

**Joint Forest Management and Chain-of-Custody  
Certification Evaluation Report for the:**

**State Forest Lands Managed by the  
Michigan Department of Natural Resources and Environment**

**Conducted under the Auspices of the SCS Forest Conservation Program  
SCS is an FSC Accredited Certification Body**

**CERTIFICATION REGISTRATION NUMBER  
SCS-FM/COC-00090N**

**Submitted to:**

**Michigan Department of Natural Resources and Environment  
Mason Building, 5<sup>th</sup> Floor  
Lansing, Michigan**

**Lead Auditor: Robert J. Hrubes, Ph.D.**

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**By:**

**SCIENTIFIC CERTIFICATION SYSTEMS  
2000 Powell St. Suite Number 1350  
Emeryville, CA 94608, USA  
[www.scscertified.com](http://www.scscertified.com)**

**SCS Contact: Brendan Grady [BGrady@scscertified.com](mailto:BGrady@scscertified.com)  
Client Contact: Dennis Nezich**

## **Organization of the Report**

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Forest Stewardship Council. This section is made available to the general public and is intended to provide an overview of the evaluation process, the management programs and policies applied to the forest, and the results of the evaluation. Section A will be posted on the SCS website ([www.scs-certified.com](http://www.scs-certified.com)) no less than 30 days after issuance of the certificate. Section B contains more detailed results and is conveyed only to the certification applicant which in this case is the Michigan Department of Natural Resources and Environment. As the certification applicant in this case is a public agency, the full evaluation report may be publicly available but only through the MDNRE.

## FOREWORD

Scientific Certification Systems, a certification body accredited by the Forest Stewardship Council (FSC), was retained by the Michigan Department of Natural Resources and Environment<sup>1</sup> to conduct a certification evaluation of its management of the Michigan State Forest system, an estate of approximately 3.9 million acres located throughout the Northern Lower Peninsula and throughout the Upper Peninsula. Under the FSC/SCS certification system, forest management operations meeting international standards of forest stewardship can be certified as “well managed,” thereby enabling use of the FSC endorsement and logo in the marketplace.

In October 2010, an interdisciplinary team of natural resource specialists was empanelled by SCS, in conjunction with NSF/ISR, to conduct the evaluation. The team collected and analyzed written materials, conducted interviews and completed a 6-day field and office audit of the “in scope” state lands managed by the Department of Natural Resources and Environment as part of the certification evaluation. Upon completion of the fact-finding phase of the evaluation, the team assessed conformance to the FSC US National Standard of Forest Stewardship in order to determine whether award of certification for another 5-year period was warranted.

This report is issued in support of a recommendation to award FSC-endorsed certification to the Michigan Department of Natural Resources and Environment (MDNRE) for the management of the Michigan state lands within the declared scope of the evaluation (State Forest lands plus selected wildlife management areas). In the event that a certificate is awarded, Scientific Certification Systems will post the public summary of this report on its web site ([www.scscertified.com](http://www.scscertified.com)).<sup>2</sup>

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<sup>1</sup> This FSC evaluation was part of a dual SFI/FSC dual certification evaluation conducted in conjunction with NSF/ISR, a SFI-accredited certification body. For this project, NSF/ISR served as the prime contractor with MDNRE, with SCS functioning as the sub-contracted provider of the FSC services. Per FSC requirements, the 5-year certification contract, if awarded, must be executed directly between MDNRE and SCS.

<sup>2</sup> SCS wishes to pay special acknowledgment to Dr. David Capen, audit team member, for his substantive role in drafting this evaluation report.

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## LIST OF ACRONYMS

ATV	All Terrain Vehicle
BMP	Best Management Practice
BCPP	Biodiversity Conservation Planning Program
BSA	Biodiversity Stewardship Area
CAR	Corrective Action Request
CITES	Convention on International Trade of Endangered Species
COC	Chain of Custody
DNRE	Department of Natural Resources and Environment [Michigan]
ERA	Ecological Reference Area
FMFM	Forest Management and Fire Management
FMD	Forest Management Division
FMU	Forest Management Unit
FSC	Forest Stewardship Council
HCVA	High Conservation Value Area
HCVF	High Conservation Value Forest
IFMAP	Integrated Forest Monitoring, Assessment, and Prescription system
LP	Lower Peninsula of Michigan
MA	Management Area (a planning unit in RSFMP)
MDNRE	Michigan Department of Natural Resources and Environment
MNFI	Michigan Natural Features Inventory
NREPA	Natural Resources and Environmental Protection Act
NSF-ISR	National Sanitary Foundation/International Systems Registrar
OI	Operations Inventory
ORV	Off-road recreational vehicle
OSA	Office of the State Archaeologist
P&C	Principles and Criteria
RSFMP	Regional State Forest Management Plan
SCA	Special Conservation Area
SCS	Scientific Certification Systems
SFMP	State Forest Management Plan
SFI	Sustainable Forestry Initiative
SWC	Statewide Council
SHPO	State Historic Preservation Office
UP	Upper Peninsula of Michigan
WLD	Wildlife Management Division

## Section A- Public Summary and Background Information

### 1.0 GENERAL INFORMATION

#### 1.1 FSC Data Request

Applicant entity	Michigan Department of Natural Resources and Environment
Contact person	Dennis Nezich, Forest Certification Specialist
Address	1990 US-41, South Marquette, MI 49855
Telephone	906-228-6561
Fax	906-228-5245
E-mail	<a href="mailto:nezichd@michigan.gov">nezichd@michigan.gov</a>
Certificate Type	Single Forest Management Unit
Location of certified forest area	
Latitude	Approximately 43-48 degrees, north latitude
Longitude	Approximately 83-90 degrees, west longitude
Forest zone	Temperate
Total forest area in scope of certificate which is:	
privately managed <sup>3</sup>	
state managed	3.8 million acres (excludes military lease lands, Luce County lease lands, GMO excised lands, Wildlife Management Areas without FMD co-management)
community managed <sup>4</sup>	
Number of forest workers (including contractors) working in forest within scope of certificate	Approximately 2000
Area of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation objectives	Approximately 1.2 million acres Note: this figure includes 750,000 acres of non-forested land.
Area of forest protected from commercial harvesting of timber and managed primarily for the production of NTFPs or services	NA
Area of forest classified as 'high conservation value forest'	Approximately 250,000 acres
List of high conservation values present <sup>5</sup>	HCV 1: Forest areas containing globally, nationally and regionally endemic and endangered species. Michigan HCVA categories: Dedicated State Natural Areas, Biodiversity Stewardship Areas, Critical Dunes, Designated Critical Habitat, and Coastal Environmental Areas. These areas are also located in Michigan Ecological Reference Areas.  HCV 2: Globally, nationally and regionally significant landscape-level forests. Michigan

<sup>3</sup> The category of 'private management' includes state owned forests that are leased to private companies for management, e.g. through a concession system.

<sup>4</sup> A community managed forest management unit is one in which the management and use of the forest and tree resources is controlled by local communities.

<sup>5</sup> High conservation values should be classified following the numbering system given in Appendix F of the FSC US Standard

	<p>HCVA categories: Dedicated State Natural Areas, Biodiversity Stewardship Areas.</p> <p>HCV 3: Forest areas that contain rare, threatened, or endangered ecosystems. Michigan HCVA categories: Dedicated State Natural Areas, Biodiversity Stewardship Areas, Critical Dunes, and Coastal Environmental Areas. These areas are also located in Michigan Ecological Reference Areas.</p> <p>HCV 4: Forest areas that provide basis services of nature in critical situations. None located upon the Michigan State Forest system.</p> <p>HCV 5: Forest areas fundamental to meeting basic needs of local communities. None located upon the Michigan State Forest system.</p> <p>HCV 6: Forest areas critical to local communities' traditional cultural identity. The Michigan DNRE currently utilizes other mechanisms to identify, conserve, and manage areas critical to local communities' traditional cultural identity such as THPO, SHPO, Compartment Review, land use permits, and designation as "Special Conservation Areas".</p>
Chemical pesticides used	See Section A.1.4.8 of this report
Total area of production forest (i.e. forest from which timber may be harvested)	Approximately 2.5 million acres
Area of production forest classified as 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF)	NA—Michigan DNRE does not practice "plantation forest management" as defined by the FSC
Area of production forest regenerated primarily by replanting <sup>6</sup>	Approximately 500,000 acres
Area of production forest regenerated primarily by natural regeneration	Approximately 2 million acres
List of main commercial timber and non-timber species included in scope of certificate	Black ash ( <i>Fraxinus nigra</i> ); green ash ( <i>Fraxinus Pennsylvanica</i> ); white ash ( <i>Fraxinus Americana</i> ); bigtooth aspen ( <i>Populus grandidentata</i> ); Trembling aspen ( <i>Populus tremuloides</i> ); balm of Gilead ( <i>Populus balsamifera</i> ); balsam fir ( <i>Abies balsamea</i> ); basswood ( <i>Tilia Americana</i> ); paper birch ( <i>Betula papyrifera</i> ); yellow birch ( <i>Betula alleghaniensis</i> ); white cedar ( <i>Thuja occidentalis</i> ); black cherry ( <i>Prunus serotina</i> ); Eastern Hemlock ( <i>Thuja Canadensis</i> ); sugar maple ( <i>Acer saccharum</i> ); red maple ( <i>Acer rubrum</i> ); northern red oak ( <i>Quercus rubra</i> ); northern pin oak ( <i>Quercus ellipsoidalis</i> ); white oak ( <i>Quercus alba</i> ); jack pine ( <i>Pinus banksiana</i> ); red pine ( <i>Pinus resinosa</i> ); white pine ( <i>Pinus strobes</i> ); black spruce

<sup>6</sup> The area is the *total* area being regenerated primarily by planting, *not* the area which is replanted annually. Note that this area may be different to the area defined as a 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF) or for other purposes.

	<i>(Picea ,mariana)</i> ; white spruce ( <i>Picea glauca</i> ); tamarack ( <i>Larix laricina</i> );
Approximate annual allowable cut (AAC) of commercial timber	Approximately 53,000 acres or about 750,000 cords
Approximate annual commercial production of non-timber forest products included in the scope of the certificate, by product type	NA
List of product categories included in scope of joint FM/COC certificate and therefore available for sale as FSC-certified products (include basic description of product - e.g. round wood, pulp wood, sawn timber, kiln-dried sawn timber, chips, resin, non-timber forest products, etc.)	Standing trees, harvested and removed from the forest in log, pulpwood, bolt, pole, and chip form, by contract purchasers; used for both solid-wood and fiber-based products

## Conversion Table English Units to Metric Units

### Length Conversion Factors

<u>To convert to</u>	<u>from</u>	<u>multiply by</u>
mile (US Statute)	kilometer (km)	1.609347
foot (ft)	meter (m)	0.3048
yard (yd)	meter (m)	0.9144

### Area Conversion Factors

<u>To convert to</u>	<u>from</u>	<u>multiply by</u>
square foot (sq ft)	square meter (sq m)	0.09290304
acre (ac)	hectare (ha)	0.4047

### Volume Conversion Factors

#### Volume

<u>To convert to</u>	<u>from</u>	<u>multiply by</u>
cubic foot (cu ft)	cubic meter (cu m)	0.02831685
gallon (gal)	liter	4.546

1 acre	= 0.404686 hectares
1,000 acres	= 404.686 hectares
1 board foot	= 0.00348 cubic meters
1,000 board feet	= 3.48 cubic meters
1 cubic foot	= 0.028317cubic meters
1,000 cubic feet	= 28.317 cubic meters
Breast height	= 1.4 meters, or 4 1/2 feet, above ground level

Although 1,000 board feet is theoretically equivalent to 2.36 cubic meters, this is true only when a board foot is actually a piece of wood with a volume 1/12 of cubic foot. The conversion given here, 3.48 cubic meters, is based on the cubic volume of a log 16 feet long and 15 inches in diameter inside bark at the small end.

## 1.2 Management Context

As a public forest operation located in the State of Michigan, management of the Michigan

State Forest system is subject to a host of state and federal regulations. The principal regulations of greatest relevance to Michigan Department of Natural Resources and Environment in its management of the State Forest are associated with the following statutes:

**Pertinent Statutes at the Federal Level:**

- Endangered Species Act
- Clean Water Act (Section 404 wetland protection)
- Occupational Safety and Health Act
- National Historic Preservation Act
- Archaeological and Historic Preservation Act
- Americans with Disabilities Act
- U.S. ratified treaties, including CITES and tribal treaties

**Pertinent Statutes at State and Local Level:**

Natural Resources and Environmental Protection Act, 1994 PA 451 (NREPA), as amended, is the primary statute pertaining to State Forest management. Examples of relevant sections include:

- Part 305, Natural Rivers
- Part 351, Wilderness and Natural Areas
- Part 355, Biological Diversity Conservation
- Part 365, Endangered Species Protection
- Part 401, Wildlife Conservation
- Part 405, Wildlife Restoration, Management, and Research Projects
- Part 515, Prevention and Suppression of Forest Fires
- Part 525, Sustainable Forestry on State Forestlands
- Part 625, Mineral Wells
- Part 811, Off-Road Recreation Vehicles
- Part 821, Snowmobiles
- Part 831, State Forest Recreation

MIOSHA STD-1135, Dept. of Labor, General Industry Standards, Part 51, Logging

**1.2.1 Environmental Context**

The following information is modified from the Michigan State Forest Management Plan (2008), pages 10-44 and other [unknown] sources:

The present physical geography of the State of Michigan is a direct result of the Wisconsin glacialiation of the Pleistocene Epoch, when the state was totally covered by ice. As the present interglacial period began and the ice sheet gradually receded, southern Lower Michigan became mostly ice free approximately 13,000 years before present (B.P.). Upper Michigan became ice free approximately 10,000 B.P. The landform and soils of Michigan are the result of post-glacial lakes, rivers, erosion and soil development processes acting upon the glacial deposits, resulting in a diversity of terrain features including moraines, drumlins, eskers, kames, outwash plains and former lake beds that are interspersed with numerous lakes, streams and depressions, including four of the world's largest freshwater lakes.

The terrestrial landscape of Michigan is comprised of four distinct eco-regions: Southern Lower Michigan; Northern Lower Michigan; Eastern Upper Michigan; and Western Upper Michigan. Each eco-region is distinct in its climate, physiography, soils, and vegetation. These distinctions are a result of the peninsular configuration of the state, which dramatically affects the climatic differences of both peninsulas. The distinctiveness of warm, vegetatively diverse Southern Lower Michigan and cold Upper Michigan is largely due to their latitudinal positions and the continental land masses on their southern borders. The four Great Lakes that surround the state also provide a significant influence upon the climate in portions of both peninsulas.

During the latter part of the 19<sup>th</sup> century and the first third of the 20<sup>th</sup> century, the forests throughout the Lake States region were heavily exploited through high grading, commercial clearcutting and widespread wildfire of high intensity due to the massive amounts of logging slash. Essentially the entire forested region of Michigan burned at least once during this era of exploitation. As a result of this intensive past human intervention, there is very little in the way of virgin, old-growth forest cover left in the state.

Michigan is the 5<sup>th</sup> largest state and one of the most heavily forested states in the US with approximately 53% of the state in forest cover, totaling approximately 19.3 million acres. Forest cover in Michigan has increased by approximately 5% since 1980. The Michigan State Forest constitutes approximately 21% of the state's total forest cover.

There are approximately 36,350 miles of rivers and streams located within Michigan, many of which run through the State Forest. Some of the regionally most significant anadromous river systems have substantial portions of their watersheds located on the State Forest.

Threatened and endangered wildlife species (either federally or state listed) among others found on the State Forest include: gray wolf, bald eagle, common loon, red-shouldered hawk, and Kirtland's warbler. Numerous state listed plant and animal species are also found within the State Forest system.

### **1.2.2 Socioeconomic Context**

Portions of the following information are extracted and modified from the Michigan State Forest Management Plan (2008), page 63.

The State of Michigan has a population of approximately 10 million people, with the major population centers located in the southern half of the Lower Peninsula. Some of the state forest units located in the Lower Peninsula are within a few hours' drive of both the Detroit and Chicago metropolitan areas as well as second-tier population centers such as Grand Rapids, Lansing, and Bay City. The outdoor recreational desires of these millions of citizens has a profound impact on the State Forest, as manifest through high levels of demand for ATV/ORV access, snowmobile trails, hunting and fishing opportunities as well as developed and dispersed camping. Accommodating this demand for outdoor recreational opportunities, while protecting the ecological integrity of the State Forest, constitutes a major management challenge for the DNRE.

