

Minnesota DNR Division of Forestry

500 Lafayette Road
St. Paul, MN 55155-4044

FRS 6Y921

SFI 2015-2019 Forest Management Standard

Surveillance Audit

NSF International Forestry Program Audit Report

A. Program Participant's Name

Minnesota DNR

NSF Customer Number (FRS)

6Y921

B. Scope

Forest management on Minnesota DNR's forestry lands, Lake County fisheries lands, Land Utilization Project (LUP) lands, and wildlife lands except for the Prairie Province. Scientific and Natural Areas (SNAs) and State Parks are excluded. SFI Objectives 1-15 of the SFI 2015-2019 Forest Management Standard and all relevant requirements of the SFI 2010-2014 Forest Management Standard are included. The SFI Certificate Number is NSF-SFIS-6Y921.

C. NSF Audit Team

Mike Ferrucci, NSF Lead Auditor; Brendan Grady, SCS Global, FSC Lead Auditor

D. Audit Dates

September 20-23, 2016

E. Reference Documentation

SFI 2015-2019 Forest Management Standard, NSF Forms: 4856, 7571, 15517

Company Documentation

Various: Management plans, procedures, policies, etc. See report checklists.

F. Audit Results: Based on the results of this assessment, the auditor concluded:

Acceptable with no nonconformities

The following nonconformities were identified and will require corrective action.

Major: 0 Minor: 0

In addition, 1 opportunity for improvement (OFIs) was identified)

G. Changes to Operations or to the Standard

Note: Were there any significant changes in operations, procedures, specifications, facility records, etc., from the previous visit?

Yes (Please explain)

No

H. Other Issues Reviewed

- | | | | | | | |
|-------------------------------------|-----|--------------------------|----|-------------------------------------|-----|--|
| <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | Public report from previous audit(s) is posted on the [SFI/SBP/etc.] website |
| <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | Relevant industry specific logos or labels (SFI, PEFC, etc.) are utilized correctly. |
| <input type="checkbox"/> | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | N/A | Relevant accreditation logos (ANSI or ANAB) are utilized correctly and meet rules specified in AESOP 4876 sections 12-15 and AESOP 14680 section GP-59. |
| <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | Nonconformities from previous audit were reviewed.
The 2015 Minor Non-conformance involved requirement in Forest Management Guidelines under "Spills and Emergencies" during logging operations, related to SFI Indicator 3.1.1 that requires a "Program to implement federal, state or provincial water quality best management practices during all phases of management activities." Minnesota DNR has modified the timber sale agreement and its sale administration procedure to emphasize the need to meet legal requirements regarding spills and to ensure that operators have a spill kit or other means to address any fluid spills that may occur. |

I. Future Audit Schedule

Following the initial registration audit, continued certification requires annual assessments commonly referred to as "Surveillance Audits". Additionally, at the end of the certification period, maintaining certification requires the completion of a recertification or "Reassessment Audit". The next audit a Surveillance Audit scheduled to be conducted during September 2017.

J. Appendices

- [Appendix 1:](#) Audit Notification Letter and Audit Agenda
- [Appendix 2:](#) SFI Public Summary Report
- [Appendix 3:](#) SFI Forest Management Standard Checklist
- [Appendix 4:](#) Meeting Attendance
- [Appendix 5:](#) Field Site Notes

Appendix 1 Audit Notification Letter and Audit Agenda

June 15, 2016

Tim Beyer, Forest Certification Program Consultant
Minnesota DNR Division of Forestry
500 Lafayette Road
St. Paul, MN 55155-4044

RE: Confirmation of 2016 SFI and FSC Surveillance Audits, Minnesota DNR

Dear Tim:

As we discussed, I will be leading the 2016 SFI Surveillance Audit of your program's conformance to the SFI 2015-2019 Forest Management Standard as described in the attached plan and schedule. As agreed, the 2016 joint FSC and SFI audits of Minnesota DNR are scheduled for September 20-23, 2016.

SFI Scope

Forest management on Minnesota DNR's forestry lands, Lake County fisheries lands, Land Utilization Project (LUP) lands, and wildlife lands except for the Prairie Province. Scientific and Natural Areas (SNAs) and State Parks are excluded. SFI Objectives 1-15 are included. The SFI Certificate Number is NSF-SFIS-6Y921.

Multi-Site Sampling Plan

Minnesota DNR qualifies for multi-site sampling as provided within the Requirements for the SFI 2015-2019 Program: Standards, Rules for Label Use, Procedures, and Guidance, Section 9 Auditing Requirements. The program has 17 forestry work areas that are considered sites. (Note: Lands administered by the Division of Wildlife, wildlife activities, and wildlife work areas within the certified portion of the state are also within the scope of the audit; because these generally overlap geographically with forestry work areas sampling is based on the Forestry Division's work areas.

The 2016 audit includes 3 forestry work areas, some small Wildlife Management Areas (WMAs), and one larger WMA Unit. The audit will include a review the centralized management of the organization, conducted partially in the St. Paul offices and partially as time allows during the rest of the week (during some of the longer drives).

The forestry and wildlife units are included in the 2016 audit sample are:

- Little Falls Forestry Area
- Bemidji Forestry Area
- Park Rapids Forestry Area
- Wildlife Management Areas in Bemidji, Little Falls, and Park Rapids Forestry Area's

Preparing for the Audit (Information Requests)

A key part of the audit is a review of selected evidence related to your program, which may include:

- Approval for logo usage
- Internal Audit and Management Review records
- Training records
- Documentation for operation of complaint procedure
- Documentation for multisite requirements

Please have this information available for me by the start of audit.

This audit is being conducted in conjunction with your FSC Forest Management Audit (conducted by SCS Global). Please provide me any information or documents that you provide to SCS Global or to their assigned Lead Auditor. This will help reduce the burden that the dual audit process places on you and your team.

To the degree possible in advance of the audit, please provide key written evidence for the SFI requirements selected for review (see list below). I would ask that you place particular emphasis on SFI-focused requirement (SFI Implementation Committee involvement, SFI reporting, etc.) as these are often overlooked when customers prepare for dual audits. While printed binders provided to the audit team at the start of the audit are quite useful, the team also requests electronic copies of documents where possible. Receiving some of these documents, notably status updates regarding open CARs, one to two weeks prior to the audits would be helpful.

SFI Requirements Selected for 2016 Surveillance Audit

(Note: The first number indicates the Objective; for example 8.1 is under Objective 8.)

Requirement	Description
Objectives 2 - 7	All requirements within Objectives 2 through 7 (field-oriented requirements) to the extent they are relevant to the field sites inspected.
8.1	Recognize and respect Indigenous Peoples’ rights
8.2	Forest management on public lands and Indigenous Peoples
8.3	Communicate with and respond to local Indigenous Peoples with respect to sustainable forest management practices on their private lands
9.1	Forestry Law/Reg. Compliance System
9.2	Social Law Compliance (including ILO)
11.1	Training of Contractors and Personnel
11.2	Improved Wood Producer Professionalism
11.2.3	Logger certification
13.1	Public Lands Planning Involvement
14.1	Summary Audit Report
14.2	Annual Reporting to SFI, Inc.
15.1	Management Review System

Role of SFI Inc. Office of Label Use and Licensing

As a reminder, your organization is responsible for contacting SFI, Inc. and complying with all requirements before using or changing any SFI label or logo. Your contact is:

Rachel Dierolf, Manager of Statistics and Labeling
 Sustainable Forestry Initiative, Inc.
 900 17th Street NW, Suite 700
 Washington, DC 20006
 613-274-0124 rachel.dierolf@sfiprogram.org

Field Site Selection Process

As in the past, please provide spreadsheet of all currently established but unsold, currently sold and active, and closed (closed within the last 2 years [after July 1, 2014]) timber sales for areas involved in the 2016 Audit.

Brendan Grady is taking the lead on site selections for Tuesday and Wednesday, and I’ll do the selections for Thursday in Park Rapids. I’ll make my initial selections based on information you provide, and may ask for follow-up information in order to pare down the selections to 5 or 6 harvest sites for each of the 2 “Audit Crews”.

After the initial sites are selected by the auditors, please ask the appropriate person from the area to develop audit routes that would take us the sites selected and to additional sites that may be nearby and which are active or recently-completed, or otherwise useful to develop evidence for the audits. These routes should include “non-timber sale” sites that demonstrate forest management programs and accomplishments. As in the past there is an interest in potentially visiting sites of forest conversions to other species and/or non-forest, indigenous people sites, HCVFs, and active timber harvests. The goal is to have a list of 10-12 potential stops (timber sales and non-timber sale sites) for each daily audit crew’s tour.

During the opening meeting each audit day the auditor will review the list of 10-12 potential stops and then select and adapt the sites to visit in the field time available.

Audit Schedules and Travel Logistics

The attached schedule was agreed to by all parties. More detailed daily schedules are to be developed by your team as we proceed with the site selection process. These should be provided to all involved at least two days before the start of the audit. The schedules will be reviewed and adjusted as needed during the opening meeting or in the field to accommodate any special circumstances.

The audit team will arrange transportation to your St. Paul office at the start of the audits, but may request transportation to airports at the end of the audit. The team will travel in your vehicles during the audit. We will work with you to arrange lodging for the audit team. During the audits please plan to have lunches (simple sandwich lunches and soft drinks are sufficient) on site each day to expedite the audit activities.

Please contact me via email or phone if you would like to recommend changes or have any questions regarding what is needed for the audit.

Thank you for selecting NSF International to provide your audit services.

Sincerely,



Mike Ferrucci, SFI Lead Auditor

203-887-9248 mferrucci@iforest.com

Copy: Brendan Grady, SCS Global, FSC Lead Auditor

Audit Schedule

Type of Audit

- | | | |
|---|---|--|
| <input type="checkbox"/> Readiness Review (Stage 1) | <input type="checkbox"/> Registration (Stage 2) | <input checked="" type="checkbox"/> Surveillance |
| <input type="checkbox"/> Reassessment | <input type="checkbox"/> Transfer | <input type="checkbox"/> Verification |

Audit Objectives

Determine if certification should be maintained by reviewing selected requirements and program changes.

MONDAY, SEPTEMBER 19
AUDITORS ARRIVE

TUESDAY, SEPTEMBER 20	
Focus	OPENING MEETING
Location	Minnesota DNR - Central Office (Room 6 East)
Times	Start Time = 8:30 AM End Time = 10:30 AM
Attendance	Commissioners' Office NW Regional Director
	Division Directors (FOR - FAW - EWR) NW Region Managers (FOR - FAW - EWR)
	Program Supervisors (TBD) Regional Specialists (TBD)
	FCIT Members Trust Lands Administrator

TUESDAY, SEPTEMBER 20	
Focus	FIELD AUDIT: LITTLE FALLS AREA (WEST)
Location	MEET IN FIELD (~6 SITES) (travel to Bemidji at end of day, 2 hrs)
Times	Start Time = 1:00 PM End Time = 5 PM
LUNCH	BAG LUNCH - pick up from Subway before leaving CO
Auditors	Audit Crew A Audit Crew B
Sites	TBD - Concentrating on Wildlife Management Areas
5-7 pm	Audit of selected issues, focus on administrative; FCIT Team (during drive)

WEDNESDAY, SEPTEMBER 21 (2 Audit Crews)	
Focus	FIELD AUDIT: BEMIDJI AREA
Times	Start Time = 8:00 AM End Time = ~5:00 PM
Location	ALL: MEET AT BEMIDJI REGIONAL OFFICE
Auditors	Audit Crew A (Southern sites) Audit Crew B (Northern sites)
Sites	TBD
LUNCH	Location TBD - in field. Box lunches available in AM.

THURSDAY, SEPTEMBER 22 (2 Audit Crews)	
Focus	FIELD AUDIT: PARK RAPIDS AREA
Times	Start Time = 8:00 AM End Time = ~3:00 PM
Auditors	Audit Crew A (WEST) Audit Crew B (EAST)
Location	MEET AT PARK RAPIDS AREA (return to St Paul and end of day, 3.5 hrs)
Sites	TBD
LUNCH	Location TBD - in field. Box lunches available in AM.
3-7 pm	Review of remaining issues, focus on administrative; FCIT Team (during drive)

FRIDAY, SEPTEMBER 23	
Focus	CLOSING MEETING
Location	DNR Central Office (6 East)
Times	Start Time = 9:00 AM End Time = 11:00 AM

NOTE: The morning of each day will begin with an intro presentation and safety briefing from the Area Forest / Wildlife Supervisors. ~45 minutes. Staff participating in the audit should be present for AM briefing. Lodging on 9/19 and 9/22 will be in St Paul, and on 9/20 and 9/21 will be in Bemidji.

Audit logistics:

If lodging is needed for the audit team and has not yet been booked, please make arrangements at this time;

Plans should be made to have lunch on site to expedite the visit;

Travel will most likely occur in your vehicle(s) each day during the audit, but the audit team will have transportation to each field location at the start and end of each audit day.

Appendix 2

Minnesota DNR Public Summary Audit Report

The SFI Program of Minnesota DNR has demonstrated conformance with the SFI 2015-2019 Standard and Rules, Section 2 – Forest Management Standard, according to the NSF Certification Process.

NSF initially certified Minnesota DNR to the SFI Standard in 2005 and recertified the organization in 2010 and in 2013 based on review of the program against all of the SFI requirements. Surveillance audits of a sample of requirements occurred in 2014 and 2015. This report describes the 2016 Re-Certification Audit.

The audit was performed by NSF on September 20-23 by a five-person audit team headed by Mike Ferrucci, NSF Lead Auditor supported by FSC Auditors Brendan Grady and Beth Jackmain. Audit team members fulfill the qualification criteria for conducting audits contained in SFI 2015-2019 Standards and Rules, Section 9 - Procedures and Auditor Qualifications and Accreditation.

The objective of the audit was to assess continuing conformance of the organization's SFI Program to the requirements of the SFI 2015-2019 Standard and Rules, Section 2 – Forest Management. The scope of the audit included forest management operations. Forest practices that were the focus of field inspections included those that have been under active management over the planning period of the past 2 years. Practices conducted earlier were also reviewed as appropriate (regeneration and Best Management Practices for example). SFI obligations to promote sustainable forestry practices, to seek legal compliance, and to incorporate continual improvement systems were also within the scope of the audit.

The SFI Standard was used without modifying any requirements. Several of the SFI Section 2 requirements were outside of the scope of Minnesota DNR's SFI program and were excluded from the scope of the SFI Re-Certification Audit as follows:

- Indicator 2.1.4 involving planting exotic species
- Performance Measure 8.3 relating to private lands
- Indicator 10.1.2 because there is no research on genetically engineered trees via forest tree biotechnology

Audit Process

NSF initiated the audit with a planning process to confirm the scope of the audit, review the SFI Indicators and evidence to be used to assess conformance, verify that Minnesota DNR was prepared to proceed to the Re-Certification Audit, and to prepare a detailed audit plan. NSF then conducted the Certification Audit of conformance to the SFI, Section 2. A report was prepared and final approval was done by an independent Certification Board member assigned by NSF. Follow-up or Surveillance Audits are required by SFI, Section 9. The next Surveillance Audit is scheduled for mid-September, 2017.

The audit was governed by a detailed audit plan designed to enable the audit team to efficiently determine conformance with the applicable SFI requirements. The plan provided for the assembly and review of audit evidence consisting of documents, interviews, and on-site inspections of ongoing or completed forest practices.

During the audit the NSF team reviewed a sample of the written documentation assembled to provide objective evidence of Conformance. NSF also selected field sites for inspection based upon the risk of environmental impact, likelihood of occurrence, special features, and other criteria outlined in the NSF protocols. NSF also selected and interviewed stakeholders such as contract loggers, landowners and other interested parties, and interviewed employees within the organization to confirm that the SFI Standard was understood and actively implemented.

Minnesota DNR qualified for multi-site sampling per the SFI Standard's Section 9 Auditing Requirements. The program has 15 forestry work areas that are considered sites. (Note: Lands administered by the Division of Wildlife, wildlife activities, and wildlife work areas within the certified portion of the state are also within the scope of the audit; because these generally overlap geographically with forestry work areas the decision has been made to base sampling on the Forestry Division's work areas.) The audit team visited 3 forestry work areas, multiple small Wildlife Management Areas (WMAs) within different wildlife work areas, and reviewed the centralized management of the organization.

The possible findings of the audit included Full Conformance, Major Non-conformance, Minor Non-conformance, Opportunities for Improvement, and Practices that exceeded the Basic Requirements of the standard.

Minnesota DNR's Lands and Sustainable Forestry Programs

Minnesota DNR manages 5.4 million acres of state lands throughout Minnesota, following an interdisciplinary approach designed to integrate the harvesting of forest products, management of wildlife habitat, the protection of special sites, and the provision of extensive recreational opportunities. These lands encompass a variety of forest types, including aspen, white, red, and jack pine, mixed lowland conifers, oak-hickory, and northern hardwoods. Forest products produced include timber, pulpwood, firewood, cabin logs, poles, and other specialty products. Nearly 5 million acres are within the scope of the SFI 2015-2019 Forest Management Standard certificate.

“Background: The Minnesota Department of Natural Resources (MN DNR) sought and obtained dual forest management certificates on December 31, 2005 under two internationally recognized, independent, credible forest management certification systems: the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI). MN DNR's certificates have since grown from 4.47 to 4.96 million acres of state administered forestlands certified under the FSC standard and 4.98 million acres certified under the SFI standard. MN DNR is one of the largest single certificate holders in the country. Along with its counterparts in Wisconsin and Michigan, MN DNR has been a leader in forest certification. Currently, there are over 8.4 million acres of forestland in the state of Minnesota certified under FSC and/or the Sustainable Forestry Initiative (SFI) program.

Forest management certification is consistent with MN DNR's mission and responsibility 'to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life.' Therefore, MN DNR is looking to continue with its forest management certification efforts.” Source: Minnesota Department of Natural Resources.

