR and the LCC indicated that recruitment efforts had been made, but that it was challenging to increase the membership in a small community like Chapleau. Some of these efforts are described below.

Recruitment

2007
• No recruitment discussed

2008
• No recruitment discussed
• New member joined

2009
• Ongoing advertising in local paper for LCC participation as part of FMP process (Feb. 2009 LCC minutes and June 2009 minutes)

¹⁰ See LCC meeting minutes for February 25, 2010.
- Two LCC members to present at local English high school to encourage youth representation on LCC (Oct. minutes)

### 2010
- MNR to organize presentation to French high school to solicit youth representation
- New LCC member joined (Feb. 2010)

### 2011
- New member joined Jan 2011 & lost a member
- No apparent recruitment efforts

### July 2012
- LCC indicated they would like District Manager to call Remote Tourism Operators to try and obtain LCC representatives from this sector
- Newspaper ad to be put in local paper
- Need to address French and English high schools for youth representatives
  - LCC member and a French-speaking MNR representative to approach French high school
  - MNR planning forester (LCC rep) and LCC member to approach English high school

Note: The possibility of placing a recruitment ad in local papers was discussed again at a meeting during the audit week. The MNR representative confirmed that it proved difficult to get approval outside of the FMP process due to MNR’s requirement for standard wording for ads.

The LCC is intended to represent a range of interests on the Martel Forest. The FMPM describes it as follows:

"The membership of the local citizens committee will include local citizens representing a range and balance of interests from the communities within or adjacent to the management Unit. The majority of appointments will be drawn from nominations provided by local interest groups. Persons directly employed by the sustainable forest licensee preparing the forest management plan are eligible to be members, but will not make up the majority of the Committee.

Where they exist at the local level, the main interests represented on the local citizens committee should include:

- (a) local business;
- (b) tourism industry;
- (c) anglers and hunters;
- (d) Aboriginal communities;
- (e) forest industry;
- (f) naturalists;
- (g) municipalities;
- (h) trappers and other resource users;
- (i) other Crown land recreationalists;
- (j) forest industry trade unions;"
(k) woods workers;
(l) small independent loggers;
(m) mineral sector;
(n) waterpower sector;
(o) Chamber of Commerce member or Economic Development Officer;
(p) local environmental groups;
(q) local heritage groups or organizations;
(r) other interest groups; and
(s) The general public.”

A review of the composition of the current Martel Forest LCC shows the following affiliations:

- Forest industry (2)
- Road-based tourism (1)
- Trappers (1)
- Trade union representative (forest industry)
- Municipal government (1)

Few of the interest groups listed in the FMPM are currently represented on the LCC, including remote tourism, which is an active industry on the Martel Forest and led to an “issue resolution” process during the last FMP development. Meeting minutes in 2012 indicate that the LCC would like the District Manager to try and engage the remote tourism industry in the LCC. Three of the current six LCC members have forest industry affiliations. In this respect, it would bring more balance to the Committee if a broader range of interest groups were represented.

Discussion:

Based on a review of five years of LCC minutes, there have been some recruitment efforts made, mainly within the community of Chapleau. These efforts could use renewed focus and consider membership outside the Town of Chapleau if local recruitment is difficult. Discussions with the District Manager indicate that he would consider approving membership from outside the community, as long as potential candidates have a legitimate interest in forest management on the Martel Forest. Furthermore, the current Committee is weighted toward those with direct or indirect forestry interests and should be diversified to ensure that a range of stakeholder interests is represented.

Conclusion: The LCC, while serving the basic functions required of the Committee, should increase its efforts to expand and diversify its membership base to ensure appropriate representation of a range of stakeholders in forest management decisions on the Martel Forest.

Recommendation:
The LCC, in cooperation with Chapleau District MNR, should expand its recruitment efforts and focus on diversifying the Committee’s membership.
Recommendation 2.5.1.1

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

**Criteria 2.5:** Aboriginal Involvement in Forest Management Planning

To examine the involvement of Aboriginal communities in forest management planning and its benefits.

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

**Background Information and Summary of Evidence:**

There are five Aboriginal communities with interests on the Martel Forest:
- Brunswick House First Nation
- Chapleau Cree First Nation
- Chapleau Ojibwe First Nation
- Michipicoten First Nation
- Missanabie Cree First Nation

According to interviews with two Chiefs and several other community representatives, Tembec has been actively making efforts to build its working relationships with local communities. This includes provision of direct employment in Tembec facilities, in-kind support for community projects (water crossing installations, lumber for construction), invitations to training events and participation of Tembec staff at First Nations community events. According to company staff and community members who were interviewed, these efforts are ongoing and have resulted in good working relationships with local First Nation communities.

MNR also has obligations to ensure its duty to consult with First Nations has been met and that the forest management planning process includes proper documentation of Aboriginal values. Each community with an interest on the Martel Forest was offered the opportunity to have a member sit on the planning team. Letters were addressed to the Chief and Council dated October of 2008, and offered both a seat on the planning team and the Chapleau Area Aboriginal Resource Team (CAART). It also laid out the opportunity for a customized approach to consultation and indicated that the MNR District Liaison would be working with communities to create or update the Aboriginal Background Information reports for each community.