Michigan's forests are a significant component of the social, economic and environmental well-being of its citizens. The economic contribution of these forests include employment opportunities, wealth creation and the production of commodity and non-commodity products and values for the benefit of both the rural and urban population of the state. Wood products and forest-based recreation and tourism are two primary elements of the overall forest-based economy, and both elements are beneficial for the development and maintenance of strong rural economies. During 2005, these two combined sectors are estimated to provide 150,000 jobs and contribute over \$10 billion to the state economy.

The economies of many northern Michigan counties are particularly dependent on earnings from wildland-based industries, including timber, mining, recreation and wildlife, especially in the Upper Peninsula where there is a rich history of such industries that have been interwoven with the social fabric of the region. Ontonagon, Keweenaw, Delta and Gogebic counties in the Western Upper Peninsula eco-region approach or exceed one-quarter of total earnings from these industries. In the Eastern Upper Peninsula eco-region, Alger, Schoolcraft, and Mackinac counties approach or exceed one-quarter of total earnings. In aggregate, the Northern Lower Peninsula is not as dependent upon wildland-based industries, but on an individual county basis, earnings from these industries in Montmorency, Presque Isle, Kalkaska, and Crawford Counties exceed one-quarter of total earnings. Earnings are but one measure of the values associated with our wildlands. Forests and wildlife management areas also generate a wide array of amenity values for people who live in or visit the northern portion of the state.

State Forest lands provide for a wide variety of human uses, including production of timber and fiber for the forest products industry, oil, gas and mineral production, hunting and fishing opportunities, recreation and tourism, and public education and research. Sustainable forest management is greatly influenced by the demands of each of these uses. However, the ability of the DNRE to manage the State Forest and provide for these and other uses is highly dependent upon revenue generated through timber sales as there is very little general fund support of these programs and others such as inventory, and wildfire and forest health protection.

### **1.3 Forest Management Enterprise**

The subject of this forest certification evaluation is a public (state) forest operation managed by a state agency (Department of Natural Resources and Environment) within the executive branch of the Michigan state government.

#### **1.3.1 Land Use**

Most of the information that follows was acquired from "Michigan in Brief: 2002-2003 and Farmland Information Center:

Of Michigan's 37 million acres of dry land, more than half is covered by forest: 19 million acres. Even though only 20 percent of this vast forest is managed by the MDNRE, it is the

second largest State Forest system in the United States. The MDNRE also manages 300,000 acres in wildlife areas, 260,000 acres in state parks and recreation areas, and 28,000 acres of water-access sites—for a total of 4.5 million acres or 12 percent of the state; Michigan's state park system ranks tenth in size nationally. More than 10 million acres of Michigan's dry land is in farms.

Forty percent of Michigan is under water; some 39,000 square miles of the Great Lakes are under Michigan jurisdiction. With 3,200 miles of Great Lakes shoreline, 36,000 miles of rivers and streams, and 11,000 inland lakes, Michigan has resources, opportunities, and responsibilities that are matched by few other states.

MDNRE has jurisdiction over surface and mineral rights on 3.8 million acres of land, mineral rights only on another 2.1 million acres, and surface rights only on an additional 700,000 acres. Minerals underlying the state's 24 million acres of Great Lakes bottomlands also are state owned, and the MDNRE is empowered to lease to private individuals and firms state-owned mineral rights for oil, gas, and other mineral exploration and development. It administers nearly 6,200 oil and gas leases.

MDNRE estimates that Michigan woods and other natural attractions account for roughly one-third of the state's \$9-billion travel and tourism industry: The state's natural resources annually attract more than 800,000 licensed hunters, nearly 2 million licensed anglers and more than 900,000 registered watercraft, not to mention the 23 million visits to state parks and recreation areas.

### **1.3.2 Partial Certification--Land Outside of the Scope of Certification**

The scope of certification includes 3.8 million acres of state land within the Michigan State Forest system. A portion of the State Forest system is excluded from the scope of certification, including: military lease lands, Luce County lease lands, and GMO excised lands (these areas have been duly excised from the declared scope). These lands are organized into 15 forest management units (FMUs) located in both the Lower and Upper Peninsulas. MDNRE manages other state lands that are not part of the State Forest system and are not within the scope of this certification evaluation. These lands include state game areas, state wildlife management areas, and research areas that are not co-managed with the DNRE Forest Management Division (mostly located in the southern lower Peninsula), as well as state parks and recreation areas.

## **1.4 Management Plan**

The following information is modified from the Michigan State Forest Management Plan (2008), pages 3-5.

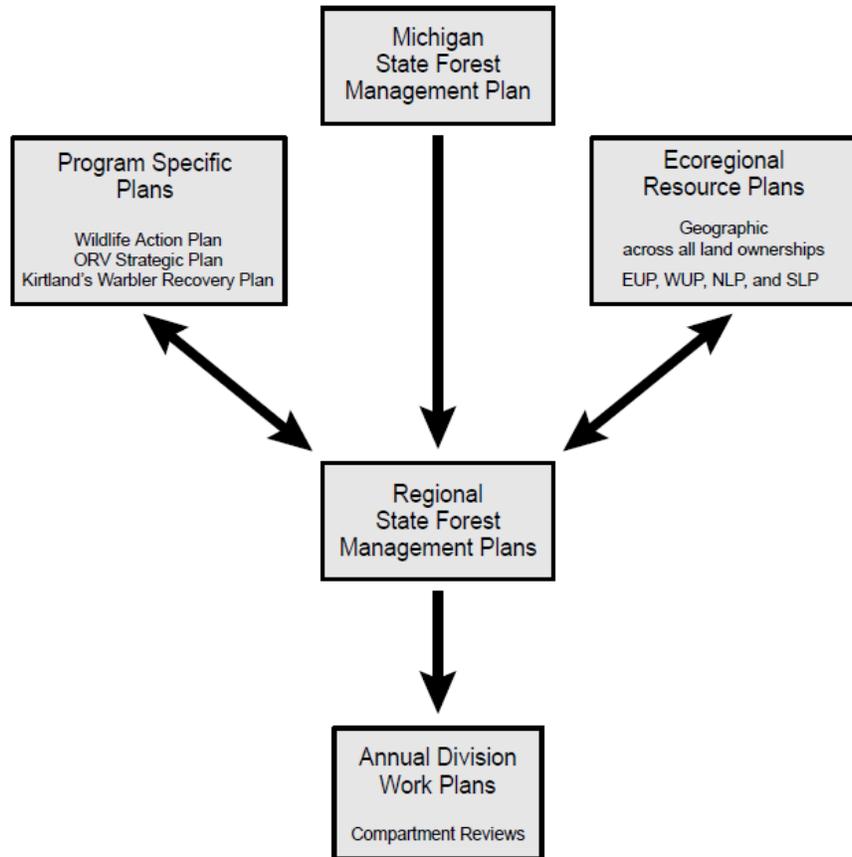
The base of the SFMP is essentially a compilation of current statutes, policy, strategies, other plans and science (social, economic and environment/natural resource), upon which further management direction for many uses and values is built. The DNRE has multiple planning processes and strategies concerning various resources at different scales and intensities.

These processes, programs, and strategies address management of individual or multiple natural resource elements, flora, fauna, watersheds, and/or ecosystems.

DNRE land resources are organized into three categories, state forest, state parks and recreation areas, and state game and wildlife areas (state game areas, waterfowl production areas, etc.), which are managed or co-managed by four primary DNRE divisions: Forest Management, Parks and Recreation, Wildlife, and Fisheries. The number of programs and the geographic scale of state-owned lands preclude the integration of all DNRE plans for these resources into a single comprehensive plan. This SFMP specifically addresses the management of the state forest ownership, for a purpose that is similar to other plans which address the management of state parks and state game and wildlife areas.

The DNRE uses a hierarchical geographic planning framework that coordinates many planning activities and guides operational decisions for management of the State Forest (see figure below). The framework consists of a suite of plans that includes a state level plan (the Michigan State Forest Management Plan), regional plans (Ecoregional Resource Plans and Regional State Forest Management Plans), and forest management unit level plans (the annual plan of work that is derived from the 10-year planning cycle for annual compartment reviews). The aggregate of all forest prescriptions from compartment reviews are contained in the annual plan of work, which represents the tactical level of planning for State Forest operations.

The DNRE is developing strategic plans that will address all ownerships in a region (including all DNRE lands – forests, parks and wildlife areas, other public plans, and private lands), which will be known as Ecoregional Resource Plans. Ecoregional Resource Plans will provide strategic goals and objectives that will provide guidance for Regional State Forest Management Plans and other state planning efforts.



Other programmatic planning efforts must be integrated to guide the management of the State Forest, which include but are not limited to:

- Michigan's Wildlife Action Plan
- Conservation Area Management Guidelines
- River Assessment and River Management Plans
- Natural River Plans
- Master plans for wildlife areas located within the State Forest
- Strategy for Kirtland's Warbler Habitat Management
- Michigan State Comprehensive Outdoor Recreation Plan
- Michigan Off-Road Vehicle (ORV) Plan 2008
- DNRE Silvicultural Guidelines
- Annual Compartment Review
- Annual Management Review

The SFMP provides a framework for planning upon which further management direction can be based. The content of the SFMP is intended to complement the Regional State Forest Management Plans, which will be more detailed and prescriptive than the SFMP. The primary purpose of regional plans is to provide landscape-level direction that informs tactical decision-making processes during compartment review at the forest management unit level

of operations.

Section 4 of the SFMP contains management direction in the form of landscape-level desired future conditions, statewide goals, objectives, standards, and guidelines for the sustainable management of the State Forest system. These management directions are intended to be used for guiding the development of content in regional plans and for management decisions in the compartment review process. Section 4 of the RSFMPs is structured in a different manner from the SFMP and employs a concept of distinct Management Areas as a framework for providing quantitative direction for management on a regional-specific basis. This concept partitions the State Forest into distinct areas with similar attributes, such as similar landforms or site potential, or concentrations of similar successional states or ownership. Specific management direction, standards, and guidelines will be provided for each Management Area. These plans will include summations of current and projected acreages for major cover types and Special Resource Areas in each management area within the next 10-year compartment review cycle.

Section 5 of the SFMP outlines general management direction for Special Conservation Areas, High Conservation Value Areas, and Ecological Reference Areas. Section 5 of the regional plans provide more detailed direction for these areas by providing spatially-explicit maps, specific management direction, standards and guidelines. Management direction for SCA, HCVA, or ERA areas will have a higher priority than direction given for the remainder of the Management Area in which they are located.

The RSFMPs, in conjunction with other DNRE plans and processes such as those listed above, will provide specific management direction that will inform the compartment review process. Annual compartment reviews by year of entry are conducted at the FMU level, and these reviews represent the tactical level of planning for forest operations. Proposed forest treatments that are considered during compartment review will be guided by the desired future conditions, goals and objectives contained in the SFMP and RSFMPs. Annual prescriptions for all year-of-entry compartments across all 15 MUs (FMUs, but not to be confused with FMU in the context of FSC) are compiled into an annual plan of work, which in aggregate represents an annual operational plan for management of the State Forest.

#### **1.4.1 Management Objectives**

The following information is modified from the Michigan State Forest Management Plan (2008), pages 6-8:

In the context of public trust responsibilities that consider interests of all current and future citizens in the state's natural resources, the DNRE has adopted the following mission statement: "To conserve, manage, protect and promote Michigan's natural resources, environment and related economic interests for current and future generations."

The vision for the State Forest is described in terms of its desired future condition, which is related to long-term management objectives. When these objectives are achieved the desired future condition of the State Forest will: (1) Sustain fundamental ecological processes and

functions that, in turn support representative, diverse, and productive biological assemblages. (2) Provide for a variety of ecosystem services that help sustain human civilization. (3) Provide for a variety of sustainable human values that are derived from ecosystems, including economic, recreational, and intrinsic values. (4) Provide for a variety of forest-based products.

Strategic goals listed below are not in any relative order of priority, since under the principles of ecosystem management the concepts of biological, social, and economic uses and values are balanced.

### *Ecological Goals*

*Goal 1. Practice sustainable, ecosystem-based management.* Resource planning and operations shall be conducted to maintain the long-term integrity, representation, diversity, and productivity of terrestrial and aquatic ecosystems; with recognition of valued human activities and uses derived from these systems. Fundamental processes, functions, and values of ecosystems shall be protected or rehabilitated. In doing so, the following set of objectives shall be followed:

Objective 1.1 Conserve Geophysical Processes. Emphasize conservation and rehabilitation of geo-physical processes such as soils formation, geomorphic sediment dynamics, carbon dynamics, hydrologic dynamics, and nutrient dynamics. Such processes are the foundation of the habitat conditions required to sustain desired biological assemblages.

Objective 1.2 Conserve Biodiversity. Encourage the management of intact, functional landscapes, ecosystems, and communities that will achieve the conservation of representative biological assemblages, including rare species; maintaining statewide biological diversity at ecosystem, species, and genetic levels.

Objective 1.3 Maintain Biotic Productivity. Manage lands in a manner to protect, maintain, and rehabilitate ecosystem processes and habitats to ensure sustainable production of desired forest, wildlife, and fishery resources.

### *Social-Economic Goals*

*Goal 2. Maintain essential ecosystem services.* Resource planning and operations shall ensure the variety of ecosystem services.

*Goal 3. Sustain social-economic values.* Resource planning and operations shall encourage the efficient and sustainable production of desired forest, mineral, wildlife, and fishery resources to provide a range of social and economic benefits.

*Goal 4. Provide public access.* Resource planning and operations shall protect and preserve the natural, historic, and cultural features of DNRE-managed lands while providing appropriate public access to these resources. In doing so, the following set of objectives shall be followed:

Objective 4.1 Provide Recreational Opportunities. Provide for a variety of active and passive recreational opportunities, tailored to specific local ecological and social characteristics.

Objective 4.2 Provide Educational Opportunities. Provide public educational programs and opportunities that help build public understanding and appreciation for the important processes linking landscapes, ecosystems, habitats, and biological assemblages, and the human values and services derived from these natural systems.

Objective 4.3 Allow for Cultural Uses. Allow for cultural uses by indigenous peoples and others.

### **1.4.2 Forest Composition**

The following information is modified from the Michigan State Forest Management Plan (2008), pages 33-34:

The 3.8 million acres that are contained and managed by the DNRE within the State Forest system are largely noncontiguous tracts of forest that are scattered throughout the landscapes of the northern Lower Peninsula of Michigan and all of Upper Peninsula of Michigan. Over half (51.6%) of DNRE-owned forestland is located in the Northern Lower Peninsula Eco-region. The Eastern Upper Peninsula and Western Upper Peninsula ec-oregions contain 26.5% and 21.9% of forestland respectively. In contrast to the statewide landscape, the largest DNRE community type is the aspen association at 885,000 acres (22%), followed by northern hardwoods at 508,000 acres (13%), jack pine at 367,000 acres (9%), red pine at 280,000 acres (7%), mixed swamp conifers at 261,000 acres (6%), the oak association at 244,000 acres (6%), and cedar swamp at 228,000 acres (6%) The current land base has changed significantly from circa 1800 conditions, where two community types were then dominant: northern hardwoods (26%) and mixed conifer swamps (22%). Two other major community types of the circa 1800 period were mixed red and white pine forests and jack pine forests, where both represented around 10% of the area that is now the State Forest. A more detailed discussion of the conditions and trends in the current cover types upon DNRE-owned forestland may be found on pages 31-61 of the MSFMP.

For a detailed overview of the forests of Michigan, see: *The Forests of Michigan*, by Donald Dickmann and Larry Leefers, published by The University of Michigan Press (2004).

### **1.4.3 Silvicultural Systems**

Reflecting the fact that the MDNRE manages a forest estate of almost 4 million acres spread throughout the northern half of the Lower Peninsula and the entirety of the Upper Peninsula, and that is occupied by a wide variety of forest cover types, essentially all silvicultural systems applicable to the management of northern temperate forests are employed. For the northern hardwood types, where the desired species for management are relatively shade tolerant, selection silviculture is prevalently employed. Generally, this silvicultural approach relies upon natural regeneration.

In other forest types such as aspen and red-white-jack pine, even-aged silviculture is commonly employed. Throughout the Michigan State Forest system, all three of the principal even-aged silvicultural systems are employed: clear cutting (with retention), seed tree, and shelterwood. Both natural and artificial regeneration is relied upon with even-aged silviculture, depending upon site conditions and the species preferred for the next stand to be established after the regeneration harvest.

Harvesting methods include short-wood, tree length and whole-tree. The most common yarding method is ground-based using rubber-tired and tracked skidders. Harvesting is increasingly mechanized with a variety of machines such as processor-forwarders. Hand falling with chain saws still is employed under certain circumstances typically associated with selection harvests in northern hardwood types.

Desired future conditions and silvicultural systems used in specific forest cover types can be found on pages 120-122 of the SFMP.