Lands included in the SFI Certification = 4,972,283 acres comprised of:

- Forestry Administered: 4,079,000 acres
- Wildlife Administered: 777,000 acres
- Fisheries Administered Lands in Lake County: 7,864 acres
- Wildlife Administered LUP (Land Utilization Project): 85,867 acres
- Trails Administered Lands: 22,552 acres

Overview of Audit Findings

Minnesota DNR was found to be in overall conformance with the standard, with no new non-conformances. One Opportunity for Improvement and several areas where the program exceeds the standard are described below.

2016 SFI Opportunity for Improvement

The auditors reviewed progress made on updating plans and implementing practices to achieve long-term landscape goals for forest composition and age-class structure and determined that the program is in conformance but efforts to address this issue are ongoing. The 2015 OFI has been reissued:

SFI OFI 2015.2: There is an Opportunity for Improvement when updating plans and implementing practices to achieve long-term landscape goals for forest composition and age-class structure. SFI Indicator 4.1.3 requires the following: “Document diversity of forest cover types and age or size classes at the individual ownership or forest tenure level, and where credible data are available, at the landscape scale. Working individually or collaboratively to support diversity of native forest cover types and age or size classes that enhance biological diversity at the landscape scale.”

This finding serves to alert the organization to an area that could be strengthened or which could merit future attention.

Minnesota DNR Exceeds the Requirements in These Areas

Minnesota DNR has demonstrated exceptional practices in several areas of the SFI 2015-2019 Forest Management Standard:

The use of the NPC ECS to classify sites and guide site-level management decisions regarding converting forest cover types is an exceptional practice. (This finding is supported by the rollout of the Stand Exam Layer.)

SFI Indicator 1.2.2 states that “Where a Program Participant intends to convert another forest cover type, an assessment considers:

- a. Productivity and stand quality conditions and impacts which may include social and economic values;
- b. Specific ecosystem issues related to the site such as invasive species, insect or disease issues, riparian protection needs and others as appropriate to site including regeneration challenges; and
- c. Ecological impacts of the conversion including a review at the site and landscape scale as well as consideration for any appropriate mitigation measures.”

The program has demonstrated exceptional performance in achieving species composition and stocking rates, often in very challenging situations. SFI Indicator 2.1.2 requires “Clear criteria to judge adequate regeneration and appropriate actions to correct understocked areas and achieve acceptable species composition and stocking rates for planting, direct seeding and natural regeneration.”

Minnesota DNR has an exceptional program for conservation of native biological diversity. SFI Indicator 4.1.1 requires a “Program to promote the conservation of native biological diversity, including species, wildlife habitats and ecological community types.”

Minnesota DNR promotes recreational use of the forests and regularly modifies timber management to better accommodate such use. As such the SFI Standard is exceeded. SFI Performance Measure 5.4 states that “Program Participants shall support and promote recreational opportunities for the public.” While Indicator 5.4.1 requires the organization to “Provide recreational opportunities for the public, where consistent with forest management objectives.”

Minnesota DNR has developed exceptional systems to review commitments, programs and procedures to evaluate effectiveness across the three divisions and for the overall land management enterprise. SFI Indicator 15.1.1 requires a “System to review commitments, programs and procedures to evaluate effectiveness.”

2015 SFI Minor Non-conformances Reviewed During the 2016 Audit

One minor non-conformance was issued during the 2015 surveillance audit. The corrective action plan developed by Minnesota DNR to address this finding was reviewed during the 2016 audit and verified:

2015 Minor Non-conformance: There is not a process in place to ensure that the requirements in the Forest Management Guidelines under “Spills and Emergencies” are being met during logging operations.

SFI Indicator 3.1.1 requires a “Program to implement federal, state or provincial water quality best management practices during all phases of management activities.”

Minnesota DNR has modified the timber sale agreement and its sale administration procedure to emphasize the need to meet legal requirements regarding spills and to ensure that operators have a spill kit or other means to address any fluid spills that may occur.

2015 SFI Opportunities for Improvement which were Resolved

Opportunities for improvement from the 2015 SFI audit were reviewed, and those listed below were resolved by Minnesota DNR and not-reissued:

Planning (SFI 1.1.1)

SFI OFI 2015.1: There is an Opportunity for Improvement in the pace of completion of Section Forest Resource Management Plans, considering the many changes in markets, conditions, and policies.

SFI Indicator 1.1.1 requires “Forest management planning at a level appropriate to the size and scale of the operation...”

Minnesota DNR has streamlined and improved the planning approach and should be on track for finalization of the next two Section Forest Resource Management Plans before the next audit in 2017.

Training (SFI 11.1.3)

SFI OFI 2015.3: There is an Opportunity for Improvement in the understanding and consistent application of the Minnesota Site Level Guidelines for the distribution of one-third of the logging slash throughout harvest sites.

SFI OFI 2015.4: There is an Opportunity for Improvement in the understanding of the implications of recent analyses of Economic Rotation Age, the factors foresters should consider when making decisions regarding the end of rotation, and how to interpret new policies related to the management of planted red pine stands.

SFI Indicator 11.1.3 (related to OFIs 2015.5 and 2015.6) requires “Staff education and training sufficient to their roles and responsibilities.”

MDNR has invested considerable effort in recent years in training and oversight related to procedures that have been subject to audit findings. The actions taken in response to the above three OFIs (and perhaps for other reasons not directly related to the above findings) are showing results in terms of the ability of area staff to explain policies and procedures. The 2016 audit provided only limited opportunity for the audit team to assess on-the-ground actions that result from the application of this improved understanding, except for Green Tree Retention, where we saw plenty of evidence of compliance with the Minnesota Site-Level Guidelines and internal policies and procedures.

Management Review (SFI 15.1.3)

SFI OFI 2015.5: There is an opportunity to continue to emphasize the process of responding to the 2014 MN Office of Legislative Audit (OLA) of Forestry Program findings. This OFI is similar to a 2014 OFI. The 2014 MN Legislative Audit of Forestry Program contains several recommendations that closely track with recent and past findings of internal audits and third-party certification audits.

SFI Indicator 15.1.3 requires “Annual review of progress by management and determination of changes and improvements necessary to continually improve conformance to the SFI 2015-2019 Forest Management Standard.”

The 2014/2015 OFI will not be continued in 2016. Progress on responding to the findings of the 2014 MN Office of Legislative Audit (OLA) of Forestry Program appears to have been substantial, with ongoing attention to remaining issues.



General Description of Evidence of Conformity

NSF's audit team used a variety of evidence to determine conformance. A general description of this evidence is provided below, organized by SFI Objective.

Objective 1 Forest Management Planning

To ensure forest management plans include long-term sustainable harvest levels and measures to avoid forest conversion.

Summary of Evidence:

The evidence of conformance for this indicator included:

- Subsection Forest Resource Management Plans (SFRMPs)
- Minnesota Forest Resources Council (MFRC) Site-Level Forest Management Guidelines
- Interdisciplinary Forest Management Coordination Framework
- ECS Native Plant Community Keys and linked Silvicultural Interpretations
- Minnesota Strategic Conservation Agenda
- MFRC Landscape Program which developed recommended desired outcomes, goals, and strategies for six Sections in Minnesota, and
- Inventory data and growth models.
- Selected management plans for wildlife management areas
- Silvicultural Prescription Worksheets and Timber Appraisal Reports for selected harvests

Objective 2 Forest Health and Productivity

To ensure long-term forest productivity, carbon storage and conservation of forest resources through prompt reforestation, afforestation, minimized chemical use, soil conservation, and protecting forests from damaging agents.

Summary of Evidence:

Field observations and associated records were used to confirm practices. Minnesota DNR has programs for reforestation, for protection against insects, diseases and wildfire, and for careful management of activities which could potentially impact soil and long-term productivity. Key field records including Silvicultural Prescription Worksheets, Timber Appraisal Reports, Permit Activity Reports, and other data from various database systems.

Objective 3 Protection and Maintenance of Water Resources

To protect the water quality of rivers, streams, lakes, wetlands and other water bodies through meeting or exceeding best management practices.

Summary of Evidence:

Field observations of a range of sites were the key evidence. Auditors visited portions of selected field sites that were close to water resources. MFRC Site-Level Forest Management Guidelines (BMPs) are also an important part of the program to protect water resources. Selected Permit Activity Reports were reviewed, and Timber Sale Administration Foresters were interviewed.

Objective 4 Conservation of Biological Diversity

To manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity by developing and implementing stand- and landscape-level measures that promote a diversity of types of habitat and successional stages, and the conservation of forest plants and animals, including aquatic species, as well as threatened and endangered species, Forests with Exceptional Conservation Value, old-growth forests and ecologically important sites.

Summary of Evidence:

Field observations, written plans and policies, use of college-trained field biologists, availability of specialists, and regular staff involvement in conferences and workshops that cover scientific advances were the evidence used to assess the requirements involved biodiversity conservation. The Interdisciplinary Forest Management Coordination Framework ensures that biodiversity issues are considered in forest management planning.

Minnesota also has developed a comprehensive system of Representative Sample Areas (RSAs) and High Conservation Value Forests (HCVFs) which are protected and managed to provide for sensitive species and communities.

Objective 5 Management of Visual Quality and Recreational Benefits

To manage the visual impact of forest operations and provide recreational opportunities for the public.

Summary of Evidence:

Field observations of completed operations and the implementation of policies for visual quality, including road zoning, were assessed during the evaluation. Maps of recreation sites, combined with field visits, helped confirm a strong recreation program.

Objective 6 Protection of Special Sites

To manage lands that are geologically or culturally important in a manner that takes into account their unique qualities.

Summary of Evidence:

Field observations of completed operations, records of special sites, training records, and written protection plans were all assessed during the evaluation. The Minnesota Biological Survey (MBS) which is conducted county-by-county to search for rare plants, animals, and communities continues to be the core of the program. Minnesota also has developed an initial set of Representative Sample Areas (RSAs) and comprehensive pool of candidate High Conservation Value Forests (HCVFs) which are managed to protect and provide for sensitive species and communities. Some of these sites were visited to compare protections with maps and written information.

Objective 7 Efficient Use of Fiber Resources

To minimize waste and ensure the efficient use of fiber resources.

Summary of Evidence:

Field observations of completed operations, contract clauses, and discussions with supervising field foresters and with loggers provided the key evidence. Foresters monitor utilization during all harvests and consider the new biomass harvesting guidelines. Selected Permit Activity Reports were reviewed, and Timber Sale Administration Foresters were interviewed. The Division of Forestry has a Utilization and Marketing Program.

Objective 8 Recognize and Respect Indigenous Peoples' Rights

To recognize and respect Indigenous Peoples' rights and traditional knowledge.

Summary of Evidence:

Auditors contacted tribal representatives and reviewed records of tribal outreach activities to determine conformance.

Objective 9 Legal and Regulatory Compliance

To comply with applicable federal, provincial, state and local laws and regulations.

Summary of Evidence:

Field reviews of ongoing and completed operations were the most critical evidence. Regulatory compliance has been very strong.

Objective 10 Forestry Research, Science and Technology

To invest in forestry research, science and technology, upon which sustainable forest management decisions are based and broaden the awareness of climate change impacts on forests, wildlife and biological diversity.

Summary of Evidence:

Records of research support and interviews with foresters and with specialists provided evidence of strong efforts in forestry research.

Objective 11 Training and Education

To improve the implementation of sustainable forestry practices through appropriate training and education programs.

Summary of Evidence:

Training records of selected personnel, records associated with harvest sites audited, and logger interviews were the key evidence for this objective. Minnesota DNR provides support for the Minnesota Logger Education Program.

Objective 12 Community Involvement and Landowner Outreach

To broaden the practice of sustainable forestry through public outreach, education, and involvement, and to support the efforts of SFI Implementation Committees.

Summary of Evidence:

Review of documents showing outreach activities and interviews with staff and stakeholders were sufficient to assess conformance with the requirements selected for review during this audit.

Objective 13 Public Land Management Responsibilities

To participate and implement sustainable forest management on public lands.

Summary of Evidence:

Interviews and review of documents and correspondence as well as the Minnesota DNR website were used to confirm the requirements.

Objective 14 Communications and Public Reporting

To increase transparency and to annually report progress on conformance with the SFI Forest Management Standard.

Summary of Evidence:

Interviews, copies of reports filed with SFI Inc. and the SFI Inc. website provided evidence of conformance.

Objective 15. Management Review and Continual Improvement

To promote continual improvement in the practice of sustainable forestry by conducting a management review and monitoring performance.

Summary of Evidence:

Records of program reviews, agendas and notes from management review meetings, and interviews with personnel from all involved levels in the organization were assessed. Follow-up actions for internal audit findings were also reviewed.



Relevance of Forestry Certification

Third-party certification provides assurance that forests are being managed under the principles of sustainable forestry, which are described in the Sustainable Forestry Initiative Standard as:

1. Sustainable Forestry

To practice sustainable forestry to meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing and harvesting of trees for useful products and ecosystem services such as the conservation of soil, air and water quality, carbon, biological diversity, wildlife and aquatic habitats, recreation and aesthetics.

2. Forest Productivity and Health

To provide for regeneration after harvest and maintain the productive capacity of the forest land base, and to protect and maintain long-term forest and soil productivity. In addition, to protect forests from economically or environmentally undesirable levels of wildfire, pests, diseases, invasive exotic plants and animals and other damaging agents and thus maintain and improve long-term forest health and productivity.

3. Protection of Water Resources

To protect water bodies and riparian areas, and to conform with forestry best management practices to protect water quality.

4. Protection of Biological Diversity

To manage forests in ways that protect and promote biological diversity, including animal and plant species, wildlife habitats, and ecological or natural community types.

5. Aesthetics and Recreation

To manage the visual impacts of forest operations, and to provide recreational opportunities for the public.

6. Protection of Special Sites

To manage lands that are ecologically, geologically or culturally important in a manner that takes into account their unique qualities.

7. Responsible Fiber Sourcing Practices in North America

To use and promote among other forest landowners sustainable forestry practices that are both scientifically credible and economically, environmentally and socially responsible.

8. Legal Compliance

To comply with applicable federal, provincial, state, and local forestry and related environmental laws, statutes, and regulations.

9. Research

To support advances in sustainable forest management through forestry research, science and technology.

10. Training and Education

To improve the practice of sustainable forestry through training and education programs.

11. Community Involvement and Social Responsibility

To broaden the practice of sustainable forestry on all lands through community involvement, socially responsible practices, and through recognition and respect of Indigenous Peoples' rights and traditional forest-related knowledge.

12. Transparency

To broaden the understanding of forest certification to the SFI Standard by documenting certification audits and making the findings publicly available.

13. Continual Improvement

To continually improve the practice of forest management, and to monitor, measure and report performance in achieving the commitment to sustainable forestry.

14. Avoidance of Controversial Sources including Illegal Logging in Offshore Fiber Sourcing

(Applies only to the SFI 2015-2019 Fiber Sourcing Standard)

To avoid wood fiber from illegally logged forests when procuring fiber outside of North America, and to avoid sourcing fiber from countries without effective social laws.

Source: Sustainable Forestry Initiative® (SFI) Standard, 2015–2019 Edition



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Appendix 3 SFI Forest Management Standard Checklist

**NSF International Forestry Program
SFI 2015-2019, Section 2: Forest Management Standard Audit Checklist**

FRS 6Y921 Minnesota DNR Division of Forestry

Date of audit: September 20-23, 2016

Note: SFI Requirements Selected for 2016 Surveillance Audit are noted in audit plan; these include field-oriented requirements under Objectives 2-7 and other requirements marked with grey highlights under Objectives 8-15.

1.2 Additional Requirements

SFI Program Participants with fiber sourcing programs (acquisition of roundwood and field-manufactured or primary-mill residual chips, pulp and veneer to support a forest products facility), must also conform to the *SFI 2015-2019 Fiber Sourcing Standard*.

Use of the *SFI* on-product labels and claims shall follow Section 5 - Rules for Use of *SFI* On-Product Labels and Off-Product Marks as well as ISO 14020:2000.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR does not use on-product labels and claims. Load tickets reviewed and the training document "Chain of Custody Load Tickets" have the appropriate use of logo and claim "SFI Certified Forest Content".
Use of Off-Product Marks was reviewed; record of approval was provided: From: rachel.dierolf@sfiprogram.org; Sent: Tuesday, September 06, 2016 12:55 PM; To: Beyer, Tim (DNR) Tim.Beyer@state.mn.us; Subject: SFI Logo Approval Request: Logo Use Approval.

Objective 1 Forest Management Planning

To ensure forest management plans include *long-term* sustainable harvest levels and measures to avoid forest conversion.

Performance Measure 1.1

Program Participants shall ensure that forest management plans include *long-term* harvest levels that are sustainable and consistent with appropriate *growth-and-yield models*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: During the 2016 SFI Surveillance Audit planning requirements were only reviewed if they related to the 2015 OFI or to site-level planning and/or site level implementation. See indicators below.

1.1.1. Forest management planning at a level appropriate to the size and scale of the operation, including:

- a. a *long-term* resources analysis;
- b. a periodic or ongoing *forest inventory*;
- c. a land classification system;
- d. biodiversity at *landscape* scales;
- e. soils inventory and maps, where available;
- f. access to *growth-and-yield modeling* capabilities;
- g. up-to-date maps or a geographic information system (GIS);
- h. recommended sustainable harvest levels for areas available for harvest; and

- i. a review of non-timber issues (e.g., recreation, tourism, pilot projects and economic incentive *programs* to promote water *protection*, carbon storage, *bioenergy feedstock* production, or *biological diversity conservation*, or to address climate-induced ecosystem change).

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The audit team determined that conformance was indicated, and that the 2015 OFI was no longer applicable: SFI OFI 2015.1: There is an Opportunity for Improvement in the timing of completing of Section Forest Resource Management Plans, considering the many changes in markets, conditions, and policies.

Minnesota DNR has streamlined and improved the planning approach and seems to be on track for plan finalization before the next audit in 2017.