Interviews with the Chiefs and representatives from two communities noted ongoing concerns regarding the adequacy of the approach to the protection of Aboriginal values. It was noted that the FMP process and the current way of thinking about values (as points on a map with an allocated buffer or “donut”) does not address the question of area-based values (like burial sites, or sacred areas) that are important to local First Nations. The issue of values protection overlapped with other observations by First Nations representatives about the fact that First Nations and MNR/company staff have a fundamentally different understanding of what constitutes sustainable use of the forest resource, or how non-timber forest values should be protected.

All five First Nations were documented as having representation on the planning team: three were actively involved (Chapleau Cree, Brunswick House and Michipicoten). Those interviewed noted that they felt an obligation on behalf of their community to stay informed, but that the process was so technical at times that it was difficult to understand the information. Another community noted that because they had no members in the territory, the participatory mechanisms did not work for them and also noted that the average person’s ability to understand and follow the technical aspects of planning is limited.

A second forum for participation in resource management issues and forest management planning for
Chapleau District (initially called the First Nations Task Team) offered by MNR is the CAART. Interviews suggest that some communities found CAART a useful forum for getting information about management of the Martel Forest while others were less positive (e.g. they felt patronized by the process, did not feel it was useful in addressing their interests, and felt that it was just a forum for MNR to get endorsement on decisions or that CAART became too political).

In recent years, several communities (including four with interests on the Martel Forest) have begun working together through the Northeast Superior Regional Chiefs Forum (NSRCF). The NSRCF provides a venue for those First Nations to address regional issues at a higher level and is engaging with both MNR and Tembec. The lead auditor met with the NSRCF as part of the IFA and documented some of their concerns. These include: the poor state of social well-being of First Nations communities and the lack of benefit derived by forest management, the intensive nature of forestry activities on the Martel Forest, including the use of herbicides and the lack of decision-making authority that the First Nations have over management activities that impact their treaty rights.

Discussion:

Although it was not formally established as part of a custom FMP consultation approach, the CAART met most frequently during FMP preparation. The MNR seemed to have established good working relationships in that time. Since the FMP was completed, the CAART met only once in 2011 (January) and not since then. Interviews with MNR staff suggest that this is in part related to staffing and resource issues (the District currently has no allocated funding in the forestry budget or assigned staff person to co-ordinate CAART meetings). The Chapleau District Resource Liaison also indicated that a majority of staff time to address First Nations matters was taken up by treaty land entitlement processes, leaving little time for co-ordination with communities on resource and forestry issues.

Conclusion:

Since the approval of the 2011 FMP for the Martel Forest, day-to-day communications with First Nations communities have dropped off, although they indicated that they still receive the required FMP notifications. The following recommendation speaks to effectiveness, since MNR has met its legal obligations for consultation on the Martel Forest.

Recommendation:

Chapleau District MNR should review its consultation approach with First Nations communities having interests on the Martel Forest to assess whether the level and type of communications with respect to forest management is satisfactory.
Principle 4: Plan Implementation

Criteria 4: To review and assess through field examination...the implementation of the management strategy.

Procedure: To review and assess in the field the implementation of approved harvest operations, including whether harvest operations were conducted to minimize site disturbance.

Background Information and Summary of Evidence:

Roadside slash was the subject of one suggestion in the last Martel IFA and over the years it has been the source of many IFA recommendations provincially. Roadside slash continues to be an issue on the Martel Forest, as it is elsewhere. In the field, the audit team saw roadsides lined with slash, in some cases piled and in some cases not. Almost every harvest site visited contained roadside slash to some degree. The team saw no evidence that slash management and slash reduction have improved since the last IFA on the Forest.

Discussion:

Roadside slash is the result of full-tree harvesting, roadside processing and the lack of a market for the residue. Full-tree harvesting is the main logging method in use today because of its cost advantage. As a practice, it was subjected to close scrutiny during the Environmental Assessment hearings and it is a permitted and widespread practice in Ontario today. There are no provincial or management unit standards for slash. Instead, the loss of productive area to slash is built into each management unit’s FMP modeling exercise.

And yet, roadside slash continues to be an issue because of the cost and difficulty in reducing it. Where objections to slash are raised, the issues include:

- loss of productive area,
- its unsightliness and offensiveness to other Crown land users,
- the resulting harmful effect on forest management’s image, and
- the long-term nature of its effects.

In addition, Tembec has an excellent corporate environmental policy known as PICC in which, among other things, the company commits to improving its environmental performance. The Martel FMP contains a slash management strategy that, among other things, calls for Tembec to measure and monitor the reduction of slash piles on company-managed forests.

Conclusion:

The company should measure and monitor its slash reduction in keeping with the FMP, and it should strive to reduce the impact of slash in keeping with its corporate PICC environmental policy. In implementing this recommendation, slash impact should be given a broad interpretation and the details on how to go about this should be left to the company.

Recommendation:

Tembec should reduce the impact of slash on the Martel Forest to be consistent with its corporate policies and the FMP slash management strategy. Tembec should report results of its slash management efforts in the Annual Reports.
**APPENDIX 2 – MANAGEMENT OBJECTIVES TABLES**