#### **1.4.4 Management Systems**

The State Forest is managed by the Michigan Department of Natural Resources and Environment, a state agency comprised of nine divisions. Supervised by a Deputy Director for Resource Management are the Divisions of (1) Wildlife, (2) Fisheries, (3) Water Resource, and (4) Law Enforcement. Under a Deputy Director for Stewardship are two Divisions: (1) Recreation, and (2) Forest Management.

As an agency within the executive branch of the state government, MDNRE is accountable to the Natural Resources Commission, members of which are appointed by the Governor. Funding and oversight rests with the state legislature.

The State Forest is located throughout the northern LP and across the UP. In a complex array of field units that differ across resource management divisions, the State Forest is organized into 15 Forest Management Units, 8 in the LP and 7 in the UP:

Lower Peninsula: Cadillac, Gladwin, Roscommon, Grayling, Traverse City, Atlanta, Gaylord, and Pigeon River Country

Upper Peninsula: Sault Ste. Marie, Newberry, Shingleton, Escanaba, Gwinn, Crystal Falls, and Baraga

#### **1.4.5 Monitoring System**

The following information is modified from the Michigan State Forest Management Plan (2008), pages 189-190:

There are many existing planning processes that have varying degrees of monitoring components. Monitoring needs to be well-integrated at all levels of management, at statewide, eco-regional and management-unit levels. Some are propelled by the annual

budgetary process, including federal grants programs. Others are programmatically driven, such as the annual Timber Sale Preparation Plan of Work process, FMU analyses, the biodiversity conservation planning process, and annual fire plans. Some are ad hoc and project oriented or dependent upon the appointment and perpetuation of various teams.

Monitoring is conducted to assess the condition of the State Forest, compliance with forest certification standards for sustainability, the degree to which management goals, objectives, and desired future conditions have been achieved, deviations from management plans, and the social and ecological effects of management activities.

Many DNRE programs and processes provide guidance for monitoring and reporting of these elements:

- The USFS Forest Inventory and Analysis program provides a statewide assessment of cover type growth and removals through harvesting and natural mortality and an assessment of the state's forest-based economy. A major assessment occurs every 5 years accompanied by annual updates.
- The Forest Health Monitoring Program includes a system of statewide survey plots that are part of a nationwide Forest Health Monitoring Program in partnership with the Environmental Protection Agency, the U.S. Forest Service and the University of Michigan.
- HCVA/ERA monitoring protocols are being developed on a compartment year-of-entry basis, in conjunction with the development of site specific management plans. Monitoring of the conditional quality of ERAs and the biodiversity stewardship areas category of HCVA is also accomplished under contract with staff from the Michigan Natural Features Inventory.
- Forest Management Unit analyses provide an annual landscape-level assessment of the compositional and structural trends of the major cover types of forest vegetation.
- The State Forest Timber Harvest Trends Report describes recent state forest harvest trends and the factors which influence them, and provides a basis for management review and reporting on timber harvest levels.
- The Wildlife Division conducts field abundance surveys for both game and nongame species on an annual basis. These include surveys for many mammal, bird, and amphibian species to determine population trends.
- The Timber Sale Monitoring Program is directed by Work Instruction 7.1. Monitoring of timber sale contract specifications is conducted by field staff using a Timber Sale Contract – Field Inspection Report (R-4050).
- The DNRE Forest Management Division' Recreation Section monitors use trends for State Forest camping, off-road vehicle, and snowmobile recreation programs through

registrations, and trail permits. State Forest recreation use and revenue trends are reported to the Michigan Legislature and Natural Resource Commission on an annual basis.

- Statewide criteria, indicators and metrics apply to the entire landscape of the state but can be used to monitor some management elements of the State Forest.

#### **1.4.6 Estimate of Maximum Sustainable Yield**

Like many other state forestry agencies, the Michigan State Forest system uses a type of a decentralized area-regulation approach to setting harvest levels. Unlike some other state forestry agencies, acres prepared for timber sale are based upon a process whereby 10% of the forest is inventoried each year and the following year's treatment decisions for timber sales are made based upon that inventory.

At the start of each year's timber inventory cycle, analyses at the Forest Management Unit scale provide an annual landscape-level assessment of the compositional and structural trends of the major cover types of forest vegetation. These analyses generate allowable cut estimates for each of the 15 Forest Management Units. This allows more detail and is easier to conceptualize by the field forester while doing the inventory. General silvicultural guidelines are used, but treatment decisions are influenced by an array of values, local conditions, and landscape concerns which are considered and documented throughout the inventory and timber sale preparation processes.

Approximately 10% of State Forest lands (or 390,000 acres) are inventoried and reviewed each year through compartment reviews, but less than 60,000 acres end up being prepared for commercial timber treatments. Over time, a detailed timber management system has evolved to establish annual plans of work and assess timber availability. This system updates an overview of the forest on an annual basis and includes the recording of stand-specific constraints (referred to as "limiting factors") to timber harvests. The FMD Management Team receives a summary report delineating by Forest Management Unit what is inventoried, and how the acres fall within the various accounting categories. The team then approves the means to treat prescribed acres. Subsequently, data on every stand which is prescribed for treatment is tracked.

Unlike traditional approaches to determining allowable cut, this approach is more "bottom-up" and assures that annual harvest targets at the stand, compartment, Forest Management Unit are achievable and sustainable. Likewise, the tracking and FMU analyses assure the harvests are achievable and sustainable over time at a statewide scale. In the view of the DNRE, the practical applicability of maximum allowable cut estimates is often unclear; in contrast, the DNRE approach explicitly details factors which prevent harvesting stands while at the same time committing acres to be harvested.

Also, silvicultural guidelines are different from traditional silvicultural criteria which serve as point estimates for assessing an allowable cut. If stands meet the silvicultural guidelines but are not prescribed for treatment, then treatment limiting factors are required to be identified

and coded. On the other hand, treatments may be prescribed before a stand reaches the silvicultural guidelines if there are no constraining factors and it is managerially desirable in order to balance age and size classes.

Rotation ages are 10-20 years longer and basal area criteria 10-20 square feet greater than are typical with industry lands in Michigan and the Lake States region. This is generally what would be expected of the management of a public forest versus an industrial forest, given their different objectives and management mandates.

#### 1.4.7 Estimated, Current and Projected Production

Annual Timber Production		
Year	Acres Harvested	Volume Produced in Cords
200	56,385	735,637
2001	54,258	662,740
2002	57,800	755,635
2003	50,859	636,272
2004	48,251	713,730
2005	54,235	807,245
2006	39,922	597,359
2007	42,784	781,882
2008	49,352	893,726
2009	47,745	780,378

Estimated Growth versus Removals (cubic feet)				
Fiscal Year	FIA-based	Harvested	Growth / Removals	
	Estimated Net Growth	Volume	Difference	Ratio
2000	1,485,565	777,065	708,500	1.9
2001	1,485,565	731,951	753,614	2.0
2002	1,485,565	724,931	760,634	2.0
2003	1,485,565	643,942	841,623	2.3
2004	1,485,565	623,736	861,829	2.4
2005	1,485,565	744,326	741,240	2.0
2006	1,485,565	587,211	898,354	2.5
2007	1,485,565	629,367	856,198	2.4
2008	1,485,565	746,732	738,834	2.0
2009	1,485,565	736,272	749,293	2.0
Average:	1,485,565	694,553	791,012	2.2

### 1.4.8 Chemical Pesticide Use

The primary use of chemicals on the State Forest is for vegetation control. Chemicals are used in conjunction with mechanical removal and prescribed fire. Chemical applications for vegetation control include: (1) treating exotic plant species (e.g., spotted knapweed, phragmites, garlic mustard) that have invaded native grasslands, wetlands, or forests; (2) controlling vegetation along power lines; and (3) using herbicides to reduce competing vegetation in even-aged forest management. Use of chemical pesticides, especially in silvicultural operations, has declined noticeably since initial FSC certification in favor of integrated pest management.

All pesticides used were reviewed by the auditors as to whether or not they are prohibited by FSC in the guidance document, “Highly Hazardous Pesticides, FSC-POL-30-001 EN”. The following pesticides are used by DNRE:

#### **Pesticides approved for use on Michigan State Forest Lands (revised using FSC chemical list dated January 20, 2010)**

<b>Product or common name</b>	<b>Active ingredient</b>	<b>Use status</b>
	2,4-D 2-ethylhexyl ester	May only be used in conformance with conditions in approved FSC pesticide derogation, expires Jan 5, 2015.
	captan	Use is allowed.
	thiram	Use is allowed.
Dicamba	dicamba	May only be used in conformance with conditions in approved FSC pesticide derogation, expires Jan 5, 2015.
Arsenal	imazapyr	Use is allowed.
Bravo	chlorothalonil	Use is allowed.
Dimlin	diflufenzuron	May only be used in conformance with conditions in approved FSC pesticide derogation, expires Jan 5, 2015.
Envoy	clethodin	Use is allowed.
Escort	metsulfuron-methyl	Use is allowed.
Garlon	triclopyr	Use is allowed.
Hyvar	bromacil	Use is allowed.
Krenite	fosamine ammonium	Use is allowed.
Merit	imidcloprid	Use is allowed.
Merit	imidcloprid	Use is allowed.
Oust	sulfometuron methyl	Use is allowed.
Plateau	imazapic	Use is allowed.
Roundup, Accord, other glyphosate formulations	glyphosate	Use is allowed.
Tordon 101	picloram + 2,4-D	Use is allowed.
Transline	clopyralid	Use is allowed.
Transline	clopyralid	Use is allowed.
Velpar	hexazinone	May only be used in conformance with conditions in approved FSC pesticide derogation, expires Jan 5, 2015.

Additional DNRE policy guidance on chemical use on the State Forest is provided in Forest Certification Work Instruction, 2.2: Use of Pesticides and Other Chemicals on State Forest Lands.

### **1.5 SLIMF Qualifications**

The State Forest of Michigan does not qualify either as small or low intensity, per FSC guidelines. As such, the standard evaluation protocols were employed in this evaluation.

## **2.0 GUIDELINES/STANDARDS EMPLOYED**

This certification evaluation was conducted against the FSC-US Forest Management Standard, which is available on the FSC-US web site, at: [www.fscus.org](http://www.fscus.org).

## **3.0 THE CERTIFICATION ASSESSMENT PROCESS**

### **3.1 Assessment Dates**

Michigan DNRE received its initial FSC certification from SCS in December 2005. Annual surveillance audits have been conducted each year since, including one special surveillance audit in 2006. The field component of this re-assessment audit was conducted from 18-25 October 2010.

### **3.2 Assessment Team**

The audit team for this certification evaluation was comprised of five natural resource professionals, three of which conducted the joint FSC/SFI certification assessment in 2005.

#### **Dr. Robert J. Hrubes, Team Leader, FSC:**

Dr. Hrubes is a California registered professional forester (#2228) and forest economist with over 30 years of professional experience in both private and public forest management issues. He is presently Senior Vice-President of Scientific Certification Systems. In addition to serving as team leader for the Michigan State Forest evaluation, Dr. Hrubes worked in collaboration with other SCS personnel to develop the programmatic protocol that guides all SCS Forest Conservation Program evaluations. Dr. Hrubes has previously led numerous audits under the SCS Forest Conservation Program of North American public forest, industrial forest ownerships and non-industrial forests, as well as operations in Scandinavia, Chile, Japan, Malaysia, Australia and New Zealand. Dr. Hrubes holds graduate degrees in forest economics (Ph.D.), economics (M.A.) and resource systems management (M.S.) from the University of California-Berkeley and the University of Michigan. His professional forestry degree (B.S.F. with double major in Outdoor Recreation) was awarded from Iowa State University. He was employed for 14 years, in a variety of positions ranging from research forester to operations research analyst to planning team leader, by the USDA Forest Service. Upon leaving federal service, he entered private consulting from 1988 to 2000. He

has been Senior V.P. at SCS since February, 2000.

**Mr. Michael Ferrucci, Team Leader, SFI (Forest Management and Silviculture):** Mike is a founding partner and President of Interforest, LLC where he is responsible for the assembly and management of integrated teams of scientists and professional managers to solve complex forestry problems. He is also responsible for the firm's forest certification program, which includes SFI and FSC certification and preparation services. Mike is also the SFI Program Manager for NSF – International Strategic Registrations and is responsible for all aspects of the firm's SFI Certification programs. He has a B.Sc. degree in forestry from the University of Maine and a Master of Forestry degree from the Yale School of Forestry and Environmental Studies. Mike has 27 years of forest management experience. He has conducted or participated in assessments of forest management on more than 14 million acres of forestland in 27 states.

**Dr. David Capen, Team Member (Wildlife Biology and Ecology):** Dave is a Professor Emeritus in the Rubenstein School of Environment and Natural Resources at the University of Vermont. His research experiences and expertise are in the areas of wildlife habitat analysis, avian ecology, landscape ecology, biodiversity analysis, GIS and remote sensing, multivariate statistics, and conservation planning and reserve design. He has a B.S.F. degree in Forestry from the University of Tennessee, an M.S. degree in Wildlife Management from the University of Maine, and a Ph.D. in Wildlife Science from Utah State University. He was been a faculty member at the University of Vermont from 1976-2009. David is a Certified Wildlife Biologist, and was formerly a Certified Forester (2002-2008). He has conducted numerous FSC and SFI audits in Massachusetts, Maine, Michigan, Indiana, New York, and Minnesota.

In addition to serving as a member of the audit team, Dr. Capen also played a substantial role in drafting this certification evaluation report.

**Kathryn Fernholz, Team Member (Recreation, Social Impacts, Stakeholder Input):** Kathryn has worked on development and forest management issues in a range of roles. Since 2004 Kathryn has worked for Dovetail Partners, Inc., as the Forestry Program Director from 2004-2006 and as Executive Director since 2006. Prior to working with Dovetail, Kathryn worked with a consulting firm as a member of the environmental department and assisted with natural resource inventories, reporting, and environmental impact assessments including the use of Geographic Information Systems (GIS). While working with the Community Forestry Resource Center, Kathryn managed a group certification project for family forests and worked to increase local capacity to provide forest management and marketing services that are compatible with certification standards. Kathryn has been a leader within the forestry community through her service as Chair of the Minnesota Chapter of the Society of American Foresters and her appointment to the Minnesota Forest Resources Council. Kathryn has a B.S. in Forest Resources from the University of Minnesota, College of Natural Resources and also studied at the College of Saint Benedict in St. Joseph, MN and Sheldon Jackson College in Sitka, Alaska. Kathryn's certification audit team experience includes work on diverse private and public lands in the United States, including the evaluation of operations in Wisconsin, Massachusetts, Oregon, New York, Maryland, Tennessee, Maine,

and Indiana.

### **Paul Pingrey, Audit Team Member (Forest Management)**

Paul Pingrey is a forester with extensive experience in sustainable resource certification, public land management and family woodland management. Pingrey retired from the Wisconsin Department of Natural Resources in 2009 after 35 years of service. He served as the DNR Forest Certification Coordinator, Private Forestry Specialist and the Wisconsin Forest Tax Law Supervisor. From 2004 to 2009, Pingrey managed Forest Stewardship Council, Sustainable Forest Initiative, and American Tree Farm System certification for 6 million acres of DNRE forestry programs. In 2008-2009, Pingrey served on national panels that developed the FSC-US Family Forest Standard and revised the American Tree Farm Standard. For 20 years he worked directly with small woodland owners in six southern Wisconsin counties, including eleven years as the Madison Area Forestry Supervisor. His duties also included state park and county forest operations, property master planning, and environmental impact assessment. He has served in Society of American Foresters leadership positions and was chair of the National SAF Certification Working Group. Pingrey received a forest management degree from Iowa State University in 1974 and completed U.S. Forest Service Silviculturist Certification in 1988.

## **3.3 Assessment Process**

### **3.3.1 Itinerary**

The following activities comprised the field phase of the full certification evaluation:

- 17 Oct. Audit team convened in Lansing
- 18 Oct. Opening meeting, staff interviews, and stakeholder meeting in Lansing
- 19 Oct. Gladwin FMU; office discussions and field visits
- 20 Oct. Gaylord and Grayling FMUs
- 21 Oct. Newberry and Shingleton FMUs; office discussions, field visits, stakeholder meeting
- 22 Oct. Escanaba FMU; office discussions and field visits
- 23 Oct. Audit team deliberations in Escanaba; three team members traveled home
- 24 Oct. Document review and report preparation, Escanaba, two team members
- 25 Oct. Closing meeting in Marquette OSC; remaining team members traveled home

### **3.3.2 Evaluation of Management System**

The process by which Scientific Certification Systems evaluated the systems employed by MDNRE in managing the State Forest and in scope wildlife management areas entailed the following components:

- Empanelment of an interdisciplinary team with demonstrated credentials and expertise in forest certification, auditing protocols, forest management, wildlife management as well as a working knowledge of the forest types found on the

- Michigan State Forest and a general familiarity with the Michigan DNRE
- Review of documents pertinent to the State Forest, as are available on the DNRE intra-net site as well as that were provided to the audit team members.
- Extensive interviews with a broad cross-section of DNRE personnel at the head office in Lansing, two OSCs (Operations Service Centers) and 6 FMUs (Forest Management Division Forest Management Units); one-on-one interviews and group discussions with a broad cross-section of stakeholders with interest in how the State Forest lands are being managed
- Field reconnaissance of a broad array of forest conditions and past and present management activities on the units that comprised the sample for the full evaluation

### **3.3.3 Selection of FMU's to Evaluate**

The forest management operation undergoing certification consists of a single Forest Management Unit in the FSC meaning of that term. However, that same term is used in the MDNRE context, as well, to connote the basic field units by which the 3.9 million acres of State Forest lands are organized. As presently organized, there are 15 administrative units comprising the Michigan State Forest system, also called Forest Management Units.