“Extensions of existing plans do not mean that forest management is occurring without direction or without consideration of new conditions or policy direction. As stand list extensions are developed, local teams determine whether to continue following existing plan direction (e.g., treatment levels, conversion goals) or revise based on new direction (e.g., rescission of ERF policy) or information (e.g., modeling of new inventory data). Stand extension lists do go through the usual internal interdisciplinary review and public review as part of Annual Stand Exam Lists. Other aspects of SFRMP implementation are also informed and updated by ongoing updates to other aspects of DNR’s “management plan” such as updated policy and guidance related to invasive species (DNR Op. Order, associated division guidelines, climate change (DNR Op. Order, associated division guidelines), and school trust land management (DNR Op. Order, associated guidance)... There may be additional or more specific actions identified based on additional experience as the NSU/NMOP processes move forward towards completing full draft plans by early in 2017.”

Management plans for the Ereaux WMA (Ereaux WMA Management Guidance Document, WMA00539) and for the Ruff-Nik WMA (Ruff-Nik WMA Management Guidance Document, WMA01148) are comprehensive and well-written.

2015 Notes: The forest management plan for MDNR is comprised of many policies and separate documents described in a 3-page summary “DNR’s Forest Management Plan”. The document includes many items under each of four categories, with sub-categories shown when useful sub-categories exist:

1. Statewide Direction: Plans, Policies, Operational Policies, Procedures, and Guidelines
2. Landscape Level Direction: Plans; Guidelines
3. Site-Level Management Direction / Decisions:
4. Databases

At each Forest Management Area presentations, documents, interviews, and field stops confirmed that plans and programs described above are in place. For example data from the Minnesota Biological Surveys is used by Ecologists and Biologists when reviewing and commenting on proposed vegetation treatments. Laws, regulations, plans, and policies covering timber and non-timber resource issues (which comprise key portions of the overall plans) are implemented through treatments driven by the Annual Stand Exam List (ASEL) review process. Each year the stands from the ASEL proposed for treatments are provided to specialists from the Wildlife Division and The Ecological & Water Resources Division for review and comments. Wildlife Biologists consider habitat needs for all species, with a focus on rare or sensitive species, when commenting. They consider species and structural diversity and reinforce the Minnesota Site Level Guidelines. Biologists and ecologists in one unit have annually organized and led annual forest-cover type specific field tour days in an attempt to foster better communication and understanding of issues of importance for the maintenance of biodiversity.

Conformance was found to all of the Sub-Indicators as summarized below:

The planning documents described above and under the Performance Measure provide conformance for:
a. long-term resources analysis; c. land classification system; and d. biodiversity at landscape scales;

The GIS and other maps showed conformance for: e. soils inventory and maps, where available; and g. up-to-date maps or a geographic information system (GIS).

Sub-Indicator i: The Executive Forest Resources Implementation Team (FRIT) composed of the Deputy Commissioner, Assistant Commissioner, and the Three Division Directors, develops interdisciplinary policies and serves as the ultimate dispute resolution body if an issue can't be resolved at the forest management unit or at the area level

1.1.2. Documented current harvest trends fall within long-term sustainable levels identified in the forest management plan.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Established Annual Allowable Harvest: 800k cords. FY2016 Harvest: 683.4k cord equivalents

1.1.3. A forest inventory system and a method to calculate growth and yield.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

1.1.4. Periodic updates of forest inventory and recalculation of planned harvests to account for changes in growth due to productivity increases or decreases, including but not limited to: improved data, long-term drought, fertilization, climate change, changes in forest land ownership and tenure, or forest health.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

1.1.5. Documentation of forest practices (e.g., planting, fertilization and thinning) consistent with assumptions in harvest plans.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Records of all harvests and silvicultural treatments are kept. The record-keeping process has improved with the "Stand Exam Layer-Comments Tab" available and being used to record more details of the interdisciplinary review process. The Stand Exam Layer includes three attribute tabs: stand information, prescription including management objectives, comment. The Stand Exam Layer is termed a "layer" because it can be placed over the FIM Forest Inventory Module.

Records indicate that nearly 90% of the harvested volume is from regeneration harvests with the remaining volume from thinning treatments. Thus the key driver (assumption) in the harvest plans in terms of projecting acres available for treatment (and thus volumes that can be harvested) is success in regeneration treatments. Regeneration treatments and monitoring regeneration results are high priorities, and thus the main basis of this requirement is met.

Minnesota DNR implements a complex system for planning, for implementing plans, and for tracking the implementation of these plans to address long-term goals for achieving ecological objectives at the landscape scale. The ultimate method for ensuring that practices to move towards landscape-level goals are implemented is Subsection Forest Resource Management Plan (SFRMP) Implementation & Monitoring. The Department has created a database application to assist areas in tracking their progress toward SFRMP management objectives. The Stand Exam Layer (SEL) is now used to document important stand management information, including stand management objectives from SFRMPs. This information is stored in one of three tabs within the Stand Exam Layer (three attribute tabs: stand information, prescription including management objectives, comment). This database will be used statewide and will comprise a key component of implementation monitoring, which is an area that has been identified through internal audits as requiring attention (internal Major Non-conformance). Thus far the new database is working as intended, and new reports that are being generated have been described by area staff as being useful.

Performance Measure 1.2

Program Participants shall not convert one forest cover type to another forest cover type, unless in justified circumstances.

1.2.1. Program Participants shall not convert one forest cover type to another forest cover type, unless the conversion:

- a. Is in compliance with relevant national and regional policy and legislation related to land use and forest management; and

- b. Would not convert *native* forest types that are rare and ecologically significant at the *landscape* level or put any *native* forest types at risk of becoming rare; and
- c. Does not create significant long-term adverse impacts on Forests with Exceptional Conservation Value, old-growth forests, forests critical to threatened and endangered species, and special sites.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

- 1.2.2. Where a *Program Participant* intends to convert another *forest cover type*, an assessment considers:
- a. *Productivity* and *stand* quality conditions and impacts which may include social and economic values;
 - b. Specific ecosystem issues related to the site such as invasive species, insect or disease issues, riparian *protection* needs and others as appropriate to site including regeneration challenges; and
 - c. Ecological impacts of the conversion including a review at the site and *landscape* scale as well as consideration for any appropriate mitigation measures.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The use of the NPC ECS to classify sites and guide site-level management decisions regarding converting forest cover types is an exceptional practice. (This finding is supported by the rollout of the Stand Exam Layer.)

Performance Measure 1.3

Program Participants shall not have within the scope of their certification to this *SFI Standard*, forest lands that have been converted to non-forest land use. Indicator:

- 1.3.1. Forest lands converted to other land uses shall not be certified to this *SFI Standard*. This does not apply to forest lands used for forest and *wildlife* management such as *wildlife* food plots or infrastructure such as forest roads, log processing areas, trails etc.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

Objective 2 Forest Health and Productivity

To ensure *long-term forest productivity*, carbon storage and *conservation* of forest resources through prompt *reforestation*, *afforestation*, *minimized chemical use*, *soil conservation*, and protecting forests from damaging agents.

Performance Measure 2.1

Program Participants shall promptly reforest after final harvest. Indicators:

- 2.1.1. Documented *reforestation* plans, including designation of all harvest areas for either natural, planted or direct seeded regeneration and prompt *reforestation*, unless delayed for site-specific environmental or *forest health* considerations or legal requirements, through *planting* within two years or two *planting* seasons, or by planned *natural regeneration* methods within five years.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Annual Stand Exam Lists (ASEL) and the harvest planning process are used to determine regeneration method. Natural regeneration is the primary method; planting is done when natural regeneration is not expected to develop adequate stocking or species composition. Sites which have had mechanical site preparation, chemical site preparation or release, release by cutting competing undesirable stems, planting, and aerial seeding were reviewed.

- 2.1.2. Clear criteria to judge adequate regeneration and appropriate actions to correct understocked areas and achieve acceptable species composition and stocking rates for *planting*, *direct seeding* and *natural regeneration*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Reviewed sites where follow-up regeneration treatments occurred because initial efforts failed to achieve stocking targets.

SFRMP and the site objectives guide the development of the prescriptions which specify regeneration method. The most common methods are coppice/root suckers (for Aspen), natural or artificial seeding (Jack Pine, birch, others) and planting (pines). Prescriptions were reviewed and discussed with Area Silviculture Program Foresters and with other foresters involved in treatments intended to regenerate stands.

Reviewed "Regeneration Monitoring - Procedures & Standards" MN DNR Forestry April 1, 2013, Revised Oct. 2014 <http://files.dnr.state.mn.us/forestry/ecssilviculture/policies/regenerationSurveyPolicyProcedures.pdf> which provides the stocking criteria and the guidelines for regeneration surveys. Following regeneration treatments on-site regeneration surveys are scheduled at specified intervals for all types except for Aspen and Black Spruce types, which receive aerial surveys. There are provisions for designating these later stand types for ground-surveys in cases where there may be regeneration challenges.

- 2.1.3. Plantings of exotic tree species should minimize risk to native ecosystems.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: No exotics are planted.

- 2.1.4. *Protection* of desirable or planned advanced *natural regeneration* during harvest.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Silviculture that relies on advance regeneration is employed on some sites, but post-harvest regeneration is far more common. Site visits confirm that advanced natural regeneration is protected during harvest. Methods include planning skid trails, directional felling and the use of appropriate (fixed as needed) processor heads.

- 2.1.5. *Afforestation programs* that consider potential ecological impacts of the selection and *planting* of tree species in non-forested *landscapes*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: No afforestation is being conducted.

Performance Measure 2.2

Program Participants shall minimize chemical use required to achieve management objectives while protecting employees, neighbors, the public and the environment, including wildlife and aquatic habitats. Indicators:

2.2.1. Minimized chemical use required to achieve management objectives.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The largest volume of pesticide use involves control of invasive plants, and spot treatments are the most-frequently used technique. The use of site preparation herbicides is the next most common chemical use. Treated areas reviewed and discussions with silviculture program foresters and others helped confirm that alternatives are sought, that mechanical site-preparation is considered first, and that chemical treatment prescriptions have the goal of minimized use.

Chemicals are only applied on a site-specific, needs-basis. Mechanical methods are available as an alternative for site preparation. Prescriptions are developed by specialists (not required to be licensed applicators) who receive annual training. The following documents were reviewed; these supported conformance with minimized chemical use and the use of an IPM-approach.

1. Op Order 59 – Pesticides and Pest Control
2. Division of Forestry Pesticide Use Guidelines
3. Op Order 113 Invasive Species
4. Op Order 119 Ash Management
5. Op Order 124 Plant Material Standards
6. Op Order 131 Climate Adaptation and Mitigation

The Division of Forestry Pesticide Use Guidelines states that the “Decision to control pests will consider the following three alternatives: • No control action; • A control action that does not use a pesticide; • A control action that does employ a pesticide.”

2.2.2 Use of least-toxic and narrowest-spectrum pesticides necessary to achieve management objectives.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Glyphosate is the most commonly-used pesticide, used for site preparation and for chemical release in young naturally-regenerated stands and planted stands and to control invasive plants. Glyphosate is accepted as one of the "least-Toxic" herbicides on the market, with no soil activity; it only will work on vegetation it is applied to. While it is a broad spectrum herbicide it is the most environmentally friendly compound used to meet the objectives for controlling a broad spectrum of vegetation.

Triclopyr is second most-commonly-used,

Pesticide Use Reports are compiled by all of the regional leaders and sent to the Silviculture Program Coordinator. Glyphosate is the most commonly-used chemical. Prescriptions involving the application of herbicides are developed by foresters who have training that helps them select least-toxic chemicals.

2.2.3. Use of pesticides registered for the intended use and applied in accordance with label requirements.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR has a list of highly-hazardous pesticides that is checked by the prescription writer (Appraiser), by the Timber Program and Silviculture Program Area Leads, and by the contract supervisor (a regional person). The business office has a contract administrator.

2.2.4. The World Health Organization (WHO) type 1A and 1B pesticides shall be prohibited, except where no other viable alternative is available.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR has a list of highly-hazardous pesticides that is checked by the prescription writer (Appraiser), by the Timber Program and Silviculture Program Area Leads, and by the contract supervisor (a regional person). The business office has a contract administrator.

2.2.5. Use of pesticides banned under the Stockholm Convention on Persistent Organic Pollutants (2001) shall be prohibited.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR has a list of highly-hazardous pesticides that is checked by the prescription writer (Appraiser), by the Timber Program and Silviculture Program Area Leads, and by the contract supervisor (a regional person). The business office has a contract administrator.

2.2.6. Use of *integrated pest management* where feasible.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Integrated pest management is required by law and by policy, with a focus on use of proper silviculture to maintain healthy, vigorous stands. Stands are generally properly stocked; assessments of forest health incidents determine causes before treatments are selected; salvage harvests are employed to minimize the spread of insect pests.

2.2.7. Supervision of forest chemical applications by state- or provincial-trained or certified applicators.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Area and Regional Timber Program or Silviculture Specialists have training in pesticide use and effectiveness. 95% or more of the chemical applications for silviculture are contracted.

For control of invasive plants the applicators are either contractors with an applicator’s license, or staff who have training but who are not necessarily certified. This varies by division; Ecological & Water Resources for example requires certified applicators in every case.

2.2.8. Use of management practices appropriate to the situation, for example:

- a. notification of adjoining landowners or nearby residents concerning applications and chemicals used;
- b. appropriate multilingual signs or oral warnings;
- c. control of public road access during and immediately after applications;
- d. designation of streamside and other needed buffer strips;
- e. use of positive shutoff and minimal-drift spray valves;
- f. aerial application of forest chemicals parallel to buffer zones to *minimize* drift;
- g. monitoring of water quality or safeguards to ensure proper equipment use and *protection* of streams, lakes and other water bodies;
- h. appropriate transportation and storage of chemicals;
- i. filing of required state or provincial reports; and/or
- j. use of methods to ensure *protection of threatened and endangered species*.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Confirmed by interviews of Silviculture Program Foresters and by review of documents that most of these provisions are routinely applied. Discussed Herbicide Site Preparation and Release Treatments with personnel responsible for treatments, confirming requirements for training, following laws and labels, requirements for completing “Pesticide Application Record” form, and specific prescriptions (chemicals, target, and methods) and maps.

Performance Measure 2.3

Program Participants shall implement forest management practices to protect and maintain forest and soil *productivity*. Indicators:

2.3.1. Process to identify soils vulnerable to compaction, and use of appropriate methods, including the use of soil maps where available, to avoid excessive soil disturbance.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The allowable season of harvest and/or ground conditions for permits (contracts for harvesting stumpage) are designated by foresters who appraise (set up) sales. These designations are guided by the ECS and by site reconnaissance to judge soil suitability and to find any sensitive portions of areas considered for harvest. Such sensitive sites are often “painted out” of the harvest units, although sometimes they are addressed by other restrictions includes with the sale specifications.

Foresters and other specialists demonstrated very detailed knowledge of the Native Plant Communities and associated forest and community growth, protection, and management issues and opportunities. For sites involving planting foresters conduct and document an evaluation, records of which were reviewed.

Interviews confirmed use of ECS/NPC tool and/or soils and topographic maps for initial planning. This information is refined by site reconnaissance prior to finalizing harvest plan; site limitations are always considered when developing harvest boundaries. Many examples of excluding sensitive soils for sale area and/or including seasonal restrictions in timber sale contracts were confirmed in the field by the audit team.

2.3.2. Use of erosion control measures to *minimize* the loss of soil and site *productivity*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Erosion control measures, specifically soil and water protection BMPs contained in the MFRC Site-Level Forest Management Guidelines, are routinely and widely employed. Proper road construction and skid trail placement, use of logging slash to protect sensitive portions of main skid roads, Waterbars, and stopping harvest when conditions are too wet are some of the techniques that were either observed or confirmed in documents reviewed.

2.3.3. Post-harvest conditions conducive to maintaining site *productivity* (e.g., limited rutting, retained down woody debris, *minimized skid trails*).

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Field observations confirmed limited rutting, retained down woody debris, and planning to minimize skid trails. No rutting was observed in excess of the policy regarding rutting.

Specifications for any sale that includes biomass removal as an option include the requirement that “If Biomass is purchased with an Added Timber Agreement, 20% of the tops and limbs must be left on the site or hauled back from the landing and redistributed in the general harvest area.” The Minnesota Site Level Guidelines address slash in two sections (Source: Minnesota Forest Management Guidelines – Quick Reference Field Guide):

- Wildlife page 59: Retain at least 1/3 of all slash and scatter across the site when possible
- Biomass Harvesting, page 63: “When harvesting more biomass than during a conventional bole wood harvest, retain the following types and amounts of woody material: (portions deleted) ... 1/3 of all tops and limbs from harvest trees well-distributed across the site. Retention of 1/3 of tops and limbs is attained through a combination of incidental breakage that occurs during felling and deliberate retention of some tops and limbs.”

Foresters did not appear to fully understand the relationship between these requirements and biomass sale specifications; refer to the OFI under SFI Indicator 11.1.3.

2.3.4. Retention of vigorous trees during partial harvesting, consistent with scientific silvicultural standards for the area.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Field observations confirmed limited rutting, retained down woody debris, and planning to minimize skid trails. No rutting was observed in excess of the policy regarding rutting.

2.3.5. Criteria that address harvesting and site preparation to protect soil *productivity*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Reviewed “Minnesota DNR State Land Rutting Guidelines and Decision Tree” (9 pages).

Each “Permit to Cut Timber” issued by Minnesota DNR as part of each timber sale includes this provision:

“21. RUTTING METRIC - All harvest operations, including skidding and forwarding trails, will comply with the DNR Forest Land Rutting Guidelines (Posted at <http://www.dnr.state.mn.us/forestry/timbersales/notices.html>). These requirements are a key part of a comprehensive program to protect soil productivity. Foresters who administer timber sales, as well as supervisors who check timber sales, are aware of them. Loggers interviewed understand the need to avoid rutting and stated that they check with the forester if any rutting occurs. No rutting in excess of these guidelines was observed during reviews of ongoing and completed timber harvests.