**Table 1. Summary of the status of the 2006 FMP Objectives**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Auditor Assessment and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSERVATION OF BIOLOGICAL DIVERSITY (Forest Diversity/Silviculture)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Objective 1</strong>: Ensure that current biological diversity of the forest is not significantly changed and where necessary and practical, is restored. (Policy Framework for Forest Sustainability)</td>
<td>Met with caveats - The current renewal program is maintaining conifer cover and representation. A large decline in lowland spruce cover types (SB1) is being offset by a large increase in LC1 because of increases in larch. This appears to be a widespread trend. Although there are some early indications of shifts in forest units that are not consistent with forecasts in the plan, the broad cover type representation of lowland conifers, upland conifers, hardwoods and mixed woods are being maintained.</td>
</tr>
<tr>
<td><strong>Objective 2</strong>: Identify, consider and provide for the forest age class structure needed to maintain functional old growth ecosystem conditions in forest ecosites for all forest communities within their natural ranges as part of future forest conditions.</td>
<td>Met - The planning team did a thorough analysis and adjusted harvest levels to meet this objective. Current market declines have reduced the rate of harvest, increasing the likelihood of meeting this objective barring major natural disasters.</td>
</tr>
<tr>
<td><strong>Objective 3</strong>: Maintain preferred/marginal habitat for the regionally selected indicator species within the bounds of natural variation as portrayed in the results of the Strategic Forest Management Model</td>
<td>Met - The planning team did a thorough analysis and adjusted harvest levels and locations to meet this objective.</td>
</tr>
<tr>
<td><strong>Objective 4</strong>: Provide marten core areas on the Superior-Martel Forest.</td>
<td>Met - The harvest patterns respected the marten cores as described in the 2006 FMP. The planning team developed large landscape patches and completed spatially explicit forecasting that suggests that the forest cover characteristics associated with this objective are feasible. The 2011 plan is well-positioned with the new landscape planning guide.</td>
</tr>
<tr>
<td><strong>Objective 5</strong>: Ensure that all known and newly discovered nesting sites for eagles, hawks, owls, osprey and herons are protected.</td>
<td>Met - Planning team found values mapping and AOC protection to be effective in meeting this objective.</td>
</tr>
<tr>
<td><strong>Objective 6</strong>: Ensure that high conservation value forest attributes are identified and given due</td>
<td>Met - See Objective 4; same methodology was used in conjunction with FSC</td>
</tr>
</tbody>
</table>
consideration for their protection on the forest. | certification requirements.

| **Objective 7**: Ensure the genetic diversity of trees is conserved. | Met - Reliance on natural regeneration and planting trees from local and/or improved seed sources helps to meet this objective. |

| **Objective 8**: Ensure the areas of red and white pine working groups are not reduced to less than the 1995 levels. Specific targets for restoring red and white pine will be set. Regeneration efforts should be focused on sites that previously supported pine. | Met short term target - Year 10 AR reports, “a total of 261 hectares were planted to a Pw/Pr forest unit during the 2006-2011 FMP, which is above the target of 20 hectares per year of pine restoration. In addition to this, an additional 987 hectares have been planted with a white pine component.” |

| **Objective 9**: The genetic diversity of white pine on the Superior-Martel Forest will be maintained or enhanced. | Met - Reliance on natural regeneration and planting trees from local and/or improved seed sources helps to meet this objective. |

**MAINTENANCE AND ENHANCEMENT OF FOREST ECOSYSTEM CONDITION AND PRODUCTIVITY (Silviculture/Forest Diversity)**

| **Objective 1**: Provide for the long-term health and vigour of Crown forests by using forest practices that, within the limits of silvicultural requirements, emulate natural disturbance patterns and landscape patterns. (CFSA) | Met with caveats - The trends in cover type and seral stage are discussed above and are consistent with meeting this objective. The 2006 FMP planned and executed a distribution of cut block sizes and shapes with residual trees and patches consistent with this objective. This consideration of landscape pattern objectives was carried forward in the 2011 FMP with the aid of spatially explicit forecasting tools (e.g. Patchworks). |

| **Objective 2**: Keep forest ecosystems productive and healthy | Met - Ecosystem function is related to composition, structure and pattern, which is emulating natural patterns as a course filter biodiversity conservation strategy. Planned activities are consistent with this principle, with some concern over forest compositional changes that are increasing mixedwood representation. As more data on the trend in mixedwoods is verified, it should be considered in future forest renewal plans. |

| **Objective 3**: Employ cost-effective renewal and tending treatments that will provide a perpetual and continuous flow of quality wood fibre from the Superior-Martel Forest | Met - The company is executing a cost-effective renewal program consistent with the rate of harvest. |

| **Objective 4**: Reduce herbicide usage through | Likely to be met with caveats regarding |
timely field-proven science and integrated pest management principles.

<table>
<thead>
<tr>
<th>CONSERVATION OF SOIL AND WATER RESOURCES (Other Values)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong>: Minimize the impacts on water quality and aquatic habitat within areas of harvest, renewal, and tending and access operations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FOREST ECOSYSTEMS CONTRIBUTIONS TO GLOBAL ECOLOGICAL CYCLES (Social)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong>: Ensure that the available forest is protected from sustained deforestation or conversion to other uses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MULTIPLE BENEFITS TO SOCIETY (Economic)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives 1</strong>: Supply industrial and consumer wood needs while maintaining forest sustainability, (CFSA, PFSF) and to realize a predictable, continuous, and consistent flow of roundwood from the Superior-Martel Forest.</td>
</tr>
</tbody>
</table>

| **Objective 2**: Enhance the fur-bearer habitat on the unit. | Met - This objective is consistent with conservation of biological diversity (see above comments). Harvest allocations also took trap lines into account. |

| **Objective 3**: Ensure the protection of non-timber uses on the land base. (CFSA, PFSF) | Met - Tembec and MNR AOC prescriptions are designed to support this objective and these prescriptions are being implemented. |