For the 2010 re-assessment evaluation, the audit team visited 6 administrative units of the FMD that had not been visited during recent surveillance audits.

### **3.3.4 Sites Visited**

See the daily itinerary in Section 3.3.1 for the FMUs that comprised the sample-based field work underpinning this certification evaluation. At each of the 6 FMUs visited during this evaluation, the audit team inspected a number of field sites, selected by audit team leaders to provide the team with exposure to the full range of forest management activities, forest cover types, special conservation areas, wildlife management, silvicultural and harvesting systems, etc. On most days, audit team members split up into 2 or 3 sub-groups in order to achieve greater geographic coverage. At all times, auditors requested that pertinent documentation associated with the selected sites was made available. In addition to site-specific documents, MDNRE supplied the audit team with an extensive array of supporting documentation such as resource-specific planning documents.

### **Monday, 18 October 2010**

**Opening Meeting.** Director's Conference Room, 6<sup>th</sup> Floor, Mason Building, Lansing.

8:00--11:00 am: Introductions by lead auditors; review of standards; protocols for audits; overview of DNRE, evolution of change, merger and re-organization, brief overview of planning initiatives for new audit team members; more detailed overview of planning effort within context of the CARs (RSFMP, BSA program); evolution of planning initiatives; OI / IFMAP and compartment review process and how treatment prescriptions are made and implemented; discussion of CARs issued at 2009 surveillance audit and presentation of materials to close CARs.

11:00 am – 2:00 pm: Break-out sessions; auditors meet in pairs or individually to discuss leadership, stakeholder issues, budgets, tribal issues, wildlife, heritage database and IFMAP information system, forest health, forest nursery, and tree improvement, forest markets and utilization.

2:30 – 4:00 pm: Public meeting for stakeholder comments.

**Participants in meetings on 18 October:**

**Opening Meeting**

<u>Name</u>	<u>Position/Title</u>
Mike Ferrucci	NSF-ISR, SFI Lead Auditor
Robert Hrubes	SCS, FSC Lead Auditor
Paul Pingrey	Auditor
Katie Fernholz	Auditor
David Capen	Auditor
Creig Grey	Law Enforcement- Roscommon
Frank Ruswick	Deputy Director, Stewardship
Doug Reeves	Asst. Chief, Wildlife Division
Penney Melchoir	Field Coordinator- Wildlife Division
Amy Clark Eagle	FMD Biodiversity & Conservation Program
Bill O'Neill	FMD Field Coordinator
Cara Boucher	Ass't Chief/ State Forester, FMD
Naomi Krefmen	FMD, Program Services Section
Larry Pedersen	FMD, Forest Resource Mgmt.
David Price	FMD, Certification Planner
Kelley Smith	Chief, Fisheries Division
Lynne Boyd	Chief, Forest Management Division
Dennis Nezich	FMD, Forest Certification Specialist
Mindy Koch	Deputy Director, Resource Management
Bill Sterrett	FMD Forest Resource Mgt. Section Mgr.
Tom Wellman	FMD MLMS Mgr.
Jim Radabaugh	FMD Recreation & Trails Mgr.
Scott Heather	FMD Resource Protection & Cooperative Programs
Doug Heym	Timber Sale Program Leader

**Afternoon Break-out Sessions**

<u>Name</u>	<u>Position/Title</u>
Nick Popoff	Tribal Coordination Unit Manager/ Fisheries Division
Creig Grey	Law Enforcement
Dennis Nezich	FMD- Tribal Coordinator

Dennis Knapp	Native American Affairs Coordinator
Dan Hopkins (Telephone)	LED Field Coordinator
Pat Lederle	DNRE Wildlife
Lynne Boyd	DNRE- FMD
Cara Boucher	FMD
Noami Krefman	FMD
Doug Reeves	WLD
Penny Melchoir	WLD
Lisa Dygert	FMD--GIS
Mike Donovan	WLD
Brian Maki	FMD--GIS
Bill Sterrett	FMD
Doug Heym	FMD
Larry Pedersen	FMD

**Public Meeting**

<u>Name</u>	<u>Organization</u>
Robert Hrubes	SCS, FSC Lead Auditor
Katie Fernholz	Auditor
David Capen	Auditor
Mike Ferrucci	NSF-ISR, SFI Lead Auditor
Marvin Roberson	Sierra Club
Lauri Kay Elbing	The Nature Conservancy
Jim Maturer	Michigan Wild Turkey Hunters Assoc
Robert Jacobson	Michigan Conservation Foundation
Paul Pingrey	Auditor
Scott Everett	Lake States Lumber Association
Will Borden	Lake States Lumber Association
Tom Barnes	Michigan Association of Timbermen

**Tuesday, 19 October 2010**

**Gladwin Management Unit**

**Compartment 72, Wet/Dry Harvest.** An active harvest site, Shawn Muma, the contractor; interviewed by some auditors. Muma is a large contractor and wins bids on many state forest harvest jobs. He maintains good equipment, practices safety, and complies with prescriptions and contract specifications. Checks were made for RTE species and historical sites before harvest specifications. No wetlands or water to buffer on this site, but there is a concern about the high water table; skid roads were laid out on small ridges; no rutting was observed; harvesting equipment seems to have moved about the stand freely, prompting questions about soil compaction from auditors; weather has been dry during the harvest,

however. Discussion of woody biomass guidelines, and a note that despite chipping of limbs and tops during this harvest, plenty of slash was distributed about the site, much of it being dragged back from the landing.

**Compartment 82.** A lowland hardwood harvest, about 40 acres. The prescription was a diameter-limit harvest of oak, ash, and maple >8 inches DBH, resulting in a residual stand of <15 BA; aspen > 2 inches also were removed. There were some questions from auditors about a diameter-limit prescription in lowland hardwoods, but most discussion at this site focused on the fact that the initial prescription was different, but there were no bids. The process for changing the prescription was well documented in the compartment files. A small, local contractor acquired the bid on this sale.

**Field Trial Area.** Although the site was not visited because of time and distance, the management plan for a unique 5,000-acre area of intensive aspen management was discussed with the wildlife biologist for this Unit. The field trial site has been managed for this purpose since 1916 and actually is designated by the state legislature for such management. Hunting of grouse and woodcock, the featured species for field trials, is not permitted on the area, although hunting for deer is allowed after the field trial season is over.

**Bently Marsh, Proposed BSA.** This site served as a basis for discussing the process of screening ecologically important sites for BSA designation. Desired Future Conditions have been drafted for this marsh and a sizeable acreage of the surrounding Mesic Hardwood Forest community.

**Compartment 66.** Inspection of a recent gate installation to create a hiking trail and access for hunters instead of illegal access by ORV's. More repair of the trail is planned. This project was funded with wildlife habitat funds, and the intent is to control damaging illegal ORV access before investing farther in habitat improvement.

**Compartment 65.** Inspection of another project funded by wildlife—a parking area (being used by a grouse hunter) and berms to prevent ORV access to a recent red pine clearcut. Auditors focused mostly on the silvicultural objectives for the red pine and on distribution of residual trees and patches of residuals. Initial plans were to replant with red pine, but seemingly sufficient amounts of regeneration on site have changed those plans in favor of natural regeneration of a mixed-species stand.

**AA Red Pine Sale, Stands 25 and 29.** 116 acre completed harvest with significant retention of pine trees in a pine clearcut with reserves in a pine plantation. Reserved trees were generally dispersed and representative of the previous stand; some clumped retention also. Excellent aesthetics and good wildlife retention. (*Mike Ferrucci, Auditor*)

**Participants in meetings on 19 October:**

**Gladwin Management Unit**

<u>Name</u>	<u>Title/Position</u>
Mike Ferrucci	NSF-ISR, SFI Lead Auditor

Robert Hrubes	SCS, FSC Lead Auditor
Dennis Nezich	Forest Certification Specialist, DNRE
Larry Pedersen	Planning Unit Supervisor, Michigan DNRE
Paul Pingrey	SCS/NSF Auditor
Jeanette Haridaj	NSF-Business Development Manager
Roger Hoeksema	DNRE- Cadillac
Penney Melchoir	Wildlife Field Coordinator-Rose Lake
Tim Gallagher	DNRE- FMD- Gladwin Unit
Jake Figley	DNRE-FMD- Gladwin Unit
Nate Stearns	DNRE-FMD- Gladwin Unit
Joel Lundberg	DNRE- Law Division
Scott Throop	DNRE-FMD Cadillac District
Kathrin Schrouder	DNRE- Fish
Bill Sterrett	Bay City- S. Lake Huron Mgmt. Unit
Creig Grey	DNRE- FMD- Lansing
Mark Reichel	DNRE- Law Enforcement
Todd Neiss	DNRE-FMD- Gladwin Unit
Amanda Matelski	DNRE-FMD Cadillac District
Barry Sova	DNRE-FMD Cadillac District
Katie Keen	DNRE- WLD- Bay City
Rex Ainslie	DNRE- WLD- Bay City
Tom Haxby	DNRE- WLD- Bay City
Bruce Barlow	DNRE-FMD Cadillac District
Rick Myrick	DNRE-FMD- Gladwin Unit
Courtney Borgondy	DNRE-FMD- Gladwin Unit
Rosanne Hatfield	DNRE-FMD- Gladwin Unit
Dick Shellenbarger	DNRE--WLD

### Wednesday, 20 October 2010

#### Gaylord Management Unit

**North Central Rail Trail – Wolverine.** The 62-mile trail, resurfaced with crushed limestone in the fall of 2007, is a popular cycling trail that runs from Gaylord to Mackinaw City. Indian River DNRE staff discussed the multi-use trail, maintenance issues and community partnerships.

**Wilmot Township Transfer Station (waste collection site).** The parking area and dumpsters on the site are provided in partnership with the township. The objective is to encourage town residents to drop off/recycle waste rather than dump it on State Forest land.

People still leave large items, tires and other junk in the woods, but problems are reduced. State forest personnel clean up most trash from the forest.

**Wolverine Aspen Compartment 156** The 86 acre sale was split into three blocks and will be cut during summer to avoid snowmobile use conflicts on the adjacent trail. This block is 50 acres, and all the aspens will be harvested (none retained). Small white pine saplings and some poles (about 7.5 square feet of basal area per acre) will be retained. The foresters explained that the retention specifications are based “on site objectives, not wildlife habitat considerations.”

**Compartment 148 Hardwood.** Active timber harvest in one-aged northern hardwood pole/small sawtimber sized stand. The harvest is creating gaps and reducing basal area to stimulate development of regeneration. The long-term management goal is all-aged mesic hardwoods. The thinning was marked by a contracted forester.

The auditors interviewed the logging company owner and a feller-buncher operator. The harvester operator explained that he'd been in the business 23 years, three for this firm. He works 9.5 hours a day, takes a half hour lunch, and is paid an hourly wage. His only other job benefit is five days of paid leave per year (he is not paid for holidays unless he uses one of the leave days). The operator had a spill kit in the harvester. He also explained use of hose plugs in the event of a hydraulic fluid leak. The company owner attends one day of logger training per year (no one else is trained). He complained that few courses are offered and that he would need to travel long distances to pick up sessions offering new topics.

**Weber Lake – ORV damage repair.** Project was coordinated by DNRE Fisheries and Forestry staff. ORV users had been driving down a steep bank to clean their machines in the lake water. Boulders were positioned to block access, and a deeply eroded gully was filled and seeded. The approved seed mix included grass and white clover. Repairs here were made for about \$5,000. Of 60 Repair Damage Report (RDR) cases in the last year, 28 were fixed, 28 are on hold for lack of funds, and 14 were dropped as not needed or not feasible.

**Compartment 145 Hardwood.** Another active harvest similar to Stop 4 (thinning of a mesic hardwood stand to create gaps). This sale was also marked by a contracted forester, who is required to attend DNRE training and pass a periodic marking test. The sale is being cut by a hand chain saw operator, but he was not on site or available for an interview.

**“Red Pine Project” site.** This large old-field tract was planted to red pines in the 1930's. Soil quality is high and so natural oaks and mesic hardwoods became established with the pines. The site has taken on a semi-natural forest appearance, and many pines have grown to large sawtimber size. Except for very few marked reserves (generally poor-formed conifers), all the pines are designated for cutting in order to allow the hardwoods to take over the site. It's an example of the “Red Pine Project” plan to remove pines from sites better suited to hardwoods. DNRE intends to plant replacement red pines on dryer, sandy sites elsewhere. Surprisingly, no stakeholder groups have expressed public opposition to harvest of the large pines. Based on habitat type, pre-settlement stands on similar soils may have had more pines than are being reserved. Curiously, the few trees painted as reserves have no stump marks

(meaning sale administrators would have a difficult time telling if marked reserves were taken).

**West Branch of the Sturgeon River ORV repair.** Where a town road crosses the beautiful trout stream, ORV riders had been entering the river and “playing” along the banks, presumably to wash mud from their machines. Boulders were positioned to prevent easy ORV access. The repairs made over five years ago (and viewed during the 2005 audit) are holding well.

**Participants in meetings on 20 October:**

**Gaylord Management Unit**

<u>Name</u>	<u>Title/Position</u>
Robert Hrubes	SCS, FSC Lead Auditor
Katie Fernholz	Auditor
Paul Pingrey	Auditor
John Pilon	Forest Planner
Keith Kintigh	Wildlife Ecologist
Jerry Grieve	FMD, Land Use Forester
Greg Gatesy	Land Use Forester
Bill O'Neill	FMD Field Coordinator
Brian Mastenbrook	Wildlife Habitat Biologist
Penney Melchoir	Wildlife Field Coordinator
Mark Monroe	Wildlife Technician
Joyce Angel-Ling	Gaylord Unit Mgr-FMD
Neal Godby	Fisheries Biologist
Amanda Matelski	Trails Analyst- Cadillac FMD

Grayling Management Unit

**Compartment 7, Fire Tower RDR Site.** Resource Damage form was completed in 2005; rehabilitation work began in 2007.

**Compartment 7, Model T Mix.** An open sale, but not active; jack pine, being managed to move toward white and red pine, consistent with site conditions. A major discussion of practices for retention in clearcuts. Biologists and foresters in this Unit have incorporated considerations of natural disturbance regimes in designing retentions islands (nearby red pine clearcuts had islands of residuals that mimic fire vortices); legacy trees also are identified and retained.

**White Pine-Hemlock Grove.** Viewed from vehicles; a Special Conservation Area (SCA) of late successional pine and hemlock. The stand is adjacent to a curved dip on a paved county road, where accidents have occurred because of ice. County commissioners have asked that

the trees be cut for some distance from the road, but MDRE has resisted because there is no evidence that trees are at fault (allegedly creating a microclimate effect).

**Historic Logging Flume.** Short walk along a pleasant trail to an old (late 1800's) wooden flume on a small stream. It is a significant historic site; once scheduled to be removed by another state agency.

**Big V Aspen Sale.** An active harvest; 125-acre clearcut, leaving all oaks <4 inches; three islands of retention, of different sizes and shapes. G&G Forest Products is the contractor, a 3-person crew owned by two brothers (both on site); interviewed Gary Spies, one of the owners. Very professional operator and compliant with safety requirements; spill kit on site; no evidence of spills or leaking equipment.

**Compartment 9, Townline KW Sale.** Discussion of management for the endangered Kirtland's Warbler, a species that breeds almost entirely in Michigan, and mostly on state and federal lands. Populations have exceeded recovery goal, but a second viable population—growing numbers in the UP—is desired before delisting. Young jack pine forests with dense, grassy understory are preferred habitat, but a more diverse mix of other species with jack pine is now being promoted. Discussion of planting crews, mostly migrant workers, their legality and working conditions.

**Muskrat Lake Campground and ORV Trailhead.** Campground is closed due to budget cuts. ORV trail is well maintained, a 50-inch trail width. Numbers of ORV registrations are still increasing.