2.3.6. Road construction and skidding layout to *minimize* impacts to soil *productivity*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Forest roads and skid trails observed during the field visits were generally well-maintained and properly designed. Each area has a silviculture/roads program forester, and these area program foresters are supported in turn by regional silviculture/roads staff specialists who are supported by specialists in the central office.

There are two types of State Forest Roads: System Forest Roads and Minimum Maintenance Roads. Temporary use roads are often pushed in by a logger, and the timber buyer will bear the costs of building, maintaining the road during harvest, and then closing out and stabilizing these. Activities on system roads include: grading; spot graveling; culvert replacement; beaver control; brushing (aka ROW maintenance); and snow plowing. In each area an assigned forester tracks these roads and inputs repair and maintenance needs into SRM (computer database) and then develops a work and spending plan.

Roads reviewed were generally in good condition.

Some roads would last longer if grading cycles were shorter and if the road-edge berms could be maintained to avoid blocking intended drainage into ditches.

Performance Measure 2.4

Program Participants shall manage so as to protect forests from damaging agents, such as environmentally or economically undesirable wildfire, pests, diseases and *invasive exotic plants and animals*, to maintain and improve *long-term forest health, productivity* and *economic viability*. Indicators:

2.4.1. *Program* to protect forests from damaging agents.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Foresters are trained in forest health and receive regular updates on forest pest issues and/or attend conferences and meetings on the subject.

Stand health and site conditions are assessed during planning to develop prescriptions intended to promote forest health. Stand prescriptions were reviewed for selected stands by reading the “SEL STAND DATA SUMMARY”, for example SFRMP: CPPMOP_14_16, STAND: t14334w1360112 with a NPC Mhc26, Central Dry-mesic Oak-Aspen Forest, current stand main species Aspen age 93+ with birch and maple. Main Species Damage, 27 - Hypox.Canker w/Phellinus of Aspen, Percent affected (2) - 11 to 25%, Percent Mortality (1) – 1-10%. Prescription is a “Clear-cut-with Reserves” to achieve a “Desired Future Stand Condition: Regenerated aspen stand with similar hardwood component. Increased density of oak adjacent to Camp Seven Lake and ephemeral pools”.

2.4.2. Management to promote healthy and productive forest conditions to *minimize* susceptibility to damaging agents.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Field observations allowed the audit team to conclude that forest management practices are developing and maintaining healthy forests in most areas. Most stands observed were properly stocked to slightly over-stocked; overstocked stands are prioritized when developing stand exam lists.

Bark beetles, Oak wilt, gypsy moth, and Asian emerald ash borer are current key concerns, with measures in place to deal with each of these and other forest pests. These measures include monitoring and pest impact evaluation, preventative actions (sanitation cuttings) and salvage work.

2.4.3. Participation in, and support of, fire and pest prevention and control *programs*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR continues to provide leadership in fire control; fire programs are coordinated with local (rural) fire departments. Specialized fire-fighting equipment was seen in all units visited.

Performance Measure 2.5

Program Participants that deploy improved planting stock, including varietal seedlings, shall use best scientific methods. Indicator:

2.5.1. Program for appropriate research, testing, evaluation and deployment of *improved planting stock*, including *varietal seedlings*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Over 90% of all reproductive materials used on state forest land are native Minnesota materials. Materials are collected and deployed based on seed zones described in Division of Forestry Policy 5 – Nursery Seed Source Control [nursery-seed-source-control-2016.pdf](#). In the event a match between seed source and planting site is unavailable, the SFNP deploys seedlings from an adjacent seed zone. In some instances, the SFNP will purchase seedlings from other public or private nurseries because the SFNP cannot supply either the number of seedlings requested or the species of seedlings requested. When this is the case, purchased seedlings are from the seed source of the planting site or from an adjacent source. Adjacency may cross statutory boundaries. For example, some plantings and sowings in southern Minnesota may be from a northern Iowa seed source.

Interviews and review of key documents confirmed conformance; GMOs trees and hybrids are not used on state forest land, and only native species are used for regeneration on state forest land.

Checked the web to confirm that MNDNR is a member of the University of Minnesota, Minnesota Tree Improvement Cooperative (MTIC) which uses traditional selection and breeding techniques. The program is described on its web site: <http://mtic.cfans.umn.edu/>. An excerpt:

“GMOs trees are not used on state forest land. Only native species are used for regeneration on state forest land. Hybrids are not used.”

Objective 3 Protection and Maintenance of Water Resources

To protect the water quality of rivers, streams, lakes, *wetlands* and other water bodies through meeting or exceeding *best management practices*.

Performance Measure 3.1

Program Participants shall meet or exceed all applicable federal, provincial, state and local water quality laws, and meet or exceed *best management practices* developed under Canadian or U.S. Environmental Protection Agency–approved water quality *programs*.

Indicators:

3.1.1. *Program* to implement federal, state or provincial water quality *best management practices* during all phases of management activities.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The 2015 SFI Minor Non-conformance has been addressed and the Corrective and Preventive Action Plans have been implemented (subject to field review). The Non-conformance was: *There is not a process in place to ensure that the requirements in the Forest Management Guidelines under “Spills and Emergencies” are being met during logging operations.*

From the Minnesota DNR response:

Corrective Action

MN DNR will add the following language to the “Permit To Cut Timber – Terms and Conditions:

25. SPILLS The permit holder must report and clean up spills as required by Minnesota Statute § 115.061 - *Duty to Notify and Avoid Water Pollution*. Any petroleum spill of more than 5 gallons must be reported to the Minnesota Duty Officer by calling 651-649-5451 or 1-800-422-0798. The permit holder must have appropriate equipment on-site to immediately contain and capture petroleum spills. See page 73 of MN Forest Resource Council’s Forest Management Guidelines Quick Reference Field Guide. Contaminated soil less than 10 cubic yards must be thin spread on upland ground away from water bodies, as stated in the MN Forest Resource Council’s Site-Level Guidelines page 45, Green Section.

As of 6/30/16, DNR has revised the Permit to Cut - Terms and Conditions page. The additional “spills” text above (#23 on Informal sales and #25 on auction sales) will appear on permits dated on and after July 1, 2016.’

Preventative Action

MN DNR will add a spill response checkoff box on the Permit Supervision Record as a reminder to the Timber Sale Administrator (TSA) to review the spill requirements with the permit holder at pre-sale meetings as required by MS 90.151 Subd 6 Notice and Approval Required.

DNR is revising (9/2016) the Permit Supervision Record to include a specific pre-sale meeting check off box for spill prevention. Notice has been sent out to all Timber Sale Administrators (TSA) to document at all pre-sale meetings that spill prevention equipment is available to immediately respond to any petroleum spill. Prepared by: Doug Tillma/Paul Dubuque Update 07/27/16

MN DNR will revise the Timber Sales and Scaling Manual, *Chapter M.1.4- Pre-Sale Meeting* with new procedures for petroleum spill review

As of 7/25/16, DNR has updated Chapter M: Opening the Sale to require that a spill prevention plan be available prior to starting timber harvest operations.

M.1.4 Spill Prevention Plan

The permit holder is required by State law to take immediate action to contain and control any petroleum spill on state land. The TSA will verify with the onsite supervisor or permit holder that a spill prevention plan and equipment are available prior to the start of harvest operations. Failure to produce spill prevention equipment after 48 hours may result in formal suspension of operations. Contaminated soil less than 10 cubic yards must be thin spread on upland soil away from water bodies. Spills over 5 gallons require the permit holder to contact the MN Duty Officer 1-800-422-0798

to receive a cleanup response plan. If in doubt about spill amounts or petroleum leaks during operations don't hesitate to contact the MN Duty Officer.

...DNR Timber Program staff reviewed spill prevention procedures at 2016 Region and Area meetings. A statewide email will be sent out notifying staff of updated procedures and pre-sale meeting requirements in September once the pre-sale meeting check off box has been implemented.

... DNR Timber Program staff will review spill prevention and pre-sale meeting requirements at 2017 Minnesota Logger Education training events.'

BMPs are emphasized in training, sale administration, and monitoring, with very strong results. Trained foresters and/or biologists plan and oversee all management activities, with review and approval by senior managers and/or specialists who have an impressive depth of knowledge and experience. MFRC Site-Level Forest Management Guidelines are followed, and the new "Quick Reference Field Guide" version is widely used.

3.1.2. Contract provisions that specify conformance to *best management practices*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Each "Permit to Cut Timber" issued by Minnesota DNR as part of each timber sale includes this provision:
 "20. SITE-LEVEL FOREST MANAGEMENT GUIDELINES - The persons affected by this permit shall comply with specific site-level forest management guidelines, biomass harvest guidelines and invasive species guidelines, as indicated on the permit form under special conditions, as indicated on supplemental page(s) titled Permit To Cut Timber Supplemental Terms and Conditions, if any, and as indicated on the attached Timber Appraisal Report. [M.S. § 89A.05, 103G.2212, 103G.2241(7)]"

3.1.3. Monitoring of overall *best management practices* implementation.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Foresters inspect active harvest projects regularly and document their observations in formal harvest notes maintained in the files.
 Several other more-formal levels of monitoring occur. The Department has an extensive "first party" BMP monitoring program for its own operations by sale administrators responsible for overseeing harvests. They document discussions in sale administration notes. A review of the "Post-Harvest Checklist" forms for a sample of completed harvest sites visited showed that the forms are used and appear to contain accurate and useful information.
 Regional managers and central administration also check a sub-sample of sites to confirm that the local audits are accurate and providing good information. Confirmation that this process continues was by interviews of managers who conduct such inspections in the Deer River and Aitken Forestry Areas. Local Area managers' efforts are supplemented by the MFRC BMP monitoring program (independent of Minnesota DNR) designed to cover all ownerships. The all-ownership BMP monitoring protocol is detailed and comprehensive.

Performance Measure 3.2

Program Participants shall implement water, wetland and riparian protection measures based on soil type, terrain, vegetation, ecological function, harvesting system, state *best management practices (BMPs)*, provincial guidelines and other applicable factors. Indicators:

3.2.1. *Program* addressing management and protection of rivers, streams, lakes, wetlands, other water bodies and riparian areas during all phases of management, including the layout and construction of roads and skid trails to maintain water reach, flow and quality.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR has a comprehensive program for the protection of wetlands and watercourses. Foresters plan all harvests and treatments; other specialists review these. Such protections are the first priority during planning and

implementation. All foresters are trained to follow Minnesota's Site Level Guidelines, with comprehensive training updates over the past 2 years in response to audit findings in 2014 and earlier.

Specialists are available for consultation as needed; all activities are subject to interdisciplinary review.

MFRC formed a scientific panel to investigate the most current science that will direct the revisions of the current BMP's for stream, lake and wetland protection.

3.2.2. Mapping of rivers, streams, lakes, *wetlands* and other water bodies as specified in state or provincial *best management practices* and, where appropriate, identification on the ground.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Confirmed mapping of rivers, streams, lakes, and other water bodies in GIS databases and for timber sale maps.

3.2.3. Document and implement plans to manage and protect rivers, streams, lakes, *wetlands*, other water bodies and *riparian areas*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Field observations confirm that plans to manage or protect rivers, streams, lakes, and other water bodies are implemented. Nearly every field site had riparian buffers that exceeded the Minnesota Site Level Guidelines.

3.2.4. Plans that address wet-weather events in order to maintain water quality (e.g., *forest inventory* systems, wet-weather tracts, definitions of acceptable operating conditions).

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Foresters assess all harvest sites during planning (using soils maps, ECS, topographic maps, or site observations) for sensitivity of site to adverse impacts from harvesting equipment. For sensitive sites contract provisions are added specifying frozen ground only, harvesting only when ground conditions are suitable (when ground is frozen or dry, for example), and/or particular date ranges.

Summer-logging tracts (i.e. tracts not requiring frozen ground) are designed and offered. When conditions are suitable and with written justification and approval documented in the files, harvest areas originally intended for harvest with frozen ground are occasionally released for harvest in the summer.

Objective 4 Conservation of Biological Diversity

To manage the quality and distribution of *wildlife habitats* and contribute to the *conservation of biological diversity* by developing and implementing *stand-* and *landscape-*level measures that promote a diversity of types of *habitat* and successional stages, and the *conservation* of forest plants and animals, including *aquatic species*, *as well as threatened and endangered species*, *Forests with Exceptional Conservation Value*, *old-growth forests* and ecologically important sites.

Performance Measure 4.1

Program Participants shall conserve biological diversity. Indicators:

4.1.1. Program to incorporate the *conservation of native biological diversity*, including species, *wildlife habitats* and ecological community types at *stand* and *landscape* levels.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: **Minnesota DNR has an exceptional program for the conservation of native biological diversity.**

The Interdisciplinary Coordination Framework is being implemented systematically to support the conservation of native biological diversity. Wildlife Division and Ecological & Water Resources Division employees are involved in most planning on lands within the scope, providing specialized expertise and supporting efforts to integrate the conservation of native biological diversity into forestry. Sub-Section/Section Plans are used to derive the long-term Stand Exam Lists. More detailed site-level planning is done for stands on the Annual Stand Exam List (ASEL), including review by plant ecologists and/or biologists from the Fish and Wildlife Division and the Ecological & Water Resources Division and joint-site visits as needed. The “Stand Exam Layer-Comments Tab” is used to record details of the interdisciplinary review process.

The Fish and Wildlife Division conducts many types of habitat improvement projects on state lands, and their efforts have been bolstered by a 2008 state constitutional amendment that authorizes collection of a sales tax which helps support habitat projects.

The recently-completed Wildlife Action Plan (SWAP) is available to support planning, based on identified “Species of Greatest Conservation Need” (SGCN).

Special habitat management guidelines have been prepared for numerous ETS species.

RSA’s have been identified and are appropriately managed and/or protected.

Lessard-Sams funding (aka Outdoor Heritage fund) is available for habitat projects on a competitive basis and several examples successful projects completed with this funding were reviewed and/or discussed.

4.1.2. Development of criteria and implementation of practices, as guided by regionally based *best scientific information*, to retain *stand-level wildlife habitat* elements such as snags, stumps, mast trees, down woody debris, den trees and nest trees.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: During the 2016 Surveillance Audit the auditors reviewed implementation of the current criteria to retain stand-level wildlife habitat elements, and associated management systems in the context of the robust and comprehensive corrective action plan developed in response to the 2014 finding for this requirement. The auditors found that foresters have taken the training, understand the requirements, and are implementing all aspects of “Green Tree Retention”.

The criteria to retain stand-level wildlife habitat elements such as snags, stumps, mast trees, down woody debris, den trees and nest trees are detailed in the Minnesota Forest Management Guidelines and summarized in the field handbook based on the more-comprehensive guidelines. Harvested stands inspected generally had legacy and leave tree retention levels consistent with these guidelines.

Most silvicultural prescriptions and completed treatments in Aspen harvests were prepared one or more years ago and thus still include language with instructions to harvest all dominant species of trees during the harvest (usually aspen, birch). In some cases despite this wording Aspen were still left after harvest, for example in retention patches or on the outside of the harvest area. Foresters interviewed understood the need to make changes to include more retention of Aspen, and there was ample documentation of efforts to improve practices in this regard.

Auditors observed many harvest sites that contained reserve patches. Staff awareness of reserve tree requirements of the Minnesota Forest Management Guidelines has improved. Auditors confirmed most aspects of a comprehensive corrective action plan developed in response to the 2014 Minor Non-conformance which found “Policies for the retention of stand-level wildlife habitat elements were not followed in all cases.” For example staff across the state have recently received detailed written instructions with standardized techniques to record leave tree islands so they are protected from future harvest until the reserve benefits are no longer needed in that stand. In some cases isolated leave trees or small leave tree clumps are now being recorded using GPS systems.

The revisions to systems for documenting treatment plans and results are being used. As stated in the “Leave Tree and Snag Guidelines”, foresters are expected to “Document leave tree and snag intentions (What? Where? Why?)” on Silvicultural Prescription Worksheet, sale appraisals, and Notice of Sale. The Stand Exam Layer (SEL) tool has made this far easier. The department’s leave tree and snag guidelines require that “a mix of species representative of the original stand be retained” unless reasons for variance are documented. Foresters interviewed understand and are increasing their compliance with the intent of the guidelines for retaining live trees in their prescriptions.

4.1.3. Document diversity of *forest cover types* and age or size classes at the individual ownership or forest tenure level, and where credible data are available, at the *landscape* scale. Working individually or collaboratively to support diversity of *native forest cover types* and age or size classes that enhance *biological diversity* at the *landscape* scale.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The auditors reviewed progress made on updating plans and implementing practices to achieve long-term landscape goals for forest composition and age-class structure. They found that this is still a work in progress and determined that the 2015 OFI will be kept.

There is an Opportunity for Improvement when updating plans and implementing practices to achieve long-term landscape goals for forest composition and age-class structure.

The program has long had challenges documenting the relationship between the prescribed treatments and the SFRMP goals for forest composition. The task of quantifying the extent to which each forestry area has pursued opportunities to work towards long-term landscape goals for forest composition and then allocating these goals between forestry areas which manage different portions of lands covered by the same plan has been particularly challenging. Now, many plans are being extended, plan coverage is being reorganized, underlying assumptions regarding Economic Rotation Age have shifted, and managers are improving their knowledge and skills regarding methods to influence stand composition.

Several subsection plans are being implemented beyond their original intended date ranges. There is a process for plan extensions, but each year that a plan is updated decisions are made in part using increasingly-dated landscape-level information. Information about recent treatments relative to plan goals are becoming easier to obtain and understand.

AL had a 7-year plan originally. An interdisciplinary team was formed to complete a three-year extension to get to FY2013. That extension updated/revised stand exam lists and continued management objectives. The plan was extended to FY2014 and 2015. For FY2016-2018, ASEs were developed using new data and model criteria with the current NMOP team. Most management objectives were continued, but revised as necessary.