<table>
<thead>
<tr>
<th>ACCEPTING SOCIETY’S RESPONSIBILITY FOR SUSTAINABLE DEVELOPMENT (Social)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives 1</strong>: Building relationships with First Nation communities.</td>
</tr>
</tbody>
</table>

| **Objective 2**: Ensure the appropriate protection of non-timber values identified on the land base. | Met - Tembec and MNR AOC prescriptions are designed to support this objective and these prescriptions are being implemented. |

| **Objective 3**: Conduct forestry practices in a manner such that all resource users may gain benefit from the forest, while recognizing that compromises need to be made to ensure the viability of resource based activities. | Met - Tembec and MNR AOC prescriptions and road use strategies are designed to support this objective and these prescriptions are being implemented. |

<table>
<thead>
<tr>
<th>MAINTAINING AND ENHANCING FRAMEWORKS FOR SUSTAINABLE FOREST MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong>: To encourage and ensure compliance</td>
</tr>
</tbody>
</table>
with legislative and regulatory requirements, which contribute to the sustainable management of Ontario’s forests. are being well-executed.

| Objective 2: Provide information from which to assess and report on forest sustainability. | Met - Tembec and MNR adhere to FIM requirements. A new Forest Inventory is scheduled for 2017. |
| Objective 3: Assess what products of the FRP or any other sources of Research & Development that might result in gains in allowable cut effect or other improvements in forest management performance. | Met - The planning team used many of the FRP products in developing the 2011 plan but there is no indication of an allowable cut effect. |
## APPENDIX 3 – COMPLIANCE WITH CONTRACTUAL OBLIGATIONS

<table>
<thead>
<tr>
<th>Licence Condition</th>
<th>Licence Holder Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment of Forestry Futures and Ontario Crown charges</td>
<td>Met – The company had no arrears in any of its SFL accounts as of March 31, 2012.</td>
</tr>
<tr>
<td>Wood supply commitments, MOAs, sharing arrangements, special conditions</td>
<td>Met – There were nine Appendix E wood supply commitment holders at the start of the audit period, only three of which remained in operation at the end of the period. Memorandums of Agreement (MOAs) were in place for all of them except Niska North. The allowable cut was sufficient for all parties and the sharing clause was never activated.</td>
</tr>
<tr>
<td>Preparation of FMP, AWS and reports; abiding by the FMP, and all other requirements of the FMPM and CFSA</td>
<td>Met – Plans and reports were prepared as required.</td>
</tr>
<tr>
<td>Conduct inventories, surveys, tests and studies; provision and collection of information in accordance with FIM</td>
<td>Met – Inspections were conducted as required (e.g. FTG, compliance).</td>
</tr>
<tr>
<td>Wasteful practices not to be committed</td>
<td>Met – No wasteful practices charges were laid against the company during the audit period.</td>
</tr>
<tr>
<td></td>
<td>The operational issue of non-utilization of merchantable material was reported on a number of occasions, both by company FOIP inspectors and by MNR. MNR and the company have been working cooperatively to resolve these issues and avoid future occurrences.</td>
</tr>
<tr>
<td>Natural disturbance and salvage SFL conditions must be followed</td>
<td>N/A - No salvage operations required during audit term.</td>
</tr>
<tr>
<td>Protection of the licence area from pest damage, participation in pest control programs</td>
<td>N/A - No pest control programs required during audit term.</td>
</tr>
<tr>
<td>Withdrawals from licence area</td>
<td>N/A - No withdrawals during audit term.</td>
</tr>
<tr>
<td>Audit action plan and status report</td>
<td>Partially met – action plan submitted on time; status report submitted seven months late; most recommendations were satisfactorily addressed – see Section 4.8 for comments.</td>
</tr>
<tr>
<td>Payment of forest renewal charges to Forest Renewal Trust</td>
<td>Met – See Crown charges above.</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Forest Renewal Trust eligible silviculture work</td>
<td>Met – All maps and records associated with the sample sites viewed by the audit team were associated with eligible silviculture work.</td>
</tr>
<tr>
<td>Forest Renewal Trust forest renewal charge analysis</td>
<td>Met – Analysis was completed for 2011-21 FMP.</td>
</tr>
<tr>
<td>Forest Renewal Trust account minimum balance</td>
<td>Met – Minimum balance was maintained.</td>
</tr>
<tr>
<td>Silviculture standards and assessment program</td>
<td>Met - Tembec met standards and carried out an assessment program.</td>
</tr>
<tr>
<td>Aboriginal opportunities</td>
<td>Met – MNR and Tembec have made progress.</td>
</tr>
<tr>
<td>Preparation of compliance plan</td>
<td>Met – Tembec prepared the required compliance plans.</td>
</tr>
<tr>
<td>Internal compliance prevention/education program</td>
<td>Met – Tembec conducted compliance education activities.</td>
</tr>
<tr>
<td>Compliance inspections and reporting; compliance with compliance plan</td>
<td>Met – Tembec maintained an adequate level of compliance inspections.</td>
</tr>
<tr>
<td>SFL forestry operations on mining claims</td>
<td>Met – MNR Chapleau District and Tembec worked cooperatively and reasonable efforts were made to identify interested and affected persons and organizations.</td>
</tr>
</tbody>
</table>
APPENDIX 4 – AUDIT PROCESS

The Independent Forest Audit Process and Protocol (IFAPP) was developed by MNR to provide a comprehensive and consistent method of evaluating forest management activities on Crown land. The IFAPP (2012) states that the purpose of an Independent Forest Audit is to:

a) assess to what extent forest management planning activities comply with the Forest Management Planning Manual and the Act;
b) assess to what extent forest management activities comply with the Act and with the forest management plans, the manuals approved under the Act and the applicable guides;
c) 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;
d) compare the forest management activities carried out with those that were planned;
e) assess the effectiveness of any action plans implemented to remedy shortcomings revealed by a previous audit;
f) review and assess a licensee’s compliance with the terms and conditions of the forest resources licence; and,
g) provide a conclusion regarding sustainability of the Crown forest.