**Compartment 29, Frost Pocket Special Management Area.** Inspection of a gas well pad on the edge of the frost pocket community proposed as a BSA. Appears to be an excellent example of the natural community. Invasive plants are an issue, but appropriate management practices are in place, including controlled burning.

**Compartment 14, Bailey Sale.** An oak stand with shelterwood harvest completed in Fall 2009; 40-50 BA residual oak, with some large white pines for diversity. Most visible regeneration is maple and aspen, but some oak is sprouting from seeds, especially in pockets that were scarified during harvest. Excellent distribution of slash on site, cut to 24-inches or less in height (a common specification); landing was small and located away from public road.

**Participants in meetings on 20 October:**

**Grayling Management Unit**

<u>Name</u>	<u>Title/Position</u>
Mike Ferrucci	NSF-ISR, SFI Lead Auditor
Dennis Nezich	Forest Certification Specialist, DNRE
David Capen	Auditor
Craig Farrer	Forest Tech
Joan Charlebois	Forester

Jim Bielecki	Timber Management Specialist
Elaine Carlson	Wildlife Biologist
Steve Sendeck	Fisheries Biologist- Grayling
Larry Allwardt	Forest Fire Officer Supervisor
Brian Burford	Forest Fire Officer-Mio
Paige Perry	Trails Program Analyst
Joel Money	Forest Fire Officer- Grayling
Lisa Weingartz	Equipment Operator- Grayling
Jack Money	Forest Fire Officer- Grayling
Tim Reis	WLD Supervisor, NEMU
Patrick Mohney	Forester- Grayling
Bill Sterrett	FRM Section Lansing
Lucas Merrick	Forester- Grayling

#### Thursday, 21 October 2010

##### Shingleton Management Unit

**Fletchers Hill Mix-Unit 4.** Completed portion of sale is composed of two stands, one predominantly aspen and the other oak. All aspen trees were cut from the former, with red pines and oaks left as reserves. The wildlife biologist described the red pines as favorable for red crossbill bird habitat. “Aspen TSI” was also done by a prison crew to remove any non-merchantable hardwoods (except oak and June-berry) perceived as a threat to aspen sprout vigor. The treatment was described as “aspen regeneration insurance.” Going forward, the prison crews will not be available since all prison work camps were closed by the state.

In the oak stand, aspen and other species were removed and the oaks were retained. For the past several years Shingleton FMU has specified no cutting of oak unless it was intentionally part of the sale volume, even if it doesn’t appear during the cruise (as sometimes can occur). The harvest was classified as a “selection cut”, although “intermediate thinning” would have been a more appropriate term.

**South Fletchers Hill Mix – “Oak Complaint.”** The sale area includes three pin oak stands. The harvest created canopy gaps to release oak seedlings and stimulate stump sprouting. The gaps were not well positioned relative to oak saplings out of mistaken concern over residual damage. The stand prescription called the treatment “selection” cutting, however, “shelterwood” would have been more appropriate terminology. Pure oak stands are not common in the management unit, and so the foresters sought outside advice on treatment options. The objective was to create a two-aged stand. The foresters believe it is unlikely that hunters would support final removal of the overstory oaks, and so they will likely be retained as permanent reserves.

**Aspen TSI W41-1356 Comp 36 Stand 32.** Similar removal of non-aspen hardwoods as seen in stop 1, intended to release aspen sprouts. Prison crews were also used here.

**Stutts Road Softwood Sale 007-2008.** Jack pine pole harvest cut in 2008 and scarified to stimulate natural jack pine seedling establishment in 2010. Large red pines were retained to encourage natural seeding of mixed pine species. The scarification was done by dragging an anchor chain with a skidder.

**Stutts 21 Jack Pine – Sale 012-2004.** The jack pine stand (which is separated from the Stop 4 site with only a narrow buffer strip, but state green-up policies do not specify minimum buffer widths between contiguous harvests) was cut in 2005. It received a similar scarification treatment as the previous site and has excellent jack pine reproduction.

**Compartment 42 – Stand 3 Site Preparation.** Follow-up treatment for a 2004 red pine final clearcut after a previous jack pine intermediate removal done in 1994. The initial plan for the site was to use prescribed fire to stimulate natural jack pine regeneration. The burn window was missed, however, and so brush and herbaceous vegetation became well established. The area was trenched in 2008, sprayed with Accord® herbicide, and planted to red pine seedlings in 2008. The Accord application was done by helicopter at the rate of 1.5 quarts per acre (the product label maximum rate is 2 quarts per acre). The herbicide application appears to have been effective.

**Camp 9 Pine – Units 1 and 12.** First and second red pine plantation thinning operations. Trees to be cut were marked at DBH and at the stump. Removals were from below. Scattered aspens were retained in Unit 12, although it appeared that more of the hardwoods could have been left for stand diversity. The Unit 12 harvest was active, and so the auditors interviewed the logger. The logger had attended annual SFI training and wore appropriate Personal Protective Equipment. His employees were paid an hourly rate and received 40 hours of paid leave per year (and no other benefits).

**Trashy Pine Sale C41-1338.** The harvest removed aspen and decadent jack pines. The foresters considered whether to accept weak aspen regeneration or to use herbicides to try for better jack pines. After considering the habitat type, they chose the jack pine alternative. Discussion revolved around need for a landscape plan to help guide such decisions. OI notes show regeneration efforts (trenching, planting) and regeneration checks. Natural regeneration was not sufficient, stand was planted spring 2009 and regeneration check done December 2009. Sprayed with Accord 1.5 quarts by helicopter one month before the audit; too soon to see results.

**Adopt a Forest Project.** Project funding was used to clean up batteries and junk that had been dumped on state land. Fourteen volunteers picked up the trash. The money was used to pay tipping fees at a landfill and to dig a berm to block a road into the site. The Natural Resources Commission and the DNRE Commissioner approved the road closure order.

**Dufour Creek Culvert Replacement.** Fixed an undersized culvert on a snowmobile trail. The small culvert caused a mud hole, which was being enlarged by illegal ORV use. The repairs, including a new rock base on the trail, have eliminated the problem. Necessary permits and engineering specifications were handled by a contractor. The RDR was dated 6.28.06 and the project completion date is September, 2008.

**Thompson Plains Prescribed Burn.** 244 acre open lands complex burned in 2010. The work was done for sharptail grouse habitat. A Wild Turkey Chapter also planted 500 native crab apple saplings and highbush cranberry shrubs. The project packet included the burn plan and post-fire monitoring report.

**Compartment 86 – Michaud Lake Intermittent Wetland ERA.** Dry lake near a proposed aspen harvest was examined. A buffer composed of a narrow red pine stand separates the Ecological Reference Area wetland from the timber sale area. The foresters explained that at least a one-tree height buffer would have otherwise been maintained, but nothing more. The dry lakebed is being damaged by illegal ORV use, and so the Conservation Officer was alerted to watch for enforcement opportunities. A Resource Damage Report form had been filed on 10/11/2010.

**Stand 15, Harvest Unit 1 (not yet cut, not observed by auditors).** Operations Inventory notes (FMD Comment): “Survey work will be needed to determine property line. The ability to harvest this stand depends on a survey work getting completed.” The Timber Sale Map prepared later shows a blue paint line along the boundary line with the private land, indicating that the survey work was completed. (The Unit Manager notified the auditors that a corner post was subsequently found by a forester, allowing the boundary to be marked.) After setting up the harvest the forester measured the basal area of retention and noted it in OI FMD Comment (Red Pine 3.6 sq ft, white pine 1.8 sq ft) showing that the residual basal area was 6% of the original basal area, within guidelines.

**Participants in meetings on 21 October:**

**Shingleton Management Unit**

<u>Name</u>	<u>Title/Position</u>
Mike Ferrucci	NSF-ISR, SFI Lead Auditor
Paul Pingrey	Auditor
Penney Melchoir	Wildlife Division Field Coordinator
Bill O'Neill	Forest Mgmt. Field Coordinator
Steve Tuovila	Forest Mgmt. Fire Officer
Jeff Stampfly	FMD Unit Manager
Darren Kramer	Fish Division- Fisheries Biologist
Robert Crisp	DNRE-Law
Jesse Bramer	Forest Mgmt- Forester
Scott Lakosky	FMD- Fire Supervisor
Kevin Swanson	WLD- Habitat Biologist
Don Brown	WLD- Wildlife Technician
Adam Petrelius	FM- Forester
Mario Molin	FM Forester
Bob Burnham	FM Forester
Rick-James Hill	FM Forester
Jay Osterberg	FM Fire Officer
Don Kuhr	FMD FMS

Newberry Management Unit

**Mac's Market.** Small kiosk at local supermarket with brochures about ORV regulations, part of ECORD education effort.

**Silver Creek ORV trail.** An RDR site; form submitted in 2007, but work has not begun. Several solutions are being discussed, including moving the ORV trail away from the site of damage, a natural scramble site. Desire is to reclaim the site as red pine forest. Another possibility is to develop a permitted scramble site. Current damage does not threaten any water or wetlands.

**Battle Wound Pine Sale.** Aspen has been cut, but the pine remains. A narrow stand of red pine, but very plantation-like. A discussion of approaches for growing red pine in more diverse stands.

**Compartment 110, Controlled burn.** A large, but diverse, forest opening that had been burned several years ago; objective was to discourage the dense lichen ground cover and encourage grasses, as cover and food for wildlife.

**Sleeper Lake Fire.** A proposed BSA and the site of the second largest fire in the Upper Peninsula, in summer 2009. The burned area visited was mostly wetland communities, which were surrounded by fire lines. The lines have been rehabilitated—a cooperative project with The Nature Conservancy—and the progress of restoration is impressive. ORV issues here and efforts to block access. A huge bloom of morel mushrooms the year after fire attracted crowds of mushroom collector to the wetlands. Researchers predict that the mushroom boom will be only for one year. No permits are required for such a harvest, but MDNRE policy is that the collection of such non-timber products is not to be for commercial purposes. (*Robert Hrubes, David Capen, Auditors*)

**Compartment 81 Skyline Ridge Jack Pine.** A 71-acre closed timber sale; jack pine, black spruce, and white birch were removed, leaving other species. Jack pine and possible white pine will be planted, resulting in a stand of mixed species. Residual trees were abundant; woody debris was plentiful. Inspected crossing of a small wetland; some disturbance of wetland soils remains, but not a BMP violation. Road into sale closed. Brief inspection of an issue of access across private land to access a harvest site that has been sold. Survey work has been done to establish boundary of state land, allowing access from a different direction. (*Robert Hrubes, David Capen, Auditors*)

**South 426 Red Pine 42-051-09-01.** Active red pine harvest site with ORV trail. Interview with contractors. Discussion of road closure requirements, BMP, guidelines for clearing ORV trail and signage to notify trail users of active logging. (*Kathryn Fernholz, Auditor*)

**Buckies Trout Pond.** Pond was drawn down because of parasite issue; opportunity to

restore the stream. Use of native seed mix and erosion prevention on side slopes. Conduct cost effectiveness evaluation to determine appropriateness of projects. Work with partners to restore streams and of a policy of not wanting damn on streams.

*(Kathryn Fernholz, Auditor)*

**Wolverine Lake.** Discussion of cabin trespass issue and enforcement response (cabin removed). Trail use conflicts between dog sledding and snowmobiles. Review of designated trout pond and dispersed camping issues offered in the area. Review of aspen cut area and interview with contractor. Retention of young white pine and large white pine on a spacing advised by wildlife staff. *(Kathryn Fernholz, Auditor)*

**Bass Lake Campground.** Review of campground reconstruction with use of applicable guidelines. Review of beech bark disease treatment and removal in the campground area. *(Kathryn Fernholz, Auditor)*

**Public Meeting, Newberry, 4:30—6:00.** *(Robert Hrubes, Kathryn Fernholz, David Capen, Auditors)*

**Citizens Advisory Committee, Eastern Upper Peninsula, 6:30—9:00, Newberry** *(Robert Hrubes, Kathryn Fernholz, David Capen, Auditors)*

**Participants in meetings on 21 October:**

<b>Newberry Management Unit</b>	
<u><i>Name</i></u>	<u><i>Title/Position</i></u>
Robert Hrubes	SCS, FSC Lead Auditor
Katie Fernholz	Auditor
Dave Capen	Auditor
Richard Stevenson	Unit Manager
Rob Katona	Trail Analyst Mgt. OSC
Paul E. Gaberdiel	Fire Supervisor
Dennis Nezich	Forest Certification Specialist, FMD
Kristen Matson	EUP Inventory Planning Spec, FMD
Jim Waybrant	Fish Biologist, NBY
Steve Scott	Lake Superior Basin Coordinator
Kristie Sitar	Wildlife Habitat Biologist
Chris Morris	Acting Lt. Chris Morris
Ben Travis	Forester, Newberry FMU
Bill Sterrett	FRM Section Mgr. Lansing
Jon Spieles	Mgr. Marketing, Education, Technology
Dan Moore	EUP Recreation Specialist, FMD
Terry Minzey	EUP Wildlife Supervisor
Keith Magnusson	Forester- Newberry FMU
Tori Irving	Forester- Newberry FMU
Sharolynne Robinson	Secretary, District EUP Ecoteam

### Public Meeting, Newberry

<u>Name</u>	<u>Title/Position</u>
Robert Hrubes	SCS, FSC Lead Auditor
Katie Fernholz	Auditor
Dave Capen	Auditor
Tina Hall	The Nature Conservancy Tahquameew Area School Board/
Gerald Grossman	Consulting Forester
Stephen Rodocic	Ruffed Grouse Society
Chad Radka	LP Corperation- Resource Mgr.
Bob DeVillez	Retired DNRE Forester
Ginny Giddings	Interested citizen
Warren Suchovsky	Michigan Assoc. of Timbermen

### Friday, 22 October 2010

#### Escanaba Management Unit

**Compartment 49.** Discussion of inventory (2009 using OI) and compartment review. Discussion of removal of Special Conservation Area (SCA) status for several stands approved during compartment review because the stands no longer meet the criteria ('wet, poor quality cedar that do not demonstrate the mature forest conditions desired for an SCA'). Discussed silviculture for stand 85, a mixed stand of low quality hardwoods, using the upland SF guideline to prescribe even-aged management, cedar and hemlock will be retained, but not maple or yellow birch or beech; drainages will be retained untreated.

**Worth Tract BSA.** A proposed BSA representing the Mesic Northern Forest natural community. Discussed the field assessment of proposed BSAs and inspected the assessment report for this area; also the process of modifying the boundary proposed initially. Nested in the proposed BSA is an excellent Type 1 Old Growth stand of Hemlock and Northern Hardwoods; it is currently protected as an SCA. (*Paul Pingrey, Robert Hrubes, Kathryn Fernholz, David Capen, Auditors*)

**Foxy Pine Timber Sale.** 81 acres of mixed harvest types. Active harvest, interviewed Dave Zwergel (18-20 years of logging experience, hand-felling, independent and sole proprietor). Three units of clearcut with reserves are completed or nearly complete, and retention of pine and other species was adequate. One lowland conifer unit is complete; this was harvested during a dry summer with some rutting that was within the limits specified in the contract. Also reviewed a proposed FTP for red pine scarification. (*Mike Ferrucci, Auditor*)

**Cedar River Campground:** Campground is well maintained; issues from the MDNRE's Internal Audit Report have been resolved. Observed evidence that hazard trees around the campground had been taken down. (*Entire audit team*)

**ORV Trail.** A brief stop to inspect a 50-inch wide ORV trail. Some trails are 24 inches, for two-wheeled motorized and un-motorized vehicles; others, called Routes, are 72 inches in width. *(Paul Pingrey, Robert Hrubes, Kathryn Fernholz, David Capen, Auditors)*

**Compartment 42, Stands 48 & 49.** A northern hardwood stand on a productive site in a region where forest and cropland mix and deer densities are high. This stand was selectively harvested in the 1990's, but the only abundant regeneration is ironwood, a species avoided by deer; other species were clearly over-browsed. Auditors were told that 90,000 acres of the Western Upper Peninsula State Forest lands have deer densities that correlate to poor regeneration in hardwoods. The WUP wildlife biologist added that more antlerless permits are being issued for the region than are used by hunters, making it difficult to remedy problems of over-browsing. *(Paul Pingrey, Robert Hrubes, Kathryn Fernholz, David Capen, Auditors)*

**Compartment 42, Sale 366.** A small, 16 acre, harvest area where all aspens and hardwoods except cherry and ash were cut, and where all balsam fir and spruce with more than 2 sticks of pulp were cut. All cedar, hemlock, and pine was retained. The residual stand, while not dense, is diverse, and very thick woody debris is left on the site. *(Paul Pingrey, Robert Hrubes, Kathryn Fernholz, David Capen, Auditors)*