The recommendations from the report “Forest Age-class Monitoring: Assessment and Recommendations”, Prepared by the Forest Age-class Monitoring Team: Jim Manolis (OSD), Clarence Turner (FOR), Tim Aunan (FOR), Lindsey Shartell (FAW) and Daren Carlson (EWR), 3 February 2014 should, over time, address some aspects of the Opportunity for Improvement. This analysis includes all ownerships, while the focus of the OFI is on the ability of the Minnesota DNR to address long-term landscape goals when making management decisions on its own land. There were three primary areas of concern:

1. Communication of and understanding of forest composition goal responsibilities by Area staff. Considerable progress was demonstrated; this is likely going to be an ongoing effort?

2. Quantifying the extent to which each Area has prescribed treatments towards those forest composition goals. SEL roll-out and use is progressing; this will take time.
3. Ability to monitor age-class distributions relative to plan goals/projections on DNR lands. Most work needed in this area.

Subsection plans include long-term landscape goals for forest composition. For example the CP-PMOP plan has 15 “Broad Landscape Goals” (source: Tatum Guide for CP-PMOP item 3, “Plan Summary by Issue and Cover Type”). Foresters are aware of landscape goals, and many examples of treating stands to reach these goals were discussed or reviewed in the field. The use of the NPC classification as a tool for assessing and prescribing treatments which are intended to influence the composition of stands is a notable strength of the program.

4.1.4. *Program Participants* shall participate in or incorporate the results of state, provincial, or regional *conservation* planning and priority-setting efforts to conserve biological diversity and consider these efforts in forest management planning. Examples of credible priority-setting efforts include state *wildlife* action plans, state forest action plans, relevant *habitat conservation* plans or provincial *wildlife* recovery plans.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: “Pilot MOA Executive FRIT decision memo FINAL 7-14-16 –Signed” describes four pilot ‘Management Opportunity Areas’ (MOAs) developed “to identify landscape-level management opportunities to address habitat priorities”. The MOAs have overlap with and draw on approaches included in the SWAP, “Minnesota’s Wildlife Action Plan, Tomorrow’s Habitat for the Wild and Rare”.

The State Wildlife Action Plan has been revised and was approved by the US Fish and Wildlife Service. The Nongame Wildlife Program of the Ecological & Water Resources Division produced this document. The Focus Area approach in the 2015 SWAP is designed to provide guidance in harvest planning decisions. The department will use the 2015 SWAP in the development of new SFRMPs, and has used the 2005 SWAP when making management decisions.

2015 Notes: Habitat management practices favoring early successional species that have been declining across their ranges (golden-winged warbler, sharp-tailed grouse, and American woodcock) are implemented in many Wildlife Management Areas and on some forestry lands.

Staff are participating in regional conservation efforts for the American marten, fisher, Canada lynx, and Eastern Timber Wolf.

1.

4.1.5. *Program* to address *conservation* of known sites with viable occurrences of significant species of concern.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The Nongame Wildlife Program in the Ecological & Water Resources Division led (and the Wildlife Division was substantially involved) in the development of the 2015 State Wildlife Action Plan (SWAP) revision, which has been approved. The plan has been approved by the U.S. Fish and Wildlife Service and is being used.

The Minnesota DNR program for the identification and protection of HCVFs helps support conformance. One audit site visited was within the Lake George HCVF. As recommended in the Lake George HCVF report for “Candidate Site 291200” the unique vegetative community on this site is being maintained through periodic, carefully planned understory burns. Further the HCVF has a buffer zone that was respected when an adjacent forest received silvicultural treatment (group selection/small patch harvest).

Minnesota DNR response to a finding (FSC Obs 2015.11):

For those HCV’s that do not have current management or protection guidance, that guidance will be defined over the next year through three actions;

- 1) A 2016 Internal CAR outlines the need for departmental guidance on Special Concern Species and Species of Greatest Conservation Need. This guidance will assist with defining management and protection needs for these categories of what Minnesota DNR defines as rare species.
- 2) The department has been evaluating lowland conifer stands in its current SFRMP planning processes for designation as Lowland Conifer Old Growth. The outcome of that process will have a significant

impact on the HCV 2 and 3 categories, and directly impact future HCVF designation in the portion of the state where MBS is not yet completed.

3) A number of the HCV's identified by Minnesota DNR came directly from FSC guidance on defining HCVF's. These examples may have been taken as specific requirements and how they apply to Minnesota is not yet defined. This most directly impacts our HCV 2 category. Over the next year (2016/2017) the department will re-visit our High Conservation Values in Categories 1-3; verify their applicability and identify what metrics are used to define them, how they should be managed, and what monitoring will occur to verify that their values are being maintained or enhanced.

In the interim, existing departmental guidance (partially listed above) will be used to provide safeguards to future designation options. In the event that staff are concerned over specific landscapes or perceived HCV's, they can use the Interdisciplinary Forest Management Coordination Framework to discuss or dispute proposed management."

Source: 2015 presentation by Luke Skinner, Director, EWR "State Wildlife Action Plan goals:

- Ensure the long-term health and viability of Minnesota's wildlife, with a focus on species that are rare, declining, or vulnerable to decline;
- Enhance opportunities to enjoy Species in Greatest Conservation Need and other wildlife and to participate in conservation; and
- Acquire the resources necessary to successfully implement the Minnesota Wildlife Action Plan

Two main approaches:

2. **1. Landscape-scale habitat approach** that focuses on sustaining and enhancing terrestrial and aquatic habitats for SGCN. This approach includes:
 - Wildlife Action Network that calls for sustaining and enhancing species, habitat, and landscape biological diversity within the network. Priority is given to 8 communities most vulnerable to climate change, including *peatlands, lowland conifer forests, and mesic hardwood forests*.
 - Conservation Focus Areas have been identified within the Network. These are priority areas for working with partners to identify, develop and implement conservation projects and report of the effectiveness of conservation actions. Examples of specific conservation actions include: developing forest management guidelines for red-shouldered hawks; studies to document habitat use by northern goshawks, and a project to monitor boreal owls.
 - Assist conservation partners in the development of research, monitoring, and demonstration projects to evaluate the response of habitat and species to management practices to inform adaptive management.
 - Continue or develop additional long-term species and habitat monitoring projects for early detection of changes in the resilience of ecological communities.
 - Develop best management practices for lowland conifer SGCN.
 - Implement Subsection Forest Resource Management plans and Minnesota Forest Resources Council's Regional Landscape plans.
3. **2. Species approach** that implements conservation actions for specific species or groups of species in greatest conservation need, which are affected by non-habitat-related issues."

4.1.6. Identification and *protection of non-forested wetlands*, including bogs, fens and marshes, and *vernal pools* of ecological significance.

- N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Field observations confirm that non-forested wetlands and some but not all small pocket forested wetlands are excluded from the harvest area on maps and on the ground using blue paint lines. In some cases very micro-scale, generally wet, non-forested openings are recognized by loggers and avoided. Tops are kept out of these areas, per BMPs enforced by foresters overseeing timber harvests.

4.1.7. Participation in *programs* and demonstration of activities as appropriate to limit the introduction, spread and impact of *invasive exotic plants and animals* that directly threaten or are likely to threaten *native* plant and animal communities.

- N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Invasive Species Operation Order 113 describes the program.

Numerous examples of efforts to combat invasive species were cited or observed during the audit: herbicide use to eliminate patches of spotted knapweed, Phragmites, purple loosestrife; inventory and treatment of gravel pits to avoid distributing seeds and rootstocks; and daily instructions to field staff and auditors to clean boots and clothes before moving from one site to another.

4.1.8. Consider the role of natural disturbances, including the use of prescribed or natural fire where appropriate, and *forest health* threats in relation to *biological diversity* when developing forest management plans.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The NMOP and NSU Section Plans currently under development include 4 pilot MOAs which are based on disturbance ecology. Reviewed "Pilot MOA Executive FRIT decision memo FINAL 7-14-16".

Current Subsection plans are based in part on the role of natural disturbances. For example, the patch management concept found in many plans is based on an understanding of the large scale disturbance events, such as windstorms or insect outbreaks followed by stand-replacing fires, that shaped pre-European forests and influence many aspects of biodiversity.

Performance Measure 4.2

Program Participants shall protect threatened and endangered species, Forests with Exceptional Conservation Values (FECV) and old-growth forests. Indicators:

4.2.1. Program to protect threatened and endangered species.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The Minnesota Biological Survey database is being used prior to harvest to identify locations of threatened and endangered species. All area foresters questioned confirmed that they review the layer (map) of rare species maintained within the GIS. During planning, either at the time of selecting the Annual Stand Exam List or when there is an Annual Plan Addition the Forest & Natural Areas Ecologist reviews the heritage database. This check is in addition to checks done by the appraisal forester, wildlife biologists, and plant ecologists.

RTE species and species of special concern are considered in the SFRMPs, based in part on analysis within the Minnesota SWAP.

Biologists and ecologists have opportunities to comment on all harvests, with a 30-day comment period after being provided the Annual Stand Exam Lists. Foresters consult with both wildlife biologists and other specialists as needed, such as when a threatened or endangered species is reported (through the heritage database) or found in the field. Ecological and Water Resources Division personnel can choose to participate in a joint-site visit to confirm and possibly to consult on protection measures; if no such joint site visit is done then foresters assume the species is present and manage accordingly.

4.2.2. *Program* to locate and protect known sites flora and fauna associated with viable occurrences of *critically imperiled* and *imperiled* species and communities also known as *Forests with Exceptional Conservation Value*. Plans for *protection* may be developed independently or collaboratively, and may include *Program Participant* management, cooperation with other stakeholders, or use of easements, *conservation* land sales, exchanges, or other *conservation* strategies.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: G1 and G2 as well as S1 and S2 sites are listed in a database and are mapped in a GIS. Confirmed that the MBS database is being used prior to harvest to identify locations of threatened and endangered species.

The Minnesota Biological Survey is systematically collecting data on locations and occurrences of rare plant and animal communities. Surveys and monitoring programs are conducted to inform conservation, management and restoration of natural systems.

4.2.3. Support of and participation in plans or *programs* for the *conservation* of *old-growth forests* in the region of ownership or forest tenure.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Reviewed one old growth site in the Bemidji area that has been set aside, was buffered from an adjacent timber harvest (that was developed to support the nearby protected stand), and has been maintained by periodic and carefully-considered understory burns which maintain rare and common desirable plant species.

During interdisciplinary stand review, EWR staff (Nongame Program, Regional Plant Ecologists) provide comments on opportunities to maintain older forest characteristics on DNR managed lands, particularly in Old Forest Management Complexes (OFMCs), High Conservation Value Forests (HCVF), Management Opportunity Areas (MOAs), and large old patches.

2015 Notes: The Division of Forestry initiated an effort to identify old-growth stands almost 20 years ago. Definitions for old-growth were drafted, and a scoring system was developed for different forest types. As field staff encountered and scored candidate stands, those stands were dropped from stands appraised for harvest and coded for protection. The process continues today, with an emphasis on lowland conifer types. Today, 45,000 acres of old-growth forest are protected on lands managed by the Division of Forestry.

Performance Measure 4.3

Program Participants shall manage ecologically important sites in a manner that takes into account their unique qualities. Indicators:

4.3.1. Use of information such as existing natural heritage data or expert advice in identifying or selecting ecologically important sites for *protection*.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Heritage databases are checked prior to harvests and land altering treatments. In the northwest region when there are "hits" foresters check with the Regional Forest Ecologist who often provides advice, or obtains information from expert specialists and then helps foresters determine appropriate protection or management prescriptions.

4.3.2. Appropriate mapping, cataloging and management of identified ecologically important sites.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: A summary of surveys for Rare, Threatened or Endangered (RTE) species in the past year by the department included MBS vegetation field surveys in many parts of the state, targeted rare plant surveys, 172 relevé vegetation plots, and Animal surveys conducted by Nongame Program staff. Confirmed that special sites are located on maps, listed in databases available to all staff involved in planning and implementation of harvests, vegetation treatments, projects, etc., and when there are close to harvests they are shown on the harvest plan maps provided to the buyers. Confirmed by review of sale documents and by field observations that special sites marked off (buffered out) of nearby timber harvests.

Performance Measure 4.4

Program Participants shall apply knowledge gained through research, science, technology and field experience to manage *wildlife habitat* and contribute to the *conservation of biological diversity*. Indicators:

4.4.1. Collection of information on *Forests with Exceptional Conservation Value* and other *biodiversity*-related data through *forest inventory* processes, mapping or participation in external *programs*, such as NatureServe, state or provincial heritage *programs*, or other credible systems. Such participation may include providing non-proprietary scientific information, time and assistance by staff, or in-kind or direct financial support.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota Biological Surveys have been completed in most areas of the State and continued in 2016The MBS also conducts surveys and monitoring across the State on many plant and animal species.

4.4.2. A methodology to incorporate research results and field applications of *biodiversity* and ecosystem research into forest management decisions.

- N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Many field foresters and managers are members of professional associations and all attend regular training meetings or workshops which include research-based presentations, often presented by scientists.

The Minnesota DNR employs many wildlife biologists and plant ecologists, some of whom have direct and regular participation in planning site-level treatments or at larger scales, at which time they are expected to apply current scientific knowledge

Wildlife Division funds significant amounts of research and has a substantial research program within the Division. Numerous research projects from the University of Minnesota are conducted in cooperation with DNR.

EWR staff are members of various professional societies, such as the Ecological Society of America or The Forest Stewards Guild, or attend meetings such as the North American Forest Ecology Conference.

Objective 5 Management of Visual Quality and Recreational Benefits

To manage the visual impact of forest operations and provide recreational opportunities for the public.

Performance Measure 5.1

Program Participants shall manage the impact of harvesting on visual quality. Indicators:

5.1.1. Program to address visual quality management.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Trained foresters are involved in all aspects of harvest planning and execution. The use of trained foresters (most have training in visual management during harvests) and the department's sale review process (which considers visual issues) constitute a program.

5.1.2. Incorporation of aesthetic considerations in harvesting, road, landing design and management, and other management activities where visual impacts are a concern.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The department continues to use visual quality management techniques when harvesting timber adjacent to high use areas or well-travelled roads. Examples included buffering harvests from roads using uncut strips, breaking up the amount of clear-cut area visible by strategic placement of uncut or leave-tree patches, placing loading areas away from roads, and alignment of skid trails parallel to highways to minimize visibility.

The sensitive sales and many other sales not located in sensitive areas have incorporated other measures that minimize visual impacts, such as careful planning and sale layout, reasonable utilization, clean landings, low slash, slash pulled back from roads, and large uncut buffers around sales.

Performance Measure 5.2

Program Participants shall manage the size, shape and placement of clearcut harvests. Indicators:

5.2.1. Average size of clearcut harvest areas does not exceed 120 acres (50 hectares), except when necessary to meet regulatory requirements, achieve ecological objectives or to respond to forest health emergencies or other natural catastrophes.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Field observations of clear-cuts confirmed that most clear-cuts are modest in size and support the veracity of records showing an average clear-cut size in FY 2016 of 44 acres. The three year (FY12-14) average was 41 acres.

5.2.2. Documentation through internal records of clearcut size and the process for calculating average size.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Auditor's observations and interviews support the program's statement:

"This calculation is determined from a query of the Timber Sales Module (TSM) database which looks at individual cutting block size rather than timber permit size. This number includes small informal sales, roadside right-of way maintenance and commercial firewood sales which tend to decrease the overall size in a given year. Most DNR timber sales are comprised of one cutting block, but the average size of timber sale permits sold at public auction would be somewhat higher. There can be a wide variation in the size of harvest areas based on forest management and patch size goals, habitat considerations, age class targets, desired future conditions (DFC), and other prescription factors. DNR timber sales are comprised of one or more cutting blocks which are attached to an appraisal and eventually sold as a permit. A cutting block in TSM includes stand management information and a harvest prescription code. The new Stand Exam Layer (SEL) is the interface application where staff enter prescription information. The harvest prescription and acre disposition (e.g. appraised, altered, deferred) are stored and archived in the Silviculture and Roads Module (SRM)."

Performance Measure 5.3

Program Participants shall adopt a green-up requirement or alternative methods that provide for visual quality. Indicators:

5.3.1. Program implementing the *green-up requirement* or alternative methods.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Foresters regularly use field GPS units linked to the superb GIS which includes recent imagery and re-inventory areas proposed for sale. This information is used, in part, to manage visual issues including green-up.

5.3.2. Harvest area tracking system to demonstrate conformance with the *green-up requirement* or alternative methods.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Foresters regularly use field GPS units. The superb GIS is used for sale planning and for records. It includes recent imagery, carefully-drawn (often based on GPS track-files) harvest unit boundaries, and links to data regarding sale size and treatment.

5.3.3. Trees in clearcut harvest areas are at least 3 years old or 5 feet (1.5 meters) high at the desired level of stocking before adjacent areas are clearcut, or as appropriate to address operational and economic considerations, alternative methods to reach the *performance measure* are utilized by the *Program Participant*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Confirmed by field observations that this requirement was not violated on sites selected for visits, nor on any of the extensive portions of the Minnesota DNR forests observed by the audit team while traveling between sites.

Performance Measure 5.4

Program Participants shall support and promote recreational opportunities for the public. Indicator:

5.4.1. Provide recreational opportunities for the public, where consistent with forest management *objectives*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR promotes recreational use of the forests and regularly modifies timber management to better accommodate such use. As such the SFI Standard is exceeded.

Lands in the scope of the certificate are used for a range of recreation, with wildlife viewing, hunting and fishing the most common. The team confirmed continuing emphasis on providing quality recreation experiences on these certified lands. Observed well signed and maintained trails of various types. Also observed parking areas and signboards. Minnesota State Forest Recreation Guide provides information on recreation opportunities in the state forests, including a list of all of the forests and the recreation available in each. The web site of the Minnesota DNR also provides accessible and useful information for citizens seeking to find recreational opportunities on these lands.

Objective 6 **Protection of Special Sites**

To manage lands that are geologically or *culturally important* in a manner that takes into account their unique qualities.

Performance Measure 6.1

Program Participants shall identify *special sites* and manage them in a manner appropriate for their unique features. Indicators:

6.1.1. Use of information such as existing natural heritage data, expert advice or stakeholder consultation in identifying or selecting *special sites* for *protection*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Interviews and documents reviewed support conformance.