The IFAPP is based on eight guiding principles and contains 170 procedures, 118 of which are applicable to the Martel Forest. The audit procedure serves as a framework to provide a structured approach to evaluating whether or not forest management activities meet the requirements governing forestry practices on Crown land in Ontario. The guiding principles are:

- Commitment,
- Public Consultation and Aboriginal Involvement,
- Forest Management Planning,
- Plan Assessment and Implementation,
- System Support,
- Monitoring,
- Achievement of Management Objectives and Forest Sustainability, and,
- Contractual Obligations.

MNR categorized most of the IFA procedures based on complexity and their potential impact on forest sustainability. The IFAPP directs the audit team to assess through sampling, per audit principle and associated criteria, the three categories of procedures as follows:

- Administrative procedures – low risk: 20 to 30% of low risk procedures to be assessed;
- Administrative but also having a bearing on sustainable forest management – medium risk: 50 to 75% of medium risk procedures to be assessed; and,
- Procedures directly related to sustainable forest management – high risk: 100% of high risk procedures to be assessed.

Table 1 summarizes the number of procedures selected by the audit team for audit based on the direction provided by the IFAPP.
Table 1. Procedures selected by the audit team.

<table>
<thead>
<tr>
<th>Principle</th>
<th>Low Risk</th>
<th>Medium Risk</th>
<th>High Risk</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Applicable (#)</td>
<td>Selected (#)</td>
<td>Audited (%)</td>
<td>Applicable (#)</td>
</tr>
<tr>
<td>1. Commitment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Public Consultation and Aboriginal Involvement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>3. Forest Management Planning</td>
<td>5</td>
<td>3</td>
<td>60</td>
<td>9</td>
</tr>
<tr>
<td>4. Plan Assessment &amp; Implementation</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>5. System Support</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>6. Monitoring</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>6</td>
</tr>
<tr>
<td>7. Achievement of Management Objectives and Forest Sustainability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Contractual Obligations</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Totals</td>
<td>7</td>
<td>5</td>
<td>-</td>
<td>27</td>
</tr>
</tbody>
</table>

The audit process for the Martel Forest IFA consisted of seven components:

1. Audit Plan: KBM prepared an audit plan that described the schedule of audit activities, audit team members and their qualifications, audit participants, and auditing methods. The audit plan was submitted to Tembec, MNR, the Forestry Futures Trust Committee, and the Chair of the Martel Forest Local Citizen’s Committee (LCC).

2. Public Consultation: Through individual letters mailed in mid-August, 2012, KBM advised a sample of MNR’s FMP mailing list that an audit would be taking place and invited their input.

3. In mid-August 2012 newspaper ads were published in three area newspapers advising the public of the upcoming audit: the Chapleau Express, the Wawatay, and the Algoma News Review. As per the requirements of the IFAPP, the notices identified the purpose of the audit and invited the public to submit comments to the LCC Chair or directly to KBM.

KBM also prepared a one-page survey to solicit public input to the audit process. The survey, in addition to a general letter informing contacts of the audit, was mailed to all businesses and organizations, and a representative sample of one-third of the individuals listed in the Forest Management Plan (FMP) mailing list (as provided by MNR Chapleau District). This list includes tourist operators, private land owners, trappers, baitfish licence holders, bear management area
holders, local municipalities and government agencies, independent loggers, logging contractors, shareholders and other special interest groups. The survey was also available to the general public on the KBM website (www.kbmrg.com).

4. Aboriginal Engagement: MNR Chapleau District provided KBM with contact information for each Aboriginal Community within or adjacent to the Martel Forest, and/or who participate in activities on the Forest. A letter was sent out to each of the Aboriginal communities on the contact list inviting them to participate in the IFA of the Martel Forest. The letter asked for their input and encouraged them to contact KBM if they wish to participate in the audit or if they require more information before making a decision. KBM also offered to arrange in-person meetings with each of these Aboriginal Communities. The audit Team Leader had a post audit meeting with the NSRCF.

5. Pre-Audit Meeting and Field Site Selection: The audit team conducted a preliminary site selection prior to the pre-audit opening meeting. Annual Work Schedules and Annual Reports were used to ascertain the amount and type of forest operations carried out on the Forest during the audit period. A stratified random sample of sites was selected to ensure that areas were representative of a cross section of all activities conducted on the Forest during the audit period. The site selection process also considered public input derived from the above procedures to focus on specific areas of interest. The auditees were informed of the site selection for the field visit. A pre-audit meeting confirmed the site selections.

6. Pre-Audit Document Review: Prior to the five-day site visit, the audit team reviewed documents provided by MNR, including the:
   a. 2006 and 2011 FMPs for the Martel Forest;
   b. Annual Work Schedules and Annual Reports associated with the above FMPs;
   c. The Martel Forest Independent Forest Audit 2002-2007 Report; and,

The audit team also developed a questionnaire that was circulated to planning team members prior to the on-site audit, and subsequent follow-up, to assess their perceptions regarding the effectiveness of specific components of forest management on the Martel Forest. The results of the survey provided additional focus to IFAPP prescribed interview procedures that occurred on site.