**Compartment 53: Green Birch Timber Sale (33-003-09-01):** 39 acres in 7 units comprised of 9 stands; logger John Gagne (not present during site visit) has worked in 4 units; Units 5 and 6 are complete, while Unit 2 is partially complete. All three are clearcuts with retention, and the observed retention is customized by stand and generally consistent with guidelines. *(Mike Ferrucci, Auditor)*

**Westman Dam:** Bridge/dam stop logs maintained by Wildlife Division staff in accordance with the "Hayward Lake Wetland Complex Strategic Plan" 9.16.2003. The plan describes the dam and associated river and lakes, provides the history that includes two significant episodes of public concern, and a concise description of the compromise solution reached and still in effect. Also reviewed Closed RDR 33054552006002 which involved illegal ORV fording of a significant river (Walton River) 50 feet from the bridge. Boulders placed to block ORV access appear to have been effective in doing so. *(Mike Ferrucci, Auditor)*

**Participants in meetings on 22 October:**

**Escanaba Management Unit**

<u>Name</u>	<u>Title/Position</u>
Mike Ferrucci	NSF-ISR, SFI Lead Auditor
Robert Hrubes	SCS, FSC Lead Auditor
Dennis Nezich	Forest Certification Specialist, DNRE
David Capen	Auditor
Paul Pingrey	Auditor
Katie Fernholz	Auditor

Jason Niemi	Conservation Officer
Rob Katona	Trail Analyst Marquette OSC
Ron Yesney	Recreation Specialist U.P.
Bill O'Neill	FMD Field Coordinator
Bill Sterrett	FRM Section Mgr. -Lansing Field
Jim Ferris	FMD, Gwinn Unit Mgr.
Timothy Robson	Distict Law Supervisor- WUP
Dan Racine	FMD Forester- Escanaba
Keith Murphy	FMD Fire Supervisor- Escanaba
Deb Begalle	FMD WUP District Super Mgt.
John Hamel	FMD Inventory & Planning Specialist
Joe Durbin	FMD Forester
Bill Rollo	Wildlife Technician
Darren Kramer	Fisheries Biologist
Penney Melchoir	Field Coordinator, WLD
Eric Thompson	Escanaba Unit Mgr.
Dan McNamee	FMD Forester

**Saturday, 23 October 2010**

Escanaba. Audit team deliberations. (*Mike Ferrucci, Paul Pingrey, Robert Hrubes, Kathryn Fernholz, David Capen, Auditors*)

**Monday, 25 October 2010**

Marquette OCS. 8:15 – 10:15 am. Closing meeting. (*Mike Ferrucci, David Capen, Auditors*)

**Participants in closing meeting on 25 October:**

Mike Ferrucci	Lead Auditor, SFI
David Capen	Representing SCS, in the Lead Auditor's absence
Mindy Koch	Deputy Director, Resource Management
Lynne Boyd	Chief, FMD
Doug Reeves	Assistant Division Chief, WLD
Kelley Smith	Chief, Fisheries Division
Cara Boucher	Assistant Division Chief/State Forester, FMD
Larry Pederson	Planning Unit Supervisor, FMD
David Price	Certification Planner, FMD
Amy Clark Eagle	Biodiversity and Conservation Program Leader, FMD
Dennis Nezich	Forest Certification Specialist, FMD
Ron Murray	Forest Health, Inventory, & Monitoring

	Supervisor, FMD
Bill Sterrett	Forest Resource Management Section, FMD
Jim Ferris	FMD Unit Manager, Gwinn
Jimmy Johnston	FMD Forester, Gwinn
Bill O'Neill	Field Coordinator, FMD
Penney Melchoir	Field Coordinator, FMD
Debbie Begalle	W UP District Supervisor, FMD
Dave Neumann	State Silviculturalist, FMD
Steve Milford	FMD Unit Manager, Crystal Falls
Keith Kintigh	WLD Wildlife Ecologist, Gaylord
Dean Wilson	FMD Forester, Ishpeming
Richard Stevenson	FMD Unit Manager, Newberry
John Hamel	FMD District Planner, Marquette
Dave Lemmien	FMD Unit Manager, Traverse City
Pat Ruppen	FMD Forester, Traverse City
Scott Lint	FMD Forester , Traverse City
Kristen Matson	FMD District Planner, Newberry
Monical Weiss	OLAF Secretary, Gwinn
Thresa Sysol	FMD Forester, Gwinn
Kevin LaBumbard	FMD Forester, Gwinn
Shannon Harig	FMD Forester, Indian River

### 3.3.5 Stakeholder Consultation

Pursuant to SCS protocols, consultations with key stakeholders were an integral component of the evaluation process. Consultation took place prior to, concurrent with, and following the field evaluation. The following were distinct purposes to the consultations:

- To solicit input from affected parties as to the strengths and weaknesses of the Michigan DNRE, relative to the standard, and the nature of the interaction between the State Forest and the surrounding communities; and
- To solicit input on whether the forest management operation has consulted with stakeholders regarding identifying any high conservation value forests.

Principal stakeholder groups of relevance to this evaluation were identified based upon lists of stakeholders from the DNRE and additional stakeholder contacts from other sources (e.g., members of the regional FSC working group). The following types of groups and individuals were determined to be principal stakeholders:

- State forestry agency employees and contractors,
- Adjacent property owners;
- Pertinent Tribal members and or representatives;
- Members of the Regional FSC Working Group/National Initiative;

- FSC International;
- Local and regionally-based environmental organizations and conservationists;
- Local and regionally-based social interest organizations;
- Forest industry groups and organizations;
- Purchasers of logs harvested on forestlands enrolled in the program;
- Local, State, and Federal regulatory agency personnel;
- User groups, such as hikers, hunters, ATV users, and others; and
- Other relevant groups.

Prior to, during, and following the site evaluation, a wide range of stakeholders were consulted in regard to their relationship with the Michigan DNRE and their views on the management of the State Forest. Stakeholders included FSC contact persons, government and non-government organizations involved in forest management, local citizens and groups, employees, contractors, and others. Stakeholders were contacted with notification mailings soliciting comments and inviting participation in the public meetings. Notifications were distributed via email as well as a hard copy mailing. Phone contacts were also made and an online questionnaire was provided to solicit input. Stakeholders representing diverse environmental, social and economic interests were contacted during the process and invited to provide comments. Comments were received via meetings and personal interviews “face-to-face”, phone interviews (“Interview”), and through written responses. Individuals providing comments were asked to provide permission to be listed in the report and additional comments were received from individuals not wishing to reveal their identities and/or requesting that their names not be listed in the report.

<b>Name</b>	<b>Affiliation</b>	<b>Consultation</b>
Dale Allen	USDA Farm Service Agency	Interview
Tom Barnes	Michigan Association of Timbermen	Interview/Public Meeting
Sandra Battie	Michigan State University	Interview
Charlie Becker	Plum Creek	Written
Robert Bly		Written
Will Borden	Quality Hardwoods Inc	Written/Public Meeting
Rich Bowman		Interview
David Bullock	Quality Hardwoods Inc	Written
Paul Call	Weyerhaeuser NR Company	Written

Summer Cohen	Keweenaw Bay Indian Community	Written
Bill Cook		Interview
Doug Craven	Little Traverse Bay Bands of Odawa Indians	Interview
Robert DeVillez		Written
Jim Dickie	Michigan Snowmobile Association	Interview
Eric Ellis	Conservation Resource Alliance	Written
Tim Flynn		Interview
Gerald Grossman	Grossman Forestry Co.	Written/Interview
Shawn Hagan	The Forestland Group, LLC	Written
Larry Heathman		Written
Robert Jacobson	Michigan Conservation Foundation	Written/Public Meeting
Maria Janowiak	Northern Institute for Applied Carbon Science	Interview
Joe Kaiser	Quality Hardwoods Inc	Written
Carolyn Kane		Interview
Jerry Lambert		Interview
Jim Maturen	Michigan Wild Turkey Hunters Association	Written/Public Meeting
Dennis McDougal	USDA Forest Service	Interview
Barry Paulson	Huron-Manistee National Forest	Interview
Marvin Roberson	Sierra Club	Interview/Written/Public Meeting
Stephen Rodock		Written/Public Meeting
Christy Roman	Antrim County Conservation District	Interview
Stephen Shine	Michigan Department of Agriculture	Interview

Marilyn Shy	Upper Peninsula RC&D	Interview
Dennis Stachewicz		Written
Amy Trotter	Michigan United Conservation Clubs	Written/Interview
John VanDyke		Interview

### 3.3.5.1 Summary of Stakeholder Concerns and Perspectives and Responses from the Team Where Applicable

The following tables provide a summary of the comments received from stakeholders related to the standards as well as major perspectives and concerns along with the audit team's response to each comment.

#### Social Concerns

Comment/Concern	Response
<ul style="list-style-type: none"> <li>MDNRE uses website, public meetings and news releases to get public input. They don't listen to public input like they should.</li> </ul>	See CAR 2010.11 addressing public review of draft plans.
<ul style="list-style-type: none"> <li>Open house for annual compartment reviews occurs too late in the process. Public input should occur at beginning of process.</li> </ul>	See CAR 2010.11 (mentioned above) and CAR 2010.10 addressing publicly available summary to support understanding.
<ul style="list-style-type: none"> <li>I would like to see active management of the timberland of the State Forest on a sustainable level. It is unsettling that the legislature has to mandate the number of acres that must be managed each year. Management should be based on science and not politics.</li> </ul>	See CAR 2010.9 addressing harvest rate calculation process.
<ul style="list-style-type: none"> <li>The Biological Stewardship Areas (BSA) process was set up for professional environmental groups to dominate and demand areas set aside. People who have jobs were unable to take part.</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>ORV/motorized use is not all the same. Hunters, anglers and trappers can use motorized vehicles/ORVs in a very low impact manner compared to trail riders. When access to motorized vehicles is restricted, it is restricted for all users. People who are using the ORV as a tool to access hunting areas should be given more access (at low speeds etc), especially during peak hunting seasons.</li> </ul>	See OBS 2010.11, OBS 2010.8 addressing ORV management

<ul style="list-style-type: none"> <li>• There are plenty of opportunities for the public to engage in review of forest management, but they aren't utilized enough to be helpful to the DNRE. Different forums should be explored, like the regional Citizen Advisory Committees and other groups and means for getting input, rather than face to face meetings.</li> </ul>	See CAR 2010.10 and CAR 2010.11 addressing public review
<ul style="list-style-type: none"> <li>• The DNRE could do more to manage more of their land base. I see too many timber stands falling over without management. I would like to see more management so I can have access to hunting areas in the future, and to provide more local jobs.</li> </ul>	See OBS 2010.10 addressing the access plan.
<ul style="list-style-type: none"> <li>• People leave litter all over the place and ORV use is tearing up the forests.</li> </ul>	See OBS 2010.11, OBS 2010.8 addressing ORV management
<ul style="list-style-type: none"> <li>• DNRE management decisions and business practices are far too centralized. There is micro-management of the local offices at unacceptable costs to the state.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• The DNRE restricts their employees from stating opinions about forest management issues.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• Why has it taken the DNRE so long to create and prepare management plans for the UP regions as required under FSC standards. Why has FSC continued to certify the State without such plans?</li> </ul>	See OBS 2010.13 regarding regional management plans
<ul style="list-style-type: none"> <li>• The provisions for gathering activities don't meet the full intent of FSC's Principle 3 addressing Indigenous rights. Tribes need to be given more opportunity for input at the policy and planning level with forest management, beyond the compartment review process. There are missed opportunities for greater collaboration.</li> </ul>	See CAR 2010.3 regarding outreach to tribes
<ul style="list-style-type: none"> <li>• MDNRE has an amazing ability to control, organize and manage their forestlands, especially with the number of people who use them for recreation each year.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• MDNRE pays great attention to detail when managing forestlands, especially regarding land control and accessibility.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• It would be helpful to know how the forestry division and wildlife division interact with one another on forestry issues.</li> </ul>	Comment Noted Cooperation and collaboration between the Divisions was prominently addressed throughout the certification evaluation.

<ul style="list-style-type: none"> <li>• A lot of resources are going into certification and certification measures have negatively impacted recreation and trail opportunities.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• MDNRE does a good job of managing multi-use recreational trails.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• The Biodiversity Conservation Planning Process lost sight of the strategic issues, is fundamentally flawed, and will reduce the willingness to invest in our natural resources.</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>• DNRE employees struggle to go to training events with no support for time and travel costs.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• Tribes should be provided more opportunities to assist in the identification and protection of cultural and historic sites.</li> </ul>	See CAR 2010.3 regarding outreach to tribes
<ul style="list-style-type: none"> <li>• Mineral leasing within portions of the Escanaba River State Forest will adversely impact tribal resources</li> </ul>	This matter is subject to ongoing litigation. SCS will monitor this situation as litigation proceeds but it is not the auditor's role to adjudicate this matter. See CAR 2010.3
<ul style="list-style-type: none"> <li>• The head of the DNRE is appointed by the governor and this can negatively impact management.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• There is misinformation and misunderstandings about the 2007 Consent Decree in some areas and education and training for MDNRE employees is needed.</li> </ul>	See CAR 2010.3 regarding outreach to tribes

### Economic Concerns

Comment/Concern	Response
<ul style="list-style-type: none"> <li>• Planted red pine is being clearcut to even out age classes but could be thinned and managed for higher valued products on longer rotations.</li> </ul>	See OBS 2010.12 regarding red pine management
<ul style="list-style-type: none"> <li>• Commercial timber harvest and the maintenance of a healthy forest system is less than the potential. The State Forest system could be doing more to support northern Michigan communities.</li> </ul>	See CAR 2010.9 addressing species selection and harvest rates.
<ul style="list-style-type: none"> <li>• Forest management is occurring in a sustainable way and there needs to be flexibility built into the operations. Need to recognize what the</li> </ul>	Comment Noted

relative risks of forest activities really are. Most activities occurring in the forest can be done in a way that still allows for multiple uses, while respecting the overall forest health.	
<ul style="list-style-type: none"> <li>The MDNRE has not provided a calculation of either allowable cut or of potential outputs from a modeling activity that justifies current or future harvest levels.</li> </ul>	See CAR 2010.9 addressing species selection and harvest rates.
<ul style="list-style-type: none"> <li>Timber harvesting on a statewide basis is well below what can be cut and still be sustainable. The amount of harvesting should be increased.</li> </ul>	See CAR 2010.9 addressing species selection and harvest rates.
<ul style="list-style-type: none"> <li>State doesn't have a system to eliminate bad contractors. Only look at lowest cost bid.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>If the levels of timber harvest are reduced they will not provide the jobs needed for regional areas. Many areas are losing jobs in Lower Michigan due to reduced timber harvests.</li> </ul>	See CAR 2010.9 addressing species selection and harvest rates.
<ul style="list-style-type: none"> <li>The MDNRE has an unclear and varied policy for crossing lands to reach State of Michigan property for timber sale preparation and harvest. In some instances, adjacent landowners are not notified or only get a call a few days before the logging begins. The DNRE should adopt a policy to ensure that attempts are made to secure access.</li> </ul>	See CAR 2010.5 regarding informing adjacent landowners
<ul style="list-style-type: none"> <li>The economic impacts of hunting, fishing and trapping are related to active forest management and should also be considered in the economic benefits of management. Sportsmen and women in Michigan spend more than \$3.4 billion per year. State Forests lands provide access to this recreation and habitat for the game wildlife species, as well as the ecosystem services that help aquatic species.</li> </ul>	Comment Noted. See OBS 2010.10 addressing the access plan.
<ul style="list-style-type: none"> <li>The MDNRE is designating too many areas as BSAs where timber will no longer be a significant focus. Letting upwards of 10-15% of the state forest decay on the stump is not a good use of tax-payer money. The agency is using forest certification as an excuse for not managing the resource to its best potential.</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>Road closures are reducing access for management activities and recreation. Roads should only be closed when there is an erosion issue.</li> </ul>	See OBS 2010.10 addressing the access plan.
<ul style="list-style-type: none"> <li>The State Forest in Michigan continue to grow</li> </ul>	See CAR 2010.9 addressing

more wood than is harvested. That suggests the DNRE is under-utilizing the timber resource.	species selection and harvest rates.
<ul style="list-style-type: none"> <li>• Timber harvesting seems to be set at a minimum. Could be increased to support more local jobs and a healthy environment</li> </ul>	See CAR 2010.9 addressing species selection and harvest rates.
<ul style="list-style-type: none"> <li>• DNRE should work more closely with industry and the universities to develop long-term management strategies that best benefit the citizens of Michigan.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• A Cost:Benefit analysis should be done for management activities (e.g. habitat projects, timber practices, etc.). The public has a right to know the benefits and costs of how these lands are managed. The analysis should include non-monetary assessments.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• MDNRE is focused on doing a good job and is well staffed, but the agency lacks a dedicated budget.</li> </ul>	See OBS 2010.3 regarding staffing
<ul style="list-style-type: none"> <li>• Certification is a positive measure; without certification forest products are at a competitive disadvantage in the marketplace.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• MDNRE is over administered and under budgeted.</li> </ul>	See OBS 2010.3 regarding staffing
<ul style="list-style-type: none"> <li>• MDNRE is under budgeted and under staffed.</li> </ul>	See OBS 2010.3 regarding staffing
<ul style="list-style-type: none"> <li>• Certification is expensive and a lot of paperwork. It is a business decision and doesn't affect forest management.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• MDNRE lacks sufficient resources for managing biomass harvesting and establishing wildlife habitats on state owned lands.</li> </ul>	See OBC 2010.4 addressing desired future conditions
<ul style="list-style-type: none"> <li>• Compartment review process has improved and is less delayed than it was before.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• What has been the benefit of certification compared to the cost? Why does the state continue to expend funds for dual certification?</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• Certification has increased costs for loggers due to additional regulation and guidelines.</li> </ul>	The only new guidelines are related to safety and resource protection
<ul style="list-style-type: none"> <li>• The MDNRE should do more to notify tribes of planned harvests that might provide gathering opportunities for birch bark, black ash, etc.</li> </ul>	See CAR 2010.3 regarding outreach to tribes
<ul style="list-style-type: none"> <li>• MDNRE does a good job of working with declining resources and has a dedicated staff that effectively serves the people.</li> </ul>	See OBS 2010.3 regarding staffing
<ul style="list-style-type: none"> <li>• MDNRE no long has a commitment to</li> </ul>	Comment Noted

production forestry because they are focused more on recreation.	
<ul style="list-style-type: none"> <li>• Certification is good for the forestry industry as a marketing tool. It teaches about sustainable forest management practices.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• Certification has been one of the DNRE's highest priorities for the past six to seven years.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• MDNRE has not exercised flexibility in the Legislative mandate to address certification requirements.</li> </ul>	Comment Noted