Heritage databases are checked prior to harvests and land altering treatments.

Information from the presentation by Luke Skinner, Ecological & Water Resources Division indicate conformance. The Minnesota Biological Survey (MBS) conducts surveys, county-by-county, to search for rare plants, animals, and communities; most of Minnesota has been surveyed, but some counties will not be completed until 2021.

6.1.2. Appropriate mapping, cataloging and management of identified *special sites*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Special site status is identified and recorded for each stand where appropriate, as confirmed in printouts of sale planning or spray planning documents provided for all sites visited. Auditors visited one HCVF site that had been harvested and one that had a prescribed burn completed. These treatments were planned in consultation with biologists with the Wildlife and the Ecological and Waters Division and agreement was reached that the treatments proposed were appropriate and would not impact the resources that contributed to the special site designation.

Confirmed through review of procedures supported by many interviews of managers that special sites are located on maps, listed in databases available to all staff involved in planning and implementation of harvests, vegetation treatments and other projects.

Confirmed by review of sale documents and by field observations that special sites marked off (buffered out) of nearby timber harvests in cases where that was appropriate (some sites are managed in part with appropriate types of harvests).

Objective 7 Efficient Use of Fiber Resources

To *minimize* waste and ensure the efficient use of fiber resources.

Performance Measure 7.1

Program Participants shall employ appropriate forest harvesting technology and in-woods manufacturing processes and practices to *minimize* waste and ensure efficient utilization of harvested trees, where consistent with other *SFI Standard objectives*. Indicator:

- 7.1.1. *Program* or monitoring system to ensure efficient utilization, which may include provisions to ensure:
- a. management of harvest residue (e.g., slash, limbs, tops) considers economic, social and environmental factors (e.g., organic and nutrient value to future forests and the potential of increased fuels build-up) and other utilization needs;
 - b. training or incentives to encourage loggers to enhance utilization;
 - c. exploration of markets for underutilized species and low-grade wood and alternative markets (e.g., bioenergy markets); or
 - d. periodic inspections and reports noting utilization and product separation.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR has a comprehensive system to address forest utilization which functions well to promote full use of harvested trees consistent with constraints designed to ensure sustainability. Practices and initiatives within each sub-indicator a. through d. are described below, based on information supplied by the department, interviews, and observations. Reviewed “Minnesota DNR Utilization Standards. Updated February 2013”.

a. Guidelines for the management of harvest residue with additional requirements when harvesting biomass are incorporated into timber sale prescriptions.

Foresters inspect sites regularly and enforce permit requirements for thorough utilization. There are provisions to charge fees when standards are not met. Some permits for commercial harvests are followed by firewood sales.

b. The Minnesota Logger Education Program includes biomass guideline training.

Many DNR timber sales include biomass volumes available for purchase, and documents from several sales were reviewed and some sites were inspected.

Other provisions to enhance utilization of biomass include:

- Biomass volumes sold as appraised
- Non-bid product, available for \$1.00 per ton (all sales)
- Scaling option to combine biomass with roundwood products into one price.

c. Minnesota DNR is working to recruit a large company to locate a proposed new siding plant in Hoyt Lake in the northern part of the state. The facility would initially consume 400,000 cords per year. The Department considers private land to be the best source of additional production and is in the process of increasing staffing in its private forest management program to attempt to stem the decline in production from that sector.

d. The department’s annual timber sale inspection program includes a timber utilization category.

Other information provided by the Minnesota DNR supports this requirement:

- Product separation is promoted and reported in various timber sale program systems including base price guidelines, Timber sale appraisals, and TSM reports by consumer, Area and by unit of measure, cords, MBF, pounds, pieces, acres, etc.
- There is a Consuming mill survey program, including primary pulpwood users, sawmills, residential fuelwood and biomass/commercial fuel use. MNDNR in partnership role working with USDA Forest Service, Northern Research Station.

Objective 8 Recognize and Respect *Indigenous Peoples’* Rights

To recognize and respect *Indigenous Peoples’* rights and traditional knowledge.

Performance Measure 8.1

Program Participants shall recognize and respect Indigenous Peoples’ rights. Indicator:

8.1.1. *Program Participants* will provide a written *policy* acknowledging a commitment to recognize and respect the rights of *Indigenous Peoples*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR has two written policies in place that recognize and respect the rights of Indigenous Peoples: “Executive Order 13-10 Affirms the Government to Government relationship between the State of Minnesota and the Minnesota Tribal Nations; Providing for Consultation, Coordination, and Cooperation. DNR Operational Order 129 (2014) Tribal Nations, provides for procedures for communication, coordination, and documentation of work between the DNR and Minnesota’s 11 federally recognized Tribal Nations on coordinated conservation, resource protection, and land management activities.” Source: written response to emailed question.

Performance Measure 8.2

Program Participants with forest management responsibilities on public lands shall confer with affected *Indigenous Peoples* with respect to sustainable forest management practices. Indicator:

8.2.1. *Program* that includes communicating with affected *Indigenous Peoples* to enable *Program Participants* to:

- a. understand and respect traditional forest-related knowledge;
- b. identify and protect spiritually, historically, or culturally important sites;
- c. address the use of non-timber forest products of value to Indigenous Peoples in areas where Program Participants have management responsibilities on public lands; and
- d. respond to Indigenous Peoples’ inquiries and concerns received.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The Department has required all program managers to attend Tribal State Relations Training which occurs about four times a year, each time with a different tribe. To date 40 DNR managers have taken the training, which is developed by Minnesota Indian Affairs Council and: “Description: The course is designed to educate state agency staff about American Indian tribal governments, histories, cultures, and traditions and help state employees to work more effectively with tribal governments and American Indians.”

Operational Order 129 sets forth annual coordination frameworks for the various divisions that identifies the action or product, the expected meeting participants, and who the primary contacts are for both the state and the tribes. Reviewed Appendix E, Forestry Division Supplements” table of activities.

Also reviewed and discussed Minnesota DNR written response to the Lead Auditor’s request for evidence:

- “The Divisions of Forestry and Fish and Wildlife contracts with the Minnesota Historical Society for one FTE archaeologist meeting the Secretary of Interior’s professional qualification standards. The DNR archaeologist ensures that the DNR is in compliance with the Minnesota Statute 138.40, which requires state agencies to consider cultural resources in their operations and development planning.
- The Department works with tribes on a local level for the permitting of collection of non-timber products such as ash and birch bark and lodge poles.
- The Department employs a Tribal Contact Tracking system to record contacts with tribes and to document emerging tribal issues, questions or concerns.”

Performance Measure 8.3

Program Participants are encouraged to communicate with and shall respond to local *Indigenous Peoples* with respect to sustainable forest management practices on their private lands. Indicators:

8.3.1. *Program Participants are aware of traditional forest-related knowledge*, such as known cultural heritage sites, the use of wood in traditional buildings and crafts, and flora that may be used in cultural practices for food, ceremonies or medicine.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: This indicator involves private lands. Minnesota DNR manages public lands, and thus is subject to Performance Measure 8.2.

8.3.2. Respond to *Indigenous Peoples'* inquiries and concerns received.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: This indicator involves private lands. Minnesota DNR manages public lands, and thus is subject to Performance Measure 8.2.

Objective 9 Legal and Regulatory Compliance

To comply with applicable federal, provincial, state and local laws and regulations.

Performance Measure 9.1

Program Participants shall comply with applicable federal, provincial, state and local *forestry* and related social and environmental laws and regulations. Indicators:

9.1.1. Access to relevant laws and regulations in appropriate locations.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Foresters carry the Minnesota Site Level Guidelines (SLG) Field Book.

Minnesota DNR Response to request for evidence:

“Forest management on Minnesota’s state forests and wildlife management areas is founded in numerous state and federal statutes and rules. Different statutes and rules can apply differently to different land classifications. State statutes and rules governing the DNR are readily accessible to all employees on the agency’s internal and external websites at http://www.dnr.state.mn.us/aboutdnr/laws_treaties/index.html

About half of the forest land certified under DNR’s certificate is School Trust land. School trust land is established and given direction in the state constitution. Additional guidance is provided in 84.027, Subd. 18(a)(4) which was amended in 2012 to strengthen the fiduciary guidance for the trust.

In August 2014 the Office of the Legislative Auditor released an evaluation report on DNR forest management. The report has detailed information on state statue responsibilities and our ability to meet those responsibilities.”

9.1.2. System to achieve compliance with applicable federal, provincial, state, or local laws and regulations.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Many aspects of compliance relate to the Minnesota Site Level Guidelines (SLG). All foresters are trained in the SFGs and copies of the full guidelines or the “Quick Reference Field Guide” are found in forester’s trucks.

The Department is also responsible for many aspects of law enforcement on its lands and many foresters have credentials in law enforcement, including Area Foresters and Area Timber Program Foresters.

A process exists for setting up all timber harvests and significant projects, reviewing them internally, and documenting their approval. This process includes the involvement of the most experienced personnel in projects, helping to ensure compliance.

For challenging issues the department has an attorney.

Minnesota DNR’s written response was confirmed through interviews and review of some of the documents: “As a government agency, the State of Minnesota complies with all applicable federal, state, and local laws and regulations. Written policy in the form of Operational Orders, Circular Letters, and Policy Guidelines provide guidance and direction to staff to comply with all laws by interpreting and providing guidance on those laws.”

9.1.3. Demonstration of commitment to legal compliance through *available regulatory action information*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Minnesota DNR’s response to request for evidence was supported by interviews and a Google search: There have been no regulatory or other enforcement actions against the DNR alleging non-compliance by the agency with applicable, federal, state, or local forestry or social and environmental laws.

Performance Measure 9.2

Program Participants shall take appropriate steps to comply with all applicable social laws at the federal, provincial, state and local levels in the country in which the *Program Participant* operates. Indicators:

9.2.1. Written *policy* demonstrating commitment to comply with social laws, such as those covering civil rights, equal employment opportunities, anti-discrimination and anti-harassment measures, workers’ compensation, *Indigenous Peoples’* rights, workers’ and communities’ right to know, prevailing wages, workers’ right to organize, and occupational health and safety.

N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Reviewed and discussed that Minnesota DNR has adopted the following written policy statements addressing these issues, based on a list provided in response to a request:

- 1) "MNDNR Commissioner's and Deputy Commissioners Statement of Commitment.
- 2) MNDNR Policy prohibiting discrimination and harassment.
- 3) MNDNR Reasonable Accommodation Policy
- 4) MNDNR Workplace Behaviors Policy.
- 5) MNDNR Equal Opportunity, Equal Employment Opportunity and Alternative Format Policy Statements for MNDNR publications.
- 6) MNDNR Public Notice of Non-Discrimination and Complaint/Request Procedures under Title VI, Title IX, Section 504 of the Rehabilitations Act of 1973, the Age Discrimination Act of 1975, Title II of the ADA, and the Minnesota Human Rights Act.
- 7) State of Minnesota Zero Tolerance for Sexual Harassment Policy.
- 8) Operational Order 96 – DNR Safety program
- 9) DNR Safety Manual covers the rules and regulations of the DNR Safety Program (it is currently being revised to include internal controls of the procedures)
- 10) Workers Compensation is carried out by the direction of the Department of Administration."

Minnesota DNR is also subject to state-wide human resources and labor relations policies addressing the identified topics. Worker's rights posters related to several of the above policies were see in those offices where auditors had the opportunity to look for them.

New employees receive training on these policies immediately upon starting employment, as confirmed by review of training records for a recently-hired employee, supported by procedures and responses of more-senior personnel who supervise other employees.

9.2.2. *Forestry enterprises* will respect the rights of workers and labor representatives in a manner that encompasses the intent of the International Labor Organization (ILO) core conventions.

N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Minnesota DNR Response to request for evidence: "The DNR has not received information from outside stakeholders with regards to concerns or conformance pertaining to their employee relations with regards to ILO Core conventions 87, 98, and 111. Public employee labor relations are governed by the Public Employee Labor Relations Act ("PELRA"), Minn. Stat. §§ 179A.01-.25."

Objective 10 Forestry Research, Science and Technology

To invest in *forestry* research, science and technology, upon which sustainable forest management decisions are based and broaden the awareness of *climate change* impacts on forests, *wildlife* and *biological diversity*.

Performance Measure 10.1

Program Participants shall individually and/or through cooperative efforts involving *SFI Implementation Committees*, associations or other partners provide in-kind support or funding for forest research to improve *forest health*, *productivity* and sustainable management of forest resources, and the environmental benefits and performance of forest products. Indicators:

10.1.1. Financial or in-kind support of research to address questions of relevance in the region of operations. Examples could include, but are not limited to, areas of forest *productivity*, water quality, biodiversity, community issues, or similar areas which build broader understanding of the benefits and impacts of forest management.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Financial support of the Minnesota SFI Implementation Committee was confirmed by copy of check #55938645 dated 2.04.16 and the associated cover transmission letter.

10.1.2. Research on genetically engineered trees via *forest tree biotechnology* shall adhere to all applicable federal, state, and provincial regulations and international protocols ratified by the United States and/or Canada depending on jurisdiction of management.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

Performance Measure 10.2

Program Participants shall individually and/or through cooperative efforts involving *SFI Implementation Committees*, associations or other partners develop or use state, provincial or regional analyses in support of their *sustainable forestry programs*. Indicator:

10.2.1. Participation, individually and/or through cooperative efforts involving *SFI Implementation Committees* and/or associations at the national, state, provincial or regional level, in the development or use of some of the following:

- a. regeneration assessments;
- b. growth and drain assessments;
- c. *best management practices* implementation and conformance;
- d. *biodiversity conservation* information for family forest owners; and
- e. social, cultural or economic benefit assessments.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

Performance Measure 10.3

Program Participants shall individually and/or through cooperative efforts involving *SFI Implementation Committees*, associations or other partners broaden the awareness of *climate change* impacts on forests, *wildlife* and *biological diversity*. Indicators:

10.3.1. Where available, monitor information generated from regional climate models on *long-term forest health*, *productivity* and *economic viability*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

10.3.2. *Program Participants* are knowledgeable about *climate change* impacts on *wildlife*, *wildlife habitats* and *conservation of biological diversity* through international, national, regional or local *programs*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

Objective 11 Training and Education

To improve the implementation of *sustainable forestry* practices through appropriate training and education *programs*.

Performance Measure 11.1

Program Participants shall require appropriate training of personnel and contractors so that they are competent to fulfill their responsibilities under the *SFI 2015-2019 Forest Management Standard*. Indicators:

11.1.1. Written statement of commitment to the *SFI 2015-2019 Forest Management Standard* communicated throughout the organization, particularly to facility and woodland managers, and field foresters.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Certification Fact Sheet on “Forest Certification” home page on the Minnesota DNR web site.

Minnesota DNR Response to request for evidence:

“A Conservation Agenda- DNR’s 10- Year Strategic Plan 2015-2025 outlines key challenges the state faces over the next 10 years and strategies the DNR will use to address them. It also identifies how the DNR will turn vision into action. A performance measure in the plan is “*Acres of state-administered lands approved for forest certification*”. The document is shared broadly with internal staff and external stakeholders and the back page indicates our support for SFI Certification. The Departments internal and external webpages also indicate our commitment to the ***SFI 2015-2019 Forest Management Standard***

11.1.2. Assignment and understanding of roles and responsibilities for achieving *SFI 2015-2019 Forest Management Standard objectives*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The Minnesota DNR uses its Forest Certification Implementation Team (FCIT) as the primary means to meet this requirement. Team members who participated in the audit have deep knowledge of the SFI requirements and of programs and policies which support conformance.

Reviewed and discussed the Minnesota DNR Response to request for evidence: “In early 2015 the SFI 2015-2019 Forest Management Standard was discussed in depth with the Departments Forest Certification Implementation Team, which is an inter-disciplinary team. The standards Objectives, Performance Measures, and Indicators were assigned to subject matter experts across all of our affected divisions to identify a crosswalk to our existing policies and procedures and to further identify any gaps. Training programs are constantly occurring through program team meetings to update staff on the requirements under the standards.”

11.1.3. Staff education and training sufficient to their roles and responsibilities.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Interviews of field staff from all three divisions confirmed a high-level of understanding of policies, procedures, and bio-physical knowledge required to implement their programs and job responsibilities.

Updates on portions of action plans from the 2014 Minor CAR which were still underway at the time of the 2015 audit, and the responses to the 3 training-related 2015 Opportunities for Improvement provided additional evidence. For example action item 9 relating to training materials developed by the Sustainable Forestry Education Cooperative at the University of Minnesota was confirmed by review of “Executed U of M Contract 93800”.

Reviewed and discussed the Minnesota DNR’s response to request for evidence:

“The Department offers New Supervisor Orientation to new supervisors and managers to introduce and improve supervisory skills. We also offer through our Enterprise Learning Management (ELM) system courses on subjects related to staffs roles and responsibilities. Technical training is decentralized and done by each division. For example, the Division of Forestry has a Training Board that in working with Division Leadership maintains an annual training calendar/schedule, coordinates training plans for new hires, determines new needs for training, finds appropriate course instructors, and communicates results to leadership. A forest management academy was implemented in the summer of 2015 to create efficiencies in training and integration of forest management subjects.” These responses were consistent with evidence assessed throughout the audit.

11.1.4. Contractor education and training sufficient to their roles and responsibilities.

- N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Confirmed that contracts for chemical application contractors require appropriate credentials. Logger interviews and system review shows that at least one on-site logger has the SFI-approved Minnesota Logger Education Program training (see below).
 Minnesota DNR Response to request for evidence:
 “The Department works with the Minnesota Logger Education Program - <http://www.mlep.org/about.htm> - to support contractor education and training sufficient to that industries roles and responsibilities. The Division of Forestry sits on the Board of Directors for that organization.

11.1.5. Program Participants shall have written agreements for the use of *qualified logging professionals* and/or *certified logging professionals* (where available) and/or *wood producers* that have completed training programs and are recognized as *qualified logging professionals*.