7. On-Site Audit: The objectives of the field site visits were to confirm that activities were conducted according to plan, that they conformed to provincial laws, regulations, and guidelines, and that they were effective. The audit began on Monday, September 24, with the opening meeting in Tembec’s Chapleau office. Auditors spent the remainder of the day with Tembec staff reviewing field binders and documents relevant to the audit. Auditors had the opportunity to visit two selected sites on Saturday, September 22 without representatives from the Company or MNR present. This was discussed at the opening meeting. The following two days were spent in trucks and helicopter visiting selected field stops. During the on-site visit portion of this audit, the audit team conducted interviews with MNR staff and with LCC members. The audit team examined documents, records and maps at the MNR offices in Chapleau.

Several stops provided the opportunity to audit multiple activities such as harvesting, renewal, and values protection. KBM committed to, and surpassed, a minimum of a 10% sampling of key activities and operations conducted on the Forest during the audit period. The 10% minimum sampling intensity is prescribed by the 2011 IFAPP. Table 2 presents the actual sampling intensity for each forestry activity examined on the ground as part of the field site visits. Due to access and time restraints, the audit team relied on a helicopter to reach many of the selected
field sites. The helicopter also provided opportunities for overviews of the subject areas, enabling overall examination of target blocks.

The closing meeting was held in Tembec’s Chapleau office on Friday, September 28, 2012. This meeting provided a forum for the audit team to present and discuss preliminary audit findings with Tembec, MNR, and members of the LCC.

Table 2. Audit sampling intensity for the Martel Forest.

<table>
<thead>
<tr>
<th>Activity or Feature</th>
<th>Population Size (2007-2012) (ha)</th>
<th>Proposed Sample Size (ha)</th>
<th>Actual Sample Size (ha)</th>
<th>Actual Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvest</td>
<td>22643</td>
<td>2264</td>
<td>4373</td>
<td>19</td>
</tr>
<tr>
<td>Plant</td>
<td>10050</td>
<td>1005</td>
<td>2483</td>
<td>25</td>
</tr>
<tr>
<td>Natural</td>
<td>16026</td>
<td>163</td>
<td>1957</td>
<td>12</td>
</tr>
<tr>
<td>Seed</td>
<td>1414</td>
<td>141</td>
<td>399</td>
<td>28</td>
</tr>
<tr>
<td>Chemical Site Preparation</td>
<td>1627</td>
<td>163</td>
<td>248</td>
<td>15</td>
</tr>
<tr>
<td>Mechanical Site Preparation</td>
<td>6401</td>
<td>640</td>
<td>1734</td>
<td>27</td>
</tr>
<tr>
<td>Free-to-Grow</td>
<td>54534</td>
<td>5453</td>
<td>5348</td>
<td>10</td>
</tr>
<tr>
<td>Tending</td>
<td>14372</td>
<td>1437</td>
<td>3016</td>
<td>21</td>
</tr>
<tr>
<td>Area of Concern Categories (#)</td>
<td>Minimum 10% sample achieved</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road Construction (km)</td>
<td>Minimum 10% sample achieved</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road Maintenance (km)</td>
<td>Minimum 10% sample achieved</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specified Procedures Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Plant</td>
</tr>
<tr>
<td>Seed</td>
</tr>
<tr>
<td>Chemical Site Preparation</td>
</tr>
<tr>
<td>Mechanical Site Preparation</td>
</tr>
<tr>
<td>Tending</td>
</tr>
<tr>
<td>Free-to-Grow</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
8. Audit Report: The audit results are presented in this report following a brief description of the audit process and the forest licence area under review. Within the report, the audit team has made recommendations to address instances of a non-conformance to a law and/or policy, or an identified lack of effectiveness in forest management activities.

Recommendations from this audit must be addressed in an action plan developed by Tembec and MNR Chapleau District, with input and review by MNR Regional and Forest Management Branch representatives.

Suggestions are no longer highlighted in audit reports, nor will they be addressed in action plans. Any suggestions of the audit team have been incorporated within the regular text of this report.

Best practices may also be reported. Any practices so identified should be 'exceptional', not situations in which the forest manager is simply meeting a good forest management standard. 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.

Public Response

Out of approximately 400 letters mailed, four individuals responded, through returned letters and phone calls with observations and concerns. Issues identified included bear management areas, riparian buffers, and concerns related to forest management practices and how they affect Aboriginal values and rights.
Local Citizens Committee

After contract award, letters were mailed to all current members of the LCC to notify them of the audit and invite their input. No letters from LCC members were received by KBM. The audit team attended an LCC meeting during the audit week and received feedback on the LCC from three of the six current LCC members at that meeting. Two LCC members (including one past member) were interviewed separately and one member attended the audit closing meeting in person.

In total, the audit team received feedback directly from four of the six LCC members, which achieves the minimum 20% sampling requirement. Discussions and interviews included questions on whether the LCC has achieved its purpose, whether there are areas where the LCC may be improved and whether the Committee was properly supported by both MNR and the Company to achieve their intended purpose.