### Environmental Concerns

Comment/Concern	Response
<ul style="list-style-type: none"> <li>• Deer populations are limiting biodiversity and tree regeneration and exceed carrying capacity in many areas</li> </ul>	See OBS 2010.5 addressing deer
<ul style="list-style-type: none"> <li>• MDNRE needs a greater understanding and consideration of the complexities of deer migration, wintering habitat, social expectations, public education and deer impacts. More input from landowners and biological science is needed in setting goals.</li> </ul>	See OBS 2010.5 addressing deer
<ul style="list-style-type: none"> <li>• I have observed more effective control of OHV/ATV usage as a result of certification.</li> </ul>	See OBS 2010.11, OBS 2010.8 addressing ORV management
<ul style="list-style-type: none"> <li>• Significant negative ecological impacts from whitetail deer are occurring in the Lake Michigan and Lake Huron showsheds.</li> </ul>	See OBS 2010.5 addressing deer
<ul style="list-style-type: none"> <li>• Aspen is not native to upland areas of Michigan. Aspen was historically limited to riparian areas.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• The MDNRE has already protected the HCVF areas and do not need the Biodiversity Stewardship areas</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>• There is too much "set aside lands".</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>• OHV policies should be consistent across the state with riders on designated trails to curtail damage and support growth of tourism associated with designated trail systems.</li> </ul>	See OBS 2010.11, OBS 2010.8 addressing ORV management
<ul style="list-style-type: none"> <li>• State should do more to replant red pine. Planting too much jack and white pine.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>• There are times that timber harvest should be done in riparian buffers to help maintain food and cover species such as aspen and alder that are critical for woodcock and beaver.</li> </ul>	See OBS 2010.4 addressing desired future conditions

<ul style="list-style-type: none"> <li>We believe the state does a good job at managing their forest resources for multiple uses. Everything we see is done in accordance with best management practices.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>There is a desire to see more early successional forest types to support game species within the State Forest. This can and should be accomplished in partnership with the Wildlife Division and volunteer conservation groups.</li> </ul>	See OBS 2010.4 addressing desired future conditions
<ul style="list-style-type: none"> <li>MDNRE does not manage enough early successional habitat for warblers and woodcock.</li> </ul>	See OBS 2010.4 addressing desired future conditions
<ul style="list-style-type: none"> <li>I would like to see more even-aged cuts to support early successional habitat for species such as ruffed grouse, white-tailed deer, and songbirds.</li> </ul>	See OBS 2010.4 addressing desired future conditions
<ul style="list-style-type: none"> <li>Much of the State Forest is older growth, which will not support important wildlife species. Young forests are a critical aspect of the overall diverse forest ecosystem.</li> </ul>	See OBS 2010.4 addressing desired future conditions
<ul style="list-style-type: none"> <li>Where clearcuts have taken place we have some of the best upland bird hunting I have seen in years. American woodcock are prospering in these young forests as well as ruffed grouse. Keep up the good work by cutting the aspen!!</li> </ul>	See OBS 2010.4 addressing desired future conditions
<ul style="list-style-type: none"> <li>My main concern with state's management of forests is the amount of cutting that takes place during the growing season. Logging operations should be carried out during the dormant season when soils are frozen, most species of wildlife are not breeding, and the spread of invasive species is reduced.</li> </ul>	See CAR 2010.7 addressing silvicultural guidelines and CAR 2010.9 addressing harvest machinery
<ul style="list-style-type: none"> <li>MDNRE does a good job at managing forests, very professional and interested in sound, sustainable management practices. A good candidate for forest certification.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>MDNRE is doing nothing to address the white-tail deer issue.</li> </ul>	See OBS 2010.5 addressing deer
<ul style="list-style-type: none"> <li>MDNRE does a good job of restoring wetlands, however more needs to be done to prevent development of wetlands. Wetland violations are being ignored.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>The biological stewardship area process is redundant with areas already set aside by the U.S. Forest Service and other entities in Michigan.</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process

<ul style="list-style-type: none"> <li>Deer population goals in the 25-30 deer per square mile range make regeneration of some tree and herbaceous species extremely difficult. MDNRE deer management impacts state lands as well as all other ownerships.</li> </ul>	See OBS 2010.5 addressing deer
<ul style="list-style-type: none"> <li>The visionary Biodiversity Conservation Planning Process is unique in the U.S. in terms of conserving natural communities on a subsection basis.</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>The final sets of recommended Biodiversity Stewardship Areas may not meet the representation guidelines.</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>MDNRE is not allowing for biological rotation ages.</li> </ul>	See CAR 2010.7 regarding legacy trees and CAR 2010.6 addressing old growth
<ul style="list-style-type: none"> <li>MDNRE is favoring deer management over other forest values.</li> </ul>	See OBS 2010.5 addressing deer
<ul style="list-style-type: none"> <li>There are areas of large tree structure and “biological legacy trees” that are being lost due to logging in hardwood forests.</li> </ul>	See CAR 2010.7 regarding legacy trees and CAR 2010.6 addressing old growth
<ul style="list-style-type: none"> <li>Principle 10 regarding Plantations should be applied to the MDNRE’s red pine, jack pine and aspen management.</li> </ul>	Management of these species by MDNRE does not fit the FSC definition of Plantations
<ul style="list-style-type: none"> <li>Biomass harvesting guidelines should be revisited in 1-2 years to address results of new studies and regional research.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>MDNRE needs to provide greater communication to the Tribes about management of specific areas that have the potential to impact gathering rights and to address opportunities to restore historic gathering areas (birch management, berry production, blueberry areas, etc).</li> </ul>	See CAR 2010.3 regarding outreach to tribes
<ul style="list-style-type: none"> <li>Deer herd is suppressed on public land and carrying too many on private land.</li> </ul>	See OBS 2010.5 addressing deer
<ul style="list-style-type: none"> <li>The oak management plan needs to be completed.</li> </ul>	See CAR 2010.8 addressing silvicultural guidelines
<ul style="list-style-type: none"> <li>The complete set of BSA recommendations from the core design teams should be provided to the statewide council.</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process
<ul style="list-style-type: none"> <li>Should have more prescribed fire on public lands to manage oak.</li> </ul>	Comment Noted
<ul style="list-style-type: none"> <li>The BSA designation process has gone too far and exceeds what is required for certification. It is not accurate for the state to claim that the BSA process is being done to meet the</li> </ul>	See OBS 2010.7 and OBS 2010.17 addressing the BSA process

requirements of certification.	
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### **3.3.6 Other Assessment Techniques**

The audit team held two public meetings (in Lansing and Newberry) in order to provide ample opportunity for stakeholders to meet with the auditors, provide input, and learn more about the certification process. The audit team also attended the Eastern Upper Peninsula Citizens Advisory Committee meeting in Newberry, where the Team Leader made a short presentation about sustainable forest certification.

Additionally, SCS has endeavoured to maintain periodic contact with Michigan-based individuals and organizations in order to keep abreast of emerging forest management issues and the pertinence of any such issues to the FSC-endorsed certification of the Michigan State Forest.

### **3.4 Total Time Spent on Audit**

For the FSC re-assessment, approximately 28 auditor days were expended in field work. Additionally: 8.5 auditor days were spent in document review, audit planning, and site selection prior to field work; 2 auditor days were spent in contacting stakeholders; and 10 auditor days were spent in compiling the draft report.

### **3.5 Process of Determining Conformance and Award of Certification**

FSC-accredited forest stewardship standards consist of a three-level hierarchy: Principles, then the Criteria that make up each Principle, then the National (or Supplemental Regional) Indicators that make up each Criterion. Consistent with SCS Forest Conservation Program evaluation protocols, the team collectively determines whether or not the subject forest management operation is in conformance with every applicable indicator of the relevant forest stewardship standard. Each non-conformance must be evaluated to determine whether it constitutes a major or minor non-conformance at the level of the associated criterion or sub-criterion. Not all indicators are equally important, and there is no simple numerical formula to determine whether an operation is in non-conformance. The team must use their collective judgment to assess each criterion and determine if it is in conformance. If the forest management operation is determined to be in non-conformance at the criterion level, then at least one of the indicators must be in major non-conformance.

Corrective action requests (CAR's) are issued for every instance of non-conformance. Major non-conformances trigger major CAR's and minor non-conformances trigger minor CAR's

### **Interpretations of Major CARs, Minor CARs and Observations**

Major CARs: Requests for corrective action issued in response to Major Non-Conformances, either alone or in combination with non-conformances of other indicators, result (or are likely

to result) in a fundamental failure to achieve the objectives of the relevant FSC Criterion given the uniqueness and fragility of each forest resource. These are corrective actions that must be resolved or closed out prior to award of the certificate. If major CAR's arise after an operation is certified, the timeframe for correcting these non-conformances is typically shorter than for minor CAR's. Certification is contingent on the certified operation's satisfactory response to the Major CAR within the stipulated time frame, thus enabling the closure of the Major CAR.

**Minor CARs:** These are corrective action requests in response to minor non-conformances, which are typically limited in scale or can be characterized as an unusual lapse in the system. Corrective actions must be closed out within a specified time period of award of the certificate.

**Observations:** These are findings that the audit team concludes would help the Department move even further toward exemplary status. Action on the observations is voluntary and does not affect the maintenance of the certificate. However, Observations can lead to CARs if performance with respect to the criterion triggering the recommendation falls into non-conformance.

## 4.0 RESULTS OF THE EVALUATION

Table 4.1 below, contains the evaluation team’s findings as to the strengths and weaknesses of the subject forest management operation relative to the FSC Principles of forest stewardship. The table also presents the corrective action request (car) numbers related to each principle.

**Table 4.1 Notable strengths and weaknesses of the forest management enterprise relative to the P&C.**

Principle/Subject Area	Strengths Relative to the Standard	Weaknesses Relative to the Standard	CAR/OBS #s
<b>P1: FSC Commitment and Legal Compliance</b>	<ul style="list-style-type: none"> <li>▪ Adequate conformance with applicable laws, rules, and regulations was observed. Development and implementation of Work Instructions have resulted in a substantial improvement in overall conformance.</li> <li>▪ MDNRE personnel have devoted considerable effort to understand and assess the standards of certification, and have demonstrated a commitment to the principles.</li> <li>▪ Citizen Advisory Committees are effective mechanisms for involving members of the public.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The FSC-US Land Sales Policy needs to be included in the publicly available statement of commitment to manage “in scope” lands in accordance with FSC standards.</li> <li>▪ Reasons for seeking partial certification need to be revised to include FSC-POL-20-002.</li> </ul>	<u>CARs</u> 2010.1 2010.2
<b>P2: Tenure &amp; Use Rights &amp; Responsibilities</b>	<ul style="list-style-type: none"> <li>▪ All legal use rights on the State Forest are properly recognized and documented. DNRE has the statutory authority to manage the subject forest estate, which is unquestionably owned by and for the benefit of the citizens of Michigan. Timber sale boundaries are clearly marked with paint prior to commencement of site disturbing operations.</li> <li>▪ DNRE maintains active dialogue, through multiple mechanisms, with stakeholders that express an interest in the affairs of State Forest land management.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unauthorized ATV/ORV use is causing resource damage and better control constitutes an ongoing management imperative that is being hindered by shrinking budgets and staffing.</li> <li>▪ DNRE has recently informed power corridor easement holders that certain herbicides can no longer be used; this has caused some concern with those easement holders and DNRE will need to continue to dialogue with those individuals in order to settle the matter.</li> </ul>	

<b>P3: Indigenous Peoples' Rights</b>	<ul style="list-style-type: none"> <li>▪ A senior DNRE position is devoted, largely, to maintaining interactions with tribal representatives.</li> <li>▪ At the compartment review/operations inventory planning level, OSA is consulted.</li> </ul>	<ul style="list-style-type: none"> <li>▪ DNRE personnel could be more affirmative in reaching out to native American tribes with an aim at securing a higher level of collaboration.</li> </ul>	<u>CARs</u> 2010.3
<b>P4: Community Relations &amp; Workers' Rights</b>	<ul style="list-style-type: none"> <li>▪ With respect to contracting, DNRE employs a competitive bidding system that does not discriminate against non-local bidders and, in fact, implicitly favors local bidders due to lower transport costs. Contract specifications include a new requirement that contractors comply with all applicable laws and regulations, including labor laws. Also, DNRE has increased the emphasis on safety programs and procedures, in cooperation with its contractors.</li> <li>▪ Although employment opportunities and employee benefits have eroded somewhat in recent years, DNRE positions still represent a quality employment opportunity with superb job security. Non-supervisory DNRE employees are unionized. Standard contract language includes a requirement of compliance with all applicable laws of Michigan, including the right to organize.</li> <li>▪ A wide array of efforts at public education about forestry and forestry practices exist; DNRE actively collaborates with MSU and other academic institutions on research, extension and public education.</li> <li>▪ DNRE and its workforce is a very positive component of the rural communities and economies surrounding the State Forests.</li> <li>▪ DNRE has an array of standing committees and other mechanisms by which it is possible for citizen stakeholders to provide input into the management of the State Forests. On the DNRE web site, there is a link to a document: "Managing Michigan's State Forests: Your Guide to Participation"</li> </ul>	<ul style="list-style-type: none"> <li>▪ DNRE could take additional measures to assure more consistent adherence to safety guidelines, for employees and forest workers alike.</li> <li>▪ DNRE is not making adequate efforts to inform adjacent landowners about planned harvesting near property boundaries.</li> <li>▪ Eroding compensation received by DNRE employees will further complicate the Department's challenge of maintaining its stewardship of the State Forest lands in the face of shrinking staffs and budgets.</li> <li>▪ DNRE should devote more effort at safety training for logging contractors and their employees.</li> </ul>	<u>CARs</u> 2010.4 2010.5  <u>OBS</u> 2010.1 2010.2