- N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Minnesota DNR’s response to request for evidence was assessed and confirmed: “Minnesota Statutes 2014, 90.145 sub 1(d) Requires that before the start of harvesting operations on any permit, the purchaser must certify that a foreperson or other designated employee who has a current certificate of completion, which includes instruction in site-level forest management guidelines or best management practices, from the Minnesota Logger Education Program (MLEP), the Wisconsin Forest Industry Safety and Training Alliance (FISTA), or any similar continuous education program acceptable to the commissioner, is supervising active logging operations. The Department and MLEP maintains a list of qualified logging professionals.” This requirement is implemented by a clause in each timber sale contract specifying the training requirement.

Performance Measure 11.2

Program Participants shall work individually and/or with *SFI Implementation Committees*, logging or forestry associations, or appropriate agencies or others in the *forestry* community to foster improvement in the professionalism of *wood producers*.
 Indicators:

- 11.2.1. Participation in or support of *SFI Implementation Committees* to establish criteria and identify delivery mechanisms for *wood producer* training courses and periodic continuing education that address:
- a. awareness of sustainable forestry principles and the SFI program;
 - b. best management practices, including streamside management and road construction, maintenance and retirement;
 - c. reforestation, invasive exotic plants and animals, forest resource conservation, aesthetics and special sites;
 - d. awareness of responsibilities under the U.S. Endangered Species Act, the Canadian Species at Risk Act, and other measures to protect wildlife habitat (e.g., Forests with Exceptional Conservation Value);
 - e. awareness of rare forested natural communities as identified by provincial or state agencies, or by credible organizations such as NatureServe, The Nature Conservancy, etc.
 - f. logging safety;
 - g. U.S. Occupational Safety and Health Administration (OSHA) and Canadian Centre for Occupational Health and Safety (CCOHS) regulations, wage and hour rules, and other provincial, state and local employment laws;
 - h. transportation issues;
 - i. business management;
 - j. public policy and outreach; and
 - k. awareness of emerging technologies.

N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Minnesota DNR is an active participant and board member of the Minnesota Loggers Education Program (MLEP). The SIC has approved the training provided by the Minnesota Logger Education Program and works closely with MLEP to ensure high quality, relevant training is available each year.

Financial support of the Minnesota SFI Implementation Committee was confirmed. Tim Beyer has been a regular attendee of the meetings of the Minnesota SFI Implementation Committee, which meets twice annually in December and in the summer. The winter 2015 meeting was held at the St. Paul office of the Minnesota DNR.

11.2.2. The SIC-approved *wood producer training programs* shall have a continuing education component with coursework that supports the current training *programs*, safety and the *principles of sustainable forestry*.

N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Continuing education requirements are and have been in the MLEP program. This was confirmed via interviews and a review of the MLEP website.

11.2.3. Participation in or support of *SFI Implementation Committees* to establish criteria for recognition of logger certification *programs*, where they exist, that include:

- a. completion of *SFI Implementation Committee* recognized logger training *programs* and meeting continuing education requirements of the training *program*;
- b. independent in-the-forest verification of conformance with the logger certification *program* standards;
- c. compliance with all applicable laws and regulations including responsibilities under the U.S. Endangered Species Act, the Canadian Species at Risk Act and other measures to protect *wildlife habitat*;
- d. use of *best management practices* to protect water quality;
- e. logging safety;
- f. compliance with acceptable *silviculture* and utilization standards;
- g. aesthetic management techniques employed where applicable; and
- h. adherence to a management or harvest plan that is site specific and agreed to by the forest landowner.

N/A
 Conformance
 Exceeds
 O.F.I.
 Major NC
 Minor NC

Audit Notes: Financial support of the Minnesota SFI Implementation Committee was confirmed. Tim Beyer has been a regular attendee of the meetings of the Minnesota SFI Implementation Committee.

The DNR is an active participant and board member of the Minnesota Loggers Education Program (MLEP).

Objective 12 Community Involvement and Landowner Outreach

To broaden the practice of *sustainable forestry* through public outreach, education, and involvement, and to support the efforts of *SFI Implementation Committees*.

Performance Measure 12.1

Program Participants shall support and promote efforts by consulting foresters, state, provincial and federal agencies, state or local groups, professional societies, *conservation* organizations, *Indigenous Peoples* and governments, community groups, sporting organizations, labor, universities, extension agencies, the *American Tree Farm System*® and/or other landowner cooperative *programs* to apply *principles* of sustainable forest management. Indicators:

12.1.1. Support, including financial, for efforts of *SFI Implementation Committees*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Financial support of the Minnesota SFI Implementation Committee was confirmed. Tim Beyer has been a regular attendee of the meetings of the Minnesota SFI Implementation Committee.

During the summer 2016 meeting Gordy Mouw of Verso covered the issues in the SFI 2015-2019 Standards that are met in part by the SFI Implementation Committees.

Area foresters and wildlife biologists described numerous outreach efforts, most of which involved youth education, including field days, career days, fire-prevention programs, and work with college students.

12.1.2. Support, individually or collaboratively, education and outreach to forest landowners describing the importance and providing implementation guidance on:

- a. best management practices;
- b. reforestation and afforestation;
- c. visual quality management;
- d. conservation objectives, such as critical wildlife habitat elements, biodiversity, threatened and endangered species, and Forests with Exceptional Conservation Value;
- e. management of harvest residue (e.g., slash, limbs, tops) considers economic, social, environmental factors (e.g., organic and nutrient value to future forests) and other utilization needs;
- f. control of invasive exotic plants and animals;
- g. characteristics of *special sites*; and
- h. reduction of wildfire risk.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

12.1.3. Participation in efforts to support or promote *conservation* of managed forests through voluntary market-based incentive *programs* such as current-use taxation *programs*, *Forest Legacy Program* or *conservation* easements.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

Performance Measure 12.2

Program Participants shall support and promote, at the state, provincial or other appropriate levels, mechanisms for public outreach, education and involvement related to sustainable forest management. Indicator:

12.2.1. Periodic educational opportunities promoting *sustainable forestry*, such as

- a. field tours, seminars, websites, webinars or workshops;
- b. educational trips;
- c. self-guided forest management trails;

d. publication of articles, educational pamphlets or newsletters; or

e. support for state, provincial, and local *forestry* organizations and soil and water *conservation* districts.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed in detail during the 2016 SFI Audit, but some evidence related to this indicator emerged during interviews. Area foresters and wildlife biologists described numerous outreach efforts, most of which involved youth education, including field days, career days, fire-prevention programs, and work with college students

Performance Measure 12.3

Program Participants shall establish, at the state, provincial, or other appropriate levels, procedures to address concerns raised by loggers, consulting foresters, employees, unions, the public or other *Program Participants* regarding practices that appear inconsistent with the *SFI Standard principles* and *objectives*. Indicators:

12.3.1. Support for *SFI Implementation Committees* (e.g., toll-free numbers and other efforts) to address concerns about apparent nonconforming practices.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

12.3.2. Process to receive and respond to public inquiries. *SFI Implementation Committees* shall submit data annually to *SFI Inc.* regarding concerns received and responses.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Not reviewed during the 2016 SFI Audit.

Objective 13 Public Land Management Responsibilities

To participate and implement sustainable forest management on *public lands*.

Performance Measure 13.1

Program Participants with forest management responsibilities on public lands shall participate in the development of public land planning and management processes. Indicators:

13.1.1. Involvement in public land planning and management activities with appropriate governmental entities and the public.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Briefly reviewed the Minnesota DNR response to request for evidence, but did not confirm all aspects, so this issue should be reviewed again during this audit cycle:

“The DNR is a large public agency and its mission, policies, and statutes require input from stakeholders, tribes, other agencies, and customers. The Department invites stakeholders and agencies to many of its planning and operational activities efforts, such as Section Forest Resource Management Planning. The Division of Forestry invites stakeholders and agencies to comment on pesticide application projects, forest road construction projects, and harvesting timber from state lands. The DNR also has multiple ways that the people can voice their concerns. We have roundtable sessions, public input sessions, surveys, and websites where people can share their views. Lastly the department maintains a seat on the Minnesota Forest Resources Council. The Minnesota Forest Resources Council (MFRC) is a 17-member board created to develop policy recommendations to the Governor and federal, state, and local governments and to encourage the adoption of sustainable forest management policies and practices. Council members represent a wide range of forest resource interests and hold public meetings every other month to discuss key issues.”

13.1.2. Appropriate contact with local stakeholders over forest management issues through state, provincial, federal or independent collaboration.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: “I have now connected the Public Concern Registration Process to our external Forest Certification Web Page. <http://www.dnr.state.mn.us/forestry/certification/auditingprocess.html> . I could not find a perfect place for it but felt that the "auditing process" page was a good fit for now.” Source: Beyer, Tim (DNR) [<mailto:Tim.Beyer@state.mn.us>]; Sent: Wednesday, July 27, 2016 10:55 AM. One contact has been received, from a lake owners association, asking about pesticide use.

Minnesota DNR maintains a seat on the Minnesota Forest Resources Council, which is filled by Forest Boe, Director of the Forestry Division. Craig Schmidt is the formal contact for the Minnesota Forest Resources Partnership Minnesota Forest Resources Partnership.

Minnesota DNR provided examples of meetings with environmental groups; he described twice annual meetings with a selection of environmental NGOs (Sierra Club, TNC, Izack Walton League, Audubon, Friends of Cloquet Forest, and others). Fish and Wildlife and Ecological and Water Resources Roundtable, an annual event that is by invitation and that often attracts several hundred participants.

Minnesota DNR Response: “The DNR participates in a number of collaborative efforts such as the Minnesota Forest Resources Council, Minnesota Forest Resources Partnership, Great Lakes Fire Compact (which includes the Canadian Providence of Ontario), National Association of State Foresters, Northeastern Area Association of State Foresters, Minnesota Logger Education Program, Minnesota Master Logger Program, Natural Resources Conservation Service State Technical Team, just to name a few. The DNR also meets with customer and user groups like Minnesota Forest Industries. Minnesota Soil and Water Conservation District Forestry Association, Grand Rapids and Bemidji Forestry Affairs Councils, Minnesota Association of County Land Commissioners, Minnesota Shade Tree Advisory Committee, environmental groups, and many others. The DNR also works closely with the University of Minnesota and the Extension Service. DNR has also taken opportunities when available to provide technical review and input to County and USFS forest management plans.”

Objective 14 Communications and Public Reporting

To increase transparency and to annually report progress on conformance with the *SFI Forest Management Standard*.

Performance Measure 14.1

A *Program Participant* shall provide a summary audit report, prepared by the *certification body*, to *SFI Inc.* after the successful completion of a certification, recertification or surveillance audit to the *SFI 2015-2019 Forest Management Standard*. Indicator:

14.1.1. The summary audit report submitted by the *Program Participant* (one copy must be in English), shall include, at a minimum,

- a. a description of the audit process, *objectives* and scope;
- b. a description of substitute *indicators*, if any, used in the audit and a rationale for each;
- c. the name of *Program Participant* that was audited, including its *SFI* representative;
- d. a general description of the *Program Participant's* forestland included in the audit;
- e. the name of the *certification body* and *lead auditor* (names of the *audit team* members, including *technical experts* may be included at the discretion of the *audit team* and *Program Participant*);
- f. the dates the audit was conducted and completed;
- g. a summary of the findings, including general descriptions of evidence of conformity and any nonconformities and corrective action plans to address them, opportunities for improvement, and exceptional practices; and
- h. the certification decision.

The summary audit report will be posted on the *SFI Inc.* website (www.sfiprogram.org) for public review.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Past two summary audit reports are posted on the SFI Inc. website (www.sfiprogram.org). Summary report from NSF includes all of the required items listed above.

Performance Measure 14.2

Program Participants shall report annually to SFI Inc. on their conformance with the *SFI 2015-2019 Forest Management Standard*.

Indicators:

14.2.1. Prompt response to the *SFI* annual progress report survey.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Rachel Dierolf confirmed that the SFI Annual Progress Report for Minnesota DNR Program was provided to SFI Inc. on March 28th.

14.2.2. Record keeping for all the categories of information needed for *SFI* annual progress report surveys.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: The Department maintains electronic files of information collected to complete progress report surveys; records related to timber and vegetation management are particularly detailed.

14.2.3. Maintenance of copies of past survey reports to document progress and improvements to demonstrate conformance to the *SFI 2015-2019 Forest Management Standard*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Past survey reports are saved; a copy of the most-recent was reviewed. Minnesota DNR Response to request for evidence: The Department maintains copies of past survey reports to document our progress and improvements.

Objective 15 Management Review and Continual Improvement

To promote continual improvement in the practice of *sustainable forestry* by conducting a management review and monitoring performance.

Performance Measure 15.1

Program Participants shall establish a management review system to examine findings and progress in implementing the *SFI 2015-2019 Forest Management Standard*, to make appropriate improvements in *programs*, and to inform their employees of changes.

Indicators:

15.1.1 System to review commitments, *programs* and procedures to evaluate effectiveness.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

- Audit Notes: Reviewed and discussed the Minnesota DNR Response to request for evidence, and confirmed each of the bulleted items describing their systems to review commitments, programs, and procedures include:
- Continuation of a Forest Certification Implementation Team (FCIT) to review commitments to the SFI Standard and Department Policies and respond to audits
 - Forest Resources Issues Teams (FRITs) at the executive or regional level; for example Emily Peters staffs a team that supports Executive FRIT (the 3 divisions that are most involved in forest certification).
 - Division or Department Management Teams, including program, policy and procedure reviews. One such effort includes a meeting being held in the next week that is a facilitated workshop to review the root causes of the policy training challenges identified in past audits. For example the Division of Forestry’s “Division Management Team” (DMT) has as one of their functions, and is currently emphasizing, periodic review of existing policies. Some of these policies are updated and some are terminated. The most recent examples include policies on NHIS review, slash pile burning guidelines, uniform policy, nursery seed source control, invasive species management on state forest lands, communicating with adjacent landowners, state land trespass. Another example is a Division of Forestry process to review and update division circular letters and manuals.
 - DNR Conservation Agenda metrics and the Governor’s Department Results Performance Indicators are both updated annually
 - Annual or periodic program workshops (Timber Sales, Silviculture, Timber Appraisal, Wildlife Training
 - A DNR process (via Statewide Interdisciplinary Review Service) to review and update operational orders
 - Forestry/Wildlife/Ecological Services coordination policy.

15.1.2 System for collecting, reviewing, and reporting information to management regarding progress in achieving *SFI 2015-2019 Forest Management Standard objectives and performance measures*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

- Audit Notes: Minnesota DNR’s Forest Certification Implementation Team (FCIT) that meets regularly, with a plan to meet monthly over the next year. The FCIT Core Team is made up of Section level managers from the Divisions of Forestry, Fish and Wildlife, and Ecological and Water Resources. The assigned staff have a direct connection to their respective Division Management Teams. The Core team annually reviews internal audit findings, and joins the Certification Consultant in presenting findings to the Division Directors and Commissioners Office, as well as back to their DMT’s.

All of the items in the Minnesota DNR Response to request for evidence are supported by interviews and/or review of documents: “Systems for collecting, reviewing, and reporting information include:

- Division of Forestry annual work planning and accomplishment reporting process
- The monitoring program under M.S. §89A.07, subd. 1. Forest resource trends and conditions (FIA, FIM, pest surveys, etc.)
- The monitoring program under M.S. §89A.07, subd. 2 and 3. Practices, compliance and effectiveness monitoring (i.e., FRC site-level guidelines implementation monitoring, including field audit reports)
- FORIST development and implementation (FIM, SRM, site management documentation and objective reporting, forest development project tracking, forest inventory update tracking)

- Monitoring SFRMP implementation (progress towards SFRMP goals/targets, using FORIST SRM objectives, SEL, and other means)
- DNR timber sales reporting system
- Timber sale inspections, regeneration survival checks, etc.
- Electronic 121 checkoff of FRC guideline application
- Division training records (ECS training, FRC guidelines, timber sale design, etc.).

15.1.3 Annual review of progress by management and determination of changes and improvements necessary to continually improve conformance to the *SFI 2015-2019 Forest Management Standard*.

N/A Conformance Exceeds O.F.I. Major NC Minor NC

Audit Notes: Reviewed the “2016 Annual Management Review of DNR Implementation of the Sustainable Forestry Initiative (SFI) 2015-2019 and Forestry Stewardship Council (FSC) Forest Management Standards” dated September 12, 2016 from Tim Beyer, Forest Certification Program Consultant, Forest Certification Implementation Team. This was sent to Dave Schad, Deputy Commissioner, Barb Naramore, Assistant Commissioner, Sarah Strommen, Assistant Commissioner, Forrest Boe, Forestry Director, Jim Leach, Fish and Wildlife Director, and Luke Skinner, Eco-Waters Resources Director.

Progress on responding to the findings of the 2014 MN Office of Legislative Audit (OLA) of Forestry Program appears to have been substantial.