Summary of LCC comments:

LCC members generally felt that the committee was effective in meeting its roles and responsibilities. They felt that MNR was providing appropriate support for the Committee to function effectively and that Tembec was co-operative in providing information when requested. It was noted by several members as well as the District Manager that attendance and recruitment were the main ongoing challenges for the group.

Aboriginal Communities

Letters were sent to the five Aboriginal communities on the contact list, inviting them to participate in the audit. The letter welcomed their input and encouraged them to contact KBM if they wish to participate in the audit or if they require more information before making a decision. The MNR District Liaison was contacted for suggestions on how to best reach those communities with interests on the Martel Forest, including the Chapleau Métis Council.

Subsequent efforts were made to make telephone contact with both the Chiefs of each community and/or the person assigned to the natural resources portfolio. A week before the audit, an email reminder was sent to each Chief and designated resources staff as a reminder that the audit team would be in Chapleau and welcomed their input. During the audit week, phone calls and/or in-person visits were made.

The audit team had face-to-face interviews with representatives of the Chapleau Ojibwe First Nation, Chapleau Cree First Nation as well as telephone interviews with the Chief and an elder of Missanabie Cree and a representative of the Chapleau Métis Council. The lead auditor also attended a meeting of the Northeast Superior Regional Chiefs Forum (NSRCF), which represents four of the five communities with interests on the Martel Forest.

Summary of Input from First Nations

Common themes in the interviews with First Nations included: a desire to see the footprint of industrial forestry reduced on the landscape, a more natural approach to forest management (e.g. fewer herbicides, incorporate more traditional knowledge), improved mutual understanding and respect for native values and a willingness to consider alternative approaches to their protection (the “donut” approach of leaving a buffer is not adequate to protect some native values), improved communications with MNR on a day-to-day basis, and a need to examine higher-level issues (sharing in benefits of resource management, how the land is used, governance and decision-making). The latter was being addressed by the communities through the formation of the NSRCF. Several of those interviewed noted that Tembec’s efforts in recent years had resulted in improved working relationships with the First Nations individually, as well as with the NSRCF as an organization.

The representative of the Chapleau Métis Council noted that the Métis were interested in being consulted as a rights-bearing community with respect to forestry activities on the Martel Forest. They were not satisfied with MNR’s response to the request and are still waiting for a decision.

Overlapping Licensees, Contractors and Commitment Holders
All businesses listed in the FMP mailing list provided by Chapleau MNR were sent the one-page KBM survey and letter soliciting input to the audit. One business, a fishing and hunting lodge located in the Chapleau area, responded to the letter. A number of concerns were identified regarding forest operations planning on the Martel Forest. Specifically, the business had issues regarding the management of wildlife habitat and harvesting practices on the Forest resulting in fewer bear baiting sites.

**Ministry of Natural Resources**

Interviews were held with the District Manager, Area Supervisor, Area Forester, District Planner, Resource Liaison Specialist and Area Technician. MNR District personnel also accompanied the audit team in the field for one day including the Area Forester and the Area Technician. The audit opening and closing meetings were attended by MNR District personnel.

One representative from the Forestry Futures Trust Committee participated in the opening meeting, the truck day, and the closing meeting via teleconference.

One representative from MNR Forests Branch attended one field day and participated in the pre-audit and closing meetings via teleconference.

One regional representative attended the pre-audit meeting, the truck field day and participated in the closing meeting via teleconference.

**Tembec**

Tembec actively participated in all aspects of the audit process and provided a great deal of input on the drafting of this report.
## Appendix 5 – List of Acronyms

<table>
<thead>
<tr>
<th>No.</th>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ABIR</td>
<td>Aboriginal Background Information Report</td>
</tr>
<tr>
<td>3</td>
<td>AOC</td>
<td>Area of Concern</td>
</tr>
<tr>
<td>4</td>
<td>AR</td>
<td>Annual Report</td>
</tr>
<tr>
<td>5</td>
<td>AWS</td>
<td>Annual Work Schedule</td>
</tr>
<tr>
<td>6</td>
<td>CAART</td>
<td>Chapleau Area Aboriginal Resource Team</td>
</tr>
<tr>
<td>7</td>
<td>CCFN</td>
<td>Chapleau Cree First Nation</td>
</tr>
<tr>
<td>8</td>
<td>CFSA</td>
<td>Crown Forest Sustainability Act</td>
</tr>
<tr>
<td>9</td>
<td>eFRI</td>
<td>Enhanced Forest Resource Inventory</td>
</tr>
<tr>
<td>10</td>
<td>FFTF</td>
<td>Forestry Futures Trust Fund</td>
</tr>
<tr>
<td>11</td>
<td>FIM</td>
<td>Forest Information Manual</td>
</tr>
<tr>
<td>12</td>
<td>FMP</td>
<td>Forest Management Plan</td>
</tr>
<tr>
<td>13</td>
<td>FMPM</td>
<td>Forest Management Planning Manual</td>
</tr>
<tr>
<td>14</td>
<td>FOIP</td>
<td>Forest Operations Information Program</td>
</tr>
<tr>
<td>15</td>
<td>FOIR</td>
<td>Forest Operations Inspections Report</td>
</tr>
<tr>
<td>16</td>
<td>FRI</td>
<td>Forest Resource Inventory</td>
</tr>
<tr>
<td>17</td>
<td>FRP</td>
<td>Forestry Research Partnership</td>
</tr>
<tr>
<td>18</td>
<td>FTG</td>
<td>Free To Grow</td>
</tr>
<tr>
<td>19</td>
<td>GIS</td>
<td>Geographic Information System</td>
</tr>
<tr>
<td>20</td>
<td>IFA</td>
<td>Independent Forest Audit</td>
</tr>
<tr>
<td>21</td>
<td>IFAPP</td>
<td>Independent Forest Audit Process and Protocol</td>
</tr>
<tr>
<td>22</td>
<td>IR</td>
<td>Issue Resolution</td>
</tr>
<tr>
<td>23</td>
<td>KBM</td>
<td>KBM Forestry Consultants Inc.</td>
</tr>
<tr>
<td>24</td>
<td>LCC</td>
<td>Local Citizens’ Committee</td>
</tr>
<tr>
<td>25</td>
<td>LTMD</td>
<td>Long Term Management Direction</td>
</tr>
<tr>
<td>26</td>
<td>MNO</td>
<td>Métis Nation of Ontario</td>
</tr>
<tr>
<td>27</td>
<td>MNR</td>
<td>Ministry of Natural Resources</td>
</tr>
<tr>
<td>28</td>
<td>NSRCF</td>
<td>Northeast Superior Regional Chiefs’ Forum</td>
</tr>
<tr>
<td>29</td>
<td>RPF</td>
<td>Registered Professional Forester</td>
</tr>
<tr>
<td>30</td>
<td>RSA</td>
<td>Resource Stewardship Agreement</td>
</tr>
<tr>
<td>31</td>
<td>SAR</td>
<td>Species at Risk</td>
</tr>
<tr>
<td>32</td>
<td>SFL</td>
<td>Sustainable Forest Licence</td>
</tr>
<tr>
<td>33</td>
<td>SFMM</td>
<td>Sustainable Forest Management Model</td>
</tr>
<tr>
<td>34</td>
<td>SGR</td>
<td>Silviculture Ground Rule</td>
</tr>
</tbody>
</table>
### Appendix 6 – Audit Team Members and Qualifications

<table>
<thead>
<tr>
<th>Name/Role</th>
<th>Responsibilities</th>
<th>Credentials</th>
</tr>
</thead>
</table>
| Laird Van Damme  
- Lead Auditor  
- Planning  
- Silviculture | Overall audit coordination and oversight of activities of the audit team.  
Assess silvicultural planning and operations; assist in assessment of achievement of management objectives and forest sustainability. | R.P.F., M.Sc.F.; 27 years experience as a practicing forester, educator and consultant; primary areas of practice are silviculture, forest management and forest research; completed ISO 14001 EMS Lead Auditor training; worked on 18 previous IFAs as either Lead, Harvest or Planning Auditor. |
| Peter Higgelke  
- Silviculture (stand-in for Laird Van Damme on field portion of the audit) | Field assessment of silviculture operations and effectiveness | R.P.F., M.Sc.F.; 30 years combined forestry experience in Ontario, Quebec, and Germany; experience as practicing consultant; completed ISO 14001 EMS Lead Auditor training; Lead Auditor on four IFAs, Wildlife Auditor on one Forest Management Agreement Review and nine IFAs; Harvest Auditor on six IFAs. |
| Peter Hynard  
- Operations | Field assessment of harvesting operations and utilization  
Field assessment of roads and water crossings  
Review of compliance planning/reporting management objectives, contractual obligations, and forest sustainability. | R.P.F., B.Sc.F.; 42 years combined forestry experience in Ontario and Quebec, both with industry and government. Formerly a management forester, forest industry liaison officer and project manager with MNR. Currently a consulting forester. Worked on two previous IFAs. |
| Rod Seabrook  
- Wildlife auditor  
- AOC auditor | Assess AOC documentation and practices and aspects of forest management related to environmental protection and wildlife practices.  
Review of management objectives, contractual obligations, and forest sustainability. | M.Sc. Biology; EP(EMSLA); 32 years forestry experience in Ontario; principal area of practice is forest management and environmental auditing; 12 years of auditing experience; participated in 25 Independent Forest Audits for the Province of Ontario. IFA experience covers all Crown managed forest types in Ontario; conducts sustainable forest management audits under the various recognized sustainable forest management standards) |
| Neil McLean  
- Modeling auditor | Review modelling and collaborative and consultative efforts leading to the establishment of the strategic-LTMD. | R.P.F., B.Sc.F.; 30 years combined forestry experience in Ontario, British Columbia, Austria and Germany; practising consultant since 1989; completed ISO 14001 EMS Lead Auditor training; SFMM trainer. |
| Ian Dunn  
- Audit co-ordination | Coordinate audit logistics  
Assess public consultation in forest | M.F.C.; Involved in forest management planning projects and |
<table>
<thead>
<tr>
<th>- Public consultation</th>
<th>management planning.</th>
<th>Other low-risk planning procedures</th>
<th>Independent Forest Audits for KBM.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rike Burkhardt</td>
<td></td>
<td></td>
<td>R.P.F., M.F.C.; 15 years experience as a practicing forester and consultant; primary areas of practice are provincial forest management policy, parks and protected areas policy, stakeholder engagement, First Nations interests in forest management; completed ISO 14001 Auditor training; worked on eight previous IFAs and two FSC assessments of SFL areas in Ontario.</td>
</tr>
<tr>
<td>• Local Citizen’s Committee</td>
<td>Assess LCC involvement and effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• First Nations</td>
<td>Assess Aboriginal involvement and sharing in benefits of forest management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess process for incorporating tourism values in forest management planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review of contractual obligations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>