(End)

Appendix 4

Meeting Attendance

Region	Central
Area	Little Falls (West)
Area Forest Supervisor	John Korzeniowski
Asst. Area Supervisor, Timber	Peter Willis
Regional Plant Ecologist	Kit Elstad-Haveles
Area Wildlife Supervisor	Beau Liddell
Forestry Technician	Bill Salo
Forester	Andrew McGuire
Forestry Technician	Drew Butler

Central Office Staff	Tuesday, September 20 (1:00-4:30)
Central Office Staff	
Forest Certification Consultant	Tim Beyer
Silviculture Program Coord.	Paul Dubuque
Forest Wildlife Habitat Superv.	Leslie McInenly
Forest Ecologist	Emily Peters

Region	NW
Area	Bemidji
Area Forest Supervisor	Greg Snyder
Asst. Area Forestry Supervisor	Joe Rucinski
Program Forester, Timber	Ben Lang
Program Forester, Development	Nick Severson
Asst. Regional Plant Ecologist	Nick Jensen
Area Wildlife Supervisor	Dave Rave
Area Wildlife Supervisor	Erik Thorson
Forester	Cory Kimball
Forester	Daniel Wiley
Forestry Technician	Ernest Schmitt

External Audit Schedule	Wednesday, September 21
Central Office Staff	Beyer, Dubuque, McInenly, Peters

Region	NW
Area	Park Rapids
Asst. Area Forest Supervisor	Mike Lichter
Program Forester, Timber	Kyle Anderson
EWR Contact	Nick Jensen (not avail for Internal)
Area Wildlife Supervisor	Erik Thorson
Asst. Area Wildlife Manager	Greg Henderson
Area Wildlife Supervisor	Rob Baden
Forester	Elena Teich
Program Forester, PFM	Kent Wolf
Forestry Technician	Joel Holden
Forestry Technician	Steve Bade
External Audit Schedule	Thursday, September 22
Central Office Staff	Beyer, Dubuque, McInenly, Peters

Appendix 5

Field Site Notes

Date: Tuesday, September 20	
FMU / Location / sites visited	Activities / notes
8:30 – 10:30 AM	Opening meeting: Introductions, FSC and SFI updates, presentations by DNR Divisions; Forestry, Fish and Wildlife, Ecological and Water Resources.
1:00 – 4:30 PM, 9/20	Auditors visit Little Falls Area with various MNDNR administrative and field staff:
Site 1 – Ereaux WMA, Permit B013335, T41-R31W-S30	<p>Management of this 500-700 acre area is done under the Ereaux WMA Management Guidance Document, WMA00539. The treatment area (burn area) is primarily northern wet meadow about 101 acres, northern mesic prairie 19 acres, and southern dry-mesic oak forest 19 acres, for a total treatment area of 139 acres. Objectives for management activities were to maintain and/or enhance wildlife by maintaining an open landscape, reducing woody buckthorn and hazel competition, and general prairie restoration to provide ground nesting habitat with an emphasis on waterfowl, pheasants, and upland nesting song birds. Stand objectives are to maintain pin oak, oak regeneration, and management of buckthorn brush invasive.</p> <p>Harvest area inspected was set up for 83 acres to remove all aspen and marked trees. Snag removal around established woods trail and field road. All conifer and oak species designated for retention along with cherry, maple and basswood. Other specifications as listed in the Timber Appraisal Report.</p> <p>Discussions included: RTE procedures, NHIS database update schedules, prescribed burning program, and timber sale administrative procedures.</p>
Site 2 – Ruff-Nik WMA, T131N-R32W-S24	<p>Management for this approximately 1,050 acres under the Ruff-Nik WMA Management Guidance Document, WMA01148. WMA includes 120 acres of State Trust Fund land. Overall WMA is equally managed for forest, wetland, and grassland wildlife species, dependent on cover types within the WMA. An aspen cover type of about 16 acres was harvested retaining all oak and elm species. Cerulean warbler and red-shouldered hawk were specific species and general wildlife species benefits were considered in the sale area.</p> <p>Discussions included: green tree retention, beaver control, refuge management, wild rice production, waterfowl habitat management.</p>
Site 3 – Ruff-Nike WMA, Shirley Robinson Duck Refuge, T-R-S	<p>This was a dike rehabilitation and control structure replacement for two separate water impoundments of 55 and 48 acres, respectively. The 48 acre pond inventoried as a high quality wild rice pond. Supplemental funding was acquired via Ducks Unlimited to rehabilitate dikes and replace control structures in attempts to control beaver site damage and enable water level management to optimize wild rice production. A detailed Project Description provided project purpose; descriptions; dimensions; risk assessment;</p>

	<p>hydrologic volumetric and flowage calculations; existing and proposed design specifications.</p> <p>Discussion included duck protection measures instituted regarding hunting and trespass regulations, refuge management, wild rice production, waterfowl habitat management.</p>
Site 4 – Fawn Lake Twn, Permit X013879, T132-R32W, S36	<p>Three blocks totaling 26 acres of aspen cover type were clearcut for regeneration. Original sale area of 218 acres was set up for timber sale 2-3 years ago but not harvested due to inaccessibility. Retention area along edge and individual trees marked to retain. Riparian buffer along wetland was marked with blue line and met BMP requirements.</p> <p>Discussions included: green tree retention and sale administration.</p>
Site 4 – Permit X014353, T131-R32W, S24	Completed harvest for sale offered multiple times. Oak thinning.
Date: Wednesday, September 21	
FMU / Location / sites visited	Activities / notes
Brady, Jacquain Itinerary, 9/21	Bemidji Area – Southern Sites
Site 1 – WP Planting	<p>This 15.2 acre treatment area had mature red pine with mixed hardwoods of paper birch and red maple at one end and was dominated by big tooth aspen at the other. Site was seed tree harvested in late winter of 2015 using full-tree skidding and slash piling under a plan to prescribe burn the site following harvest. Red and white pine seed trees were painted to retain. Additionally a hardwood buffer strip was painted to retain along a wetland/brush complex adjacent to Lake Winnibigoshish.</p> <p>Discussions included: seedling monitoring, green tree retention BMPs, DNR training programs for green tree retention, other green tree retention topics, regeneration monitoring program, SFRMP conifer retention goals, general SFRMP development and approval processes, and tribal “good neighbor” no use of chemical herbicides,</p>
Site 2 – Bemidji Sale, Permit X014940, T145-R28W-S28	This 30 acre treatment set up to regenerate using clearcut with reserves in an aspen stand on School Trust land.
Site 3 – Gould 22, T143-R28W-S15	<p>This 62 acre clearcut with reserves treatment area has been set up and sold to be harvested in 2017. Area included two aspen stands 65 and 73 years old. The 65 year old stand has aspen, planted spruce, and upland cedar with healthy regeneration. Stand was set up for clearcut reserving cedar patches as well as pine, white spruce and balsam fir less than 5” dbh. The 73 year old stand contains high conservation values along the wetlands near Leech Lake. The high conservation values include state ranked birds stand was designated HCVF in 2015. Stand assessment review brought HCVF status to the forester’s attention who then consulted with state regional ecologist.</p> <p>Reserve trees selected for long-lived conifers for a long-term goal of shifting the standing to conifer domination on a fire dependent site (FDxx) to be</p>

	<p>managed as uneven-aged maintaining a strong aspen/hardwood component.</p> <p>Discussion included: HCVF assessment, HCVF public summary, HCVF consultation procedures, HCVF monitoring. The HCVF monitoring discussion discovery that monitoring is still being developed (Minor CAR or OBS regarding monitoring?)</p>
Site 4 – Jack Pine	<p>This 92 acre jack pine stand was clearcut in 2008 and is adjacent to recently acquired Leech Lake Tribal land acquisition. Site was clearcut, planted with jack pine seedlings in 2012, after suspected seedling failure site was planted again in 2013. The 2012 planted seedlings had about 50% mortality and with both plantings is now considered to be at a high stocking level.</p>
Site 5 -	<p>Harvested 2008, partial harvest of 6.4 acres. First harvest done in 2000. In 2008 marked jack pine for additional removal</p>
Site 6 – Jack pine experiment	<p>This was an experimental, variable-density-harvest of 45 year old jack pine using a strip harvest as part of an adaptive forest management project. Objective was to retain a robust native plant community, test whether retention of a live seed source will provide adequate natural regeneration of jack pine in FDC communities, and to learn how to initiate and coordinate a project with other divisions. Harvest was completed in 2010. Measurements were taken pre- and post-harvest. Measurements were taken for ground layer diversity, regeneration diversity, and jack pine diplodia. This alternative method was explored in part to determine of lower intensity input (natural versus site-prep and planting) can successfully regenerate jack pine on this fire dependent woodland (FDC24). This site was in the “good neighbor” no pesticide zone within the Leech Lake Tribal area. Initial results were provided in the document, “Adaptive Forest Management Projects: Assessment and Recommendations”, April 2015.</p>
Ferrucci Itinerary, 9/21	Bemidji Area – Northern Sites
Site 1 Permit B013216; Sold, Uncut	<p>Two prescriptions: Clearcut Aspen, Spruce, and 4” and larger Paper Birch with scattered and clumped reserves including Red Pine, most Bur Oak, and smaller birch.; First thinning in a young Red Pine Plantation as a logger-select strip thin cutting 15-foot wide strips with 30-foot wide leave strips.</p> <p>Discussed retention of green trees, snags, and wildlife trees, sale administration, and sale appraisal</p>
Site 2 Rockwood Wildlife Management Area	<p>This 80-acre WMA has a 1-page management description, with management direction provided as overall WMA forest management guidance.</p>
Site 2B Rockwood WMA Tree Planting Project	<p>Jack Pine was harvested from 13 acres of mixed Jack and Red Pine woodland in 2012. Scattered pine, white spruce, paper birch and a few small oak trees were left resulting in a visually-attractive area. Harvest prescription and winter harvest avoided scarification, and by 2014 a dense grass cover clearly had prevented successful regeneration by JP. A skid steer was used to scalp scattered spots that were planted to Jack Pine. The seedlings have been successfully established. Seeking a grant for bud-capping, which may be required annually for 5-7 years.</p> <p>Discussed impacts of deer browse on regeneration, particularly on Jack Pine, approach to attempt JP followed by Red Pine planting if needed, factors</p>

	<p>influencing deer populations, notably winter weather, and the issues involved in setting deer harvest levels.</p>
<p>Site 3 Gravel Pit Invasive Control, T144, R37W</p>	<p>Site was sprayed using Milestone plus Activator 90 Surfactant to control Knapweed as part of a regional effort to control invasive plants in gravel pits. The contract for control was managed from the Northwest Region with local oversight by the Invasives Species Sub-Program Forester. Gravel pits are treated on a three-year rotation. The Knapweed at this site appeared to be all killed by the treatment. A public chemical treatment notification sign is posted along the entrance road.</p> <p>Discussed uses of chemicals in Bemidji area, under direction of the Silviculture program.</p>
<p>Site 4 Permit B012991</p>	<p>Harvested Dec. 2015-Jan. 2016 using conventional (tree length) harvesting operation. The need to cross a tributary to a designated trout stream led to comments from interdisciplinary process. Minnesota DNR Public Waters Work Permit 2015-2986 and the confirmation letter from the US Army Corps of Engineers document adherence to regulatory requirements. The permitted temporary crossing structures included a culvert covered by logging slash and snow; these were removed and the crossing stabilized and seeded, with the approaches blocked using red pine logs to prevent vehicles from entering.</p> <p>Inspection of three prescriptions confirmed appropriate practices: Aspen clear-cut with reserves (which represent pre-harvest stand), and first thinning of red pine plantation and spruce plantations via third-row thinning where rows were present and strip thinning elsewhere. Stream and wetland buffers are intact and provided adequate protection.</p> <p>Discussed policies and approaches to Green Tree retention and thinning methods for plantations.</p>
<p>Site 5 Permit B013214</p>	<p>Active second thinning harvest by Richard Dukek Logging in an 11 acre Red Pine plantation. Mature Aspen also removed to favor pine in support of SFRMP goals, and 5 acres of Aspen in two stands also harvested.</p> <p>Interviewed Brett Dukek, owner-operator who confirmed MLEP training, understanding of BMPs and sale restrictions, and pre-sale walk-through with and regular inspections by MDNR foresters.</p> <p>Discussed requirements for spill kits and for maintaining a trash-free logging site and methods of sale administration. Reviewed the MDNR "Single Permit Activity Report documenting sale administration including onsite inspection notes showing frequent visits (4 in the first 8 days of the harvest).</p>
<p>Site 6 Lake George Blueberry Burn</p>	<p>Completed 3 acre understory burn in a 66-year old mixed Jack Pine/ Norway pine stand to improve the quality of the upland fire-dependent jack pine woodland community (NPC type is FDC12a) including increasing abundance of blueberry plants and number of berries per plant. The site is designated as a RSA and is also part of the Lake George HCVF. MDNR is managing this site for the understory plants that include a wide variety of dry, nutrient poor species including Blueberries.</p> <p>Discussed the importance of blueberries for recreational gathering and for the communities' annual blueberry festival, the prescribed burn plan and practices, and advance notification including press release.</p>

Site 6b Older completed harvest adjacent to Site 6.	<p>Walked a small portion of a completed gap/group selection harvest in adjacent stand including the HCVF buffer zone.</p> <p>Discussed ID process and significant involvement of staff from Fish & Wildlife and Ecological & Water Resources in the harvest design.</p>
Site 7 Permit B012814	<p>Completed clear cut with reserves in Aspen stands, with portions having sufficient oak reserves to approach shelterwood seed harvest condition. Harvest area totals 124 acres and includes two small lakes and several bordering or included wetlands, all of which were buffered and protected per Minnesota Site Level Guidelines. Several of the group reserves observed include Aspen that appeared representative of the pre-harvest stand. Walked through a portion of the harvest confirming ample coarse and fine woody debris, no rutting, and vigorous Aspen root suckering.</p> <p>Discussed patch management, connection of this sale to goals of the SFRMP, and the emerging MOA concept, confirming understanding by the area staff of these concepts and planning tools.</p>
Site 8 North Country Hiking Trail	<p>Observed trailhead parking area and kiosk, and briefly discussed the trail's status on state owned land.</p>
Date: Thursday, September 22	
FMU / Location / sites visited	Activities / notes
Jacqmain Itinerary, AM 9/22	Park Rapids Area – West, Paul Bunyan
Site 18– Permit X014374	<p>This 51 acre aspen stand, 69 years old, clearcut with reserves harvested in fall 2014. Aspen, paper birch, burr and red oak, maple and basswood were harvested retaining ash around ephemeral ponds and buffer strips of the dominant hardwood species, including large aspen, around the open water ponds in the northern part of the stand. All non-hazardous snags were specified to retain during harvest. Riparian buffer strip was painted in blue for no equipment travel or harvest. Recreational trail considerations included maintaining ATV trail as open to travel on weekends.</p> <p>Discussions included: GTR state BMPs; DNR training; Road planning, installation, maintenance, closures, funding; snags and coarse woody debris wildlife values; recreation and stakeholder consultations and management; regeneration monitoring.</p>
Ferrucci Itinerary, AM 9/22	Park Rapids West - WMAs
Site 15 Invasive Species Spraying- Wolf Lake Road Gravel Pit, Smokey Hill State Forest	<p>Abandoned gravel pit was sprayed using Milestone plus Activator 90 Surfactant to control Knapweed as part of a regional effort to control invasive plants in gravel pits. The contract for control was managed from the Northwest Region with local oversight by the Invasives Species Sub-Program Forester. Gravel pits are generally treated on a two-year rotation, with this site having been treated three times.</p> <p>Discussed the new Forestry Division Sub-Program for Invasive Species Control, which is part of expanded effort for invasive control to include roadside and landing locations in addition to the more-established program of control in gravel pits.</p>
Site 16 Hubble Pond WMA	<p>This 4,000 acre WMA located near the town of Deer Lake is very heavily used for hunting. The main features include managed flowages along the Otter</p>

	<p>Tail River and 50 miles of hunter walking trails. The recently-replaced Hubbel Pond Water-Control Structure was inspected, and its design and operation benefits described.</p> <p>Discussed water management to favor wild rice and waterfowl habitat.</p>
Site 17 Permit X04792	<p>This sold but uncut 8-acre Aspen clear cut with reserved burr oak, red oak, ash and elm was reviewed. The wildlife manager worked with the forester to reserve Aspen trees within the openings; the blue-paint on these reserved trees were seen.</p> <p>Discussed the importance of knowing operator’s tendencies and of raising key issues during the pre-audit meeting, and that wildlife staff always asks for a site visit for sites on any WMAs where harvests are proposed.</p>
Ferrucci, Jacqmain , PM 9/22	Park Rapids Area – West, Paul Bunyan
Site 11 – Permit X014559	<p>A 53 acre aspen/birch type, with conifer components, on a fire central fire dependent type (FDc34) was inspected for harvest. Routine pre-assessment for RTE discovered an occurrence comment for Red Shouldered-Hawk triggering a Joint Site visit request by the forester. The forester chose to contact both Ecological and Wildlife for consultation. The initial habitat type was questioned and Ecologist request a check on the classification of the habitat type. The forester reclassified the site to FDC34 after resampling.</p> <p>FDC34 guidance supports jack pine restoration of pine on this site including red pine, white pine, and jack pine. The forester and ecologist agreed on a pine restoration plan. The stand was harvested summer 2015. For site prep the site was sprayed with Garlon and Accord at standard, label consistent rates to reduce woody competition. The site will then be trenched and planted with primarily jack and red pine to include small mixture of white pine. Riparian buffer strips were painted for no equipment or harvest around the wetland complex.</p> <p>Discussions included: GTR standards, GTR training, spray and burning neighbor adjacency notification letters protective signage and other related procedures; specifications for spraying; the DNR “Pesticide Use Policy” (2014),</p>
Site 12 – Permit X014561	<p>A 14 acre aspen type was connected to, and part of, Site 11 was split into a separate sale to accommodate wetter site conditions and enable sale regulations specific to reducing the risk of rutting. The sale was offered as a summer dry harvest chance and was harvested immediately following Site 11 in summer 2015. The same site preparation and planting is planned.</p>
Site 10 – Random Red Pine	<p>This site was across the road from Site 12 and was an example of a successful red pine planting in a mixture with naturally regenerated aspen. This site was clearcut harvested over treatment area, ridgetops and topographically flat areas were sprayed and planted primarily to red pine at 700 trees per acre. Slopes and other operationally difficult areas to site prep retained natural aspen regeneration on steep slopes and in patches throughout stand. The mixed pine and hardwood stand was monitored and measured very good stocking over conifer and hardwood stems combined.</p>

Site 13 – Red Pine Management	Mid-rotation red pine, approximately 39 years old, had a second thin. Discussions included: 1 st , 2 nd , and 3 rd thinning approaches; rotation ages; harvest methods, equipment and techniques.
Site 14 – PLS Surveys	Described PLS survey plan as investment for maximize efficiency in surveying and overall cost outlay as well as benefit towards proactive dispute prevention regarding property boundaries.
Grady , 9/22	See FSC Report