<p><b>P5: Benefits from the Forest</b></p>	<ul style="list-style-type: none"> <li>▪ DNRE is a long-term manager of this forest estate; the collective investment in planning, inventory, resource protection and management operations is extensive and strongly indicative of a long-term commitment.</li> <li>▪ Timber harvests on the State Forest are not subject to significant short-term fluctuations due to financial exigencies; harvest levels do not exceed planned levels.</li> <li>▪ Although DNRE does not have explicit policies that favor local processing and manufacturing, DNRE employs a competitive bidding system that implicitly favors local bidders with lower transportation costs. Most wood is purchased by locally- based contractors who, in turn, sell the harvested logs to processing facilities within Michigan or northern Wisconsin.</li> <li>▪ Wood harvested from the State Forest appears to find its way to the highest-value uses.</li> <li>▪ DNRE clearly is responding to its perceived mandate to manage for the full suite of services and resources rather than merely managing to maximize revenue generation, for instance.</li> <li>▪ Average annual harvest levels on the Michigan State Forest are below average annual growth; harvests are set at levels that reflect an appropriate balancing of a suite of competing uses.</li> </ul>	<ul style="list-style-type: none"> <li>▪ While overall investment in the administration of the State Forest is considerable, the growing demands on public use management are now exceeding the current commitment of resources (people, budgets).</li> <li>▪ DNRE does not monitor the collection of non-timber products from State Forest lands.</li> <li>▪ The effects of high densities of deer in some regions and the associated impact on the natural species diversity in the forest, as well as the ability to adequately regenerate a productive forest, continues to be a concern expressed by stakeholders and some FMD foresters.</li> </ul>	<p><u>OBS</u></p> <p>2010.3 2010.4 2010.19</p>
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<p><b>P6: Environmental Impact</b></p>	<ul style="list-style-type: none"> <li>▪ Compartment review process requires involvement of foresters, wildlife biologists, fisheries biologists and reviews by MNFI, and OSA to assess short-term environmental impacts.</li> <li>▪ Numerous surveys are conducted to monitor populations of threatened or rare wildlife species. DNRE contracts with MNFI to conduct surveys for other species. Part 525 of Act 451 stipulates that management shall address stand- and landscape-level measures that promote conservation of forest plants and animals</li> <li>▪ The Biodiversity Conservation Planning Process has initiated an excellent process of protecting representative reserves.</li> <li>▪ Guidelines to prevent erosion and minimize damage during harvesting are well understood by field personnel and by contractors. Personnel in Fisheries Division and the Environmental Enforcement Divisions contribute to BMP conformance. Timber sale contracts contain specifications for minimizing damage to residual trees, regeneration, and soils. A visual management checklist is to be used on all timber sales.</li> <li>▪ Pesticides are used sparingly and only after written prescriptions are approved. More commonly, IPM procedures are evident.</li> <li>▪ Forest health specialists are available to assist with management planning and compartment reviews.</li> <li>▪ Chemicals, including fuel and oil, are stored properly; clean-up kits are routinely found in vehicles; and guidelines for proper use and disposal of such contaminants are included in timber sale contracts.</li> <li>▪ Biological control agents have been used on State Forest lands for control or experimental control of, spotted knapweed, and purple loosestrife, but close review and supervision is provided. GMOs are not used by DNRE on certified lands. Exotic tree species are not being planted, and the few plantations of Scotch pine are being converted to native species. Native grasses are seeded when correcting or preventing erosion.</li> <li>▪ Conversions of forest to non-forest use are minimal.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Eco-regional planning efforts and BSAs are poorly understood by many field personnel.</li> <li>▪ Practices of leaving residual trees in thinning and selection harvests, islands of representative trees in clearcuts, and a variety of trees to represent structural and genetic diversity are not consistent.</li> <li>▪ Although existing roads generally are maintained in adequate condition, and numerous policies address the ecological impacts of roads, the system of roads on State Forest lands is not adequately planned and designed. A new system is in place for reporting failed or flawed structures and instances of erosion, but funding for maintenance of roads and bridges has deteriorated in recent years, threatening adequate maintenance.</li> <li>▪ Efforts are being made to control invasive exotic species, but measures are inconsistent among management units.</li> <li>▪ Conversion of natural stands of hardwoods to red pine needs to be done in a manner that incorporates the diversity of a natural forest.</li> <li>▪ The effects of high densities of deer in some regions and the associated impact on the natural species diversity in the forest, as well as the ability to adequately regenerate a productive forest, continues to be a concern expressed by stakeholders and some FMD foresters.</li> <li>▪ Although progress has been made in controlling damage from ORV use, changes in access for many county roads have led to more instances of trespass and environmental impact.</li> </ul>	<p><u>CARs</u> 2010.6 2010.7</p> <p><u>OBS</u> 2010.5 2010.6 2010.7 2010.8 2010.9 2010.10 2010.11 2010.12</p>
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<p><b>P7: Management Plan</b></p>	<ul style="list-style-type: none"> <li>▪ Planning processes exist at multiple spatial and temporal scales with the most developed being at the compartment level. Completion of the State Forest Management Plan in 2008 is noteworthy.</li> <li>▪ T&amp;E species, their habitats and DNRE management approaches are the subject of extensive planning processes and documents.</li> <li>▪ Quite clearly, silvicultural prescriptions employed on the State Forest represent an integration of ecological, economic and social considerations.</li> <li>▪ Even in the absence of completed ecoregional plans, there are landscape-level considerations incorporated into management actions and programs.</li> <li>▪ There are extensive environmental safeguards that are incorporated into the DNRE management system, such as the statewide BMPs that DNRE treats as mandatory guidance.</li> <li>▪ Both even and uneven-aged silvicultural systems are employed on the State Forest with uneven-aged prescriptions being most prevalent on all forest types other than aspen, jack pine, and red pine planted stands. Silvicultural prescriptions result from an explicit consideration of pre-harvest stand conditions and desired future conditions.</li> <li>▪ The historical use patterns on the land that now comprises the State Forest is well understood and documented in the SFMP. The history of past resource exploitation clearly is a factor in the formulation of modern management policies and objectives for the State Forest.</li> <li>▪ The entire body of planning documents is publicly available; extensive information and data is available on the department web site.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ecoregional planning is still progressing behind schedule, resulting in inadequate conformance to the requirement to incorporate landscape level considerations in the multi-faceted DNRE planning process.</li> <li>▪ Non-timber forest products do not receive much attention in the planning process.</li> <li>▪ The extent and complexity of the body of planning documents represents a considerable challenge to interested stakeholders in terms of trying to understand how they all fit together into a cohesive whole and how to extract specific information of interest. A more concise public summary would be helpful.</li> <li>▪ Draft elements of regional state forest management plans (as distinct from the entirety of the draft plans) are being used without easily accessible opportunities for public review and comment prior to their use.</li> <li>▪ While meaningful progress has been made in the regional state forest management planning process since the 2009 audit, the task remains highly complex and challenging and still not yet completed.</li> <li>▪ Logger training requirements are weak and do not include basic silviculture training.</li> </ul>	<p><u>CARs</u></p> <p>2010.7 2010.8 2010.9</p> <p><u>OBS</u></p> <p>2010.13 2010.14 2010.15</p>
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<p><b>P8: Monitoring &amp; Assessment</b></p>	<ul style="list-style-type: none"> <li>• The SFMP provides a concise discussion of monitoring processes applied to the State Forests.</li> <li>• MDNRE operates under many different plans and each has different monitoring strategies. Under OI, frequency is every ten years. Forest health specialists have a fairly rigorous monitoring program in place for subjects such as Beach Bark Disease, Emerald Ash Borer, Spruce budworm, etc. Wildlife Division has various monitoring routines from annual surveys (deer pellet counts, KW breeding bird surveys) to more periodic surveys for habitat availability. Specific watershed plans have monitoring requirements and surveys built into them, which meet their respective plans.</li> <li>• Generally the MDNRE does a good job through the new IFMAP system in demonstrating conformance to the inventory requirements found in FSC Indicator 8.2.b.1.</li> <li>• BMP non-compliance reporting and lists were reviewed and are in place.</li> <li>• MDNRE forest managers incorporate adaptive approaches that build upon observed effects of past management activities; this is functioning most effectively at the compartment level.</li> </ul>	<ul style="list-style-type: none"> <li>• MDNRE’s consultation with Native American tribes does not presently comply with National Indicator 8.2.d.5.</li> <li>• The full array of results of monitoring activities undertaken on the “in scope” forestlands is not all publicly available. As well, the breadth and complexity of monitoring activities is such that results are not reasonably accessible to the public in the absence of a summary.</li> <li>• Only 1 of 3 districts has completed a draft of Chapter 6) of the regional state forest management plans.</li> </ul>	<p><u>CARs</u> 2010.3 2010.10</p> <p><u>OBS</u> 2010.16 2010.17</p>
<p><b>P9: Maintenance of High Conservation Value Forest</b></p>	<ul style="list-style-type: none"> <li>▪ DNRE’s Work Instruction 1.4 provides guidance for identification of HCVFs, and this has been a major emphasis of ecoregional planning and the Biodiversity Conservation Planning Process (BCPP).</li> <li>▪ Because many HCVFs have been identified and have interim protection as SCAs, auditors find conformance with this indicator while recognizing that full conformance and an objective listing of HCVFs awaits completion of the BCPP and RSFMPs.</li> <li>• Areas that have been identified as SCAs, BSAs, or HCVFs are clearly designated on maps and recorded in GIS format.</li> <li>▪ Some High Conservation Value Areas are managed in cooperation with other agencies, although there is no explicit statement in the Biodiversity Conservation Planning Process that encourages such cooperative management.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There is uncertainty amongst some stakeholders who have been actively engaged in MDNRE’s biodiversity planning, including the identification of biodiversity stewardship areas, as to the compatibility of BSA designation on private lands with the requirements for partnership in the CFA program</li> </ul>	<p><u>OBS</u> 2010.18</p>

## 4.2 Major Non-Conformities

Generally, major corrective action requests arise when the audit team makes a finding of non-conformity at the level of an entire FSC Criterion. Particularly significant or systemic non-conformance at the level of an individual Indicator may, at the discretion of the audit team, lead to the raising of a major non-conformity. Certification cannot be awarded until all major non-conformities are closed.

**No major non-conformities were raised regarding Michigan Department of Natural Resources and Environment’s operations during the re-certification assessment.**

## 4.3 Open Non-Conformities at the Time of the Re-Certification Audit

At the close of the 2009 surveillance audit of MDNRE, there were three open CARs, each with a due date prior to October 2010, the anticipated date of the 2010 re-certification audit. As detailed below, MDNRE provided to SCS evidence of their corrective actions in response to the three CARs by the stipulated due dates for each CAR. SCS reviewed the submitted materials and, in each case, provisionally closed the CARs subject to follow-up at the time of the 2010 re-certification audit. This follow-up was completed during the re-certification audit and all three CARs were duly closed out as part of the 2010 audit.

**Observation:** Note: this is a follow-on observation pertaining to the issues addressed in CAR 2008.1 which was closed during the October 2009 annual surveillance audit.

The Biodiversity Conservation Planning Process (BCPP) remains a critical link in the Department’s multifaceted large-scale, strategic planning initiative. As such, timely completion of the BCPP remains of high importance. An important element of the BCPP is to articulate those activities within delineated Biodiversity Stewardship Areas that are considered to be compatible with the underlying conservation objectives for BSA’s. Without this guidance, the planning teams are unable to complete the BSA delineation process. This requires the specification of field level and planning level guidance on compatible (allowed) uses in BSA’s.

<b>CAR 2009.1</b>	DNR must develop and implement field level and planning level guidance as to what land use activities are considered acceptable within designated Biodiversity Stewardship Areas; that is, activities that are deemed compatible with the underlying biodiversity conservation objectives.
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<b>Deadline</b>	June 15, 2010
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<b>Reference</b>	<i>FSC Criterion/Indicator 7.1.a.1</i>
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**MDNRE Response:** On May 21, 2010, the SCS lead auditor received an email and two attached documents from MDNRE:  
 “The attached documents provide guidance on General Principles of Management for BSA’s and Guidance for Land Use Activities within DNRE administered portions of Biodiversity Stewardship Areas (BSA's). Both documents were approved by the DNRE Statewide Council and distributed to DNRE staff on May 10, 2010.

Both documents are currently being utilized for internal DNRE review of proposed BSA’s. The General Principles of Management for BSA’s was developed for upcoming public review of

BSAs in the Northern Lower Peninsula and Western and Eastern Upper Peninsula. The Guidance for Land Use Activities within DNRE Administered Portions of Biodiversity Stewardship Areas (BSA's) was developed as an Information Circular for internal operations and planning guidance.”

SCS Certification Forester, Kyle Meister, was tasked by the lead auditor to review and assess the adequacy of DNRE’s submittals.

**Auditor Response:** On the basis of the documentary evidence provided to SCS on May 21, 2010, SCS Certification Forester, Kyle Meister, concluded that the DNRE had met the requirements of this CAR. But Mr. Meister recommended that the CAR be kept open until the 2010 surveillance audit so as to provide the audit team with an opportunity to assess the implementation of the BSA use guidelines. This follow-up was undertaken by the audit team during the October 2010 recertification evaluation and the audit team was duly satisfied. **Accordingly, CAR 2009.1 is now CLOSED.**

**Observation:** Note: this is a follow-on observation pertaining to the issues addressed in CAR 2008.2 which as closed during the October 2009 annual surveillance audit.

In response to CAR 2008.2, the DNR established a standards committee (headed up by Steve DeBrabander) that developed ORV Route standards for application to Drummond Island. The limited scope of application is not fully responsive to CAR 2008.2 and necessitates this follow-on CAR. While ORV issues, and lack of clarity regarding ORV Route designations, were addressed on Drummond Island, the issues may occur in the future in other locations in the State Forest system.

<b>CAR 2009.2</b>	Written assurance, endorsed by the FMFM Chief, must be provided to SCS that, in the future event DNR were to provide motorized recreational use opportunities, such as those found on Drummond Island, elsewhere within the State Forest system, that the standards established for Drummond Island (in response to CAR 2008.2) would apply.
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<b>Deadline</b>	March 15, 2010
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<b>Reference</b>	<i>FSC Criterion/Indicator 1.1.a, 2.2.a, and 2.2.b</i>
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**MDNRE Response:** On March 17, 2010, MIDNRE conveyed a letter to SCS, signed by Chief Boyd, confirming that “if motorized vehicle use opportunities, such as those found on Drummond Island, area offered elsewhere within the state forest system the standards established for Drummond Island would apply.”

**Auditor Response:** We consider this written commitment, endorsed by senior management, to constitute full compliance with the corrective action request. **As a result of the evidence provided by DNR, CAR 2009.2 is now CLOSED.**

**Observation:** During the discussions held at the Pigeon River Country state forest unit, it was revealed that DNR managers as well as share croppers are deploying GMO corn on state forest property for the purpose of establishing wildlife feed plots (in the case of DNR deployment). The lead auditor pointed out to the attendees at this discussion that use of GMO plant materials on FSC-certified forests is prohibited. DNR field personnel were not aware of this requirement and central office personnel were not aware of the use of GMO corn by field staff.

<b>CAR 2009.3</b>	DNR must rectify the non-conformance with FSC Criterion 6.8 by either ceasing use of GMO plant materials on all lands “within scope” or take
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	actions that will excise those lands on which GMOs are used from within the scope of their FSC certification. In selecting which option to pursue, DNR personnel should consult with personnel from the Wisconsin and Minnesota Departments of Natural Resources as this same issue as previously arisen in those states.
<b>Deadline</b>	April 15, 2010
<b>Reference</b>	<i>FSC Criterion 6.8</i>
<p><b>MDNRE Response:</b> On April 15, 2010, Michigan DNRE (MDNRE) sent a letter from Forest Management Division Chief Lynne Boyd requesting excision of land planted to GMO food crops from the scope of FSC certification. The request covers land currently planted to GMO corn (64 acres) and land that may, at some time in the future, be planted to GMO corn or soybeans.</p> <p>SCS concludes that the requested excision is consistent with the FSC requirements as to what types of areas can be excised from a certificate (FSC Policy on Excision). Per FSC requirements on excising land from the scope, the certification body is required to consult stakeholders and explain the excision in the certification report. SCS will conduct the stakeholder consultation related to excising GMO food crops as part of the recertification assessment, to be conducted in the 2<sup>nd</sup> half of 2010. The recertification report will include the relevant discussion about excising these GMO food crops from the certificate.</p>	
<p><b>Auditor Response:</b> As a result of the evidence provided to SCS by DNRE (on April 15, 2010) and as confirmed during the recertification evaluation, CAR 2009.3 is now CLOSED.</p>	

## 5.0 CERTIFICATION DECISION

### 5.1 Certification Recommendation

As determined by the full and proper execution of the SCS *Forest Conservation Program* evaluation protocols, the evaluation team hereby recommends that the Michigan State Forest lands as managed by the Michigan Department of Natural Resources and Environment be re-awarded for another 5-year period FSC certification as a “Well-Managed Forest” subject to the corrective action requests stated in Section 5.2. Michigan DNRE has demonstrated that their system of management is capable of ensuring adequate levels of conformance with the requirements of the FSC-US Forest Management Standard over the forest area covered by the scope of the evaluation. Michigan DNRE has also demonstrated that the described system of management is being implemented consistently over the forest area covered by the scope of the certificate.

### 5.2 Corrective Action Requests

<b>Nonconformity:</b> MDNRE has not made publicly available a statement that complies with National Indicator 1.6.a.	
<b>Minor CAR 2010.1</b>	Develop and make publicly available a written statement of commitment to manage the “in scope” State Forest lands in conformance with FSC standards and policies, including the FSC-US

	Land Sales Policy.
<b>Deadline</b>	30 days after award of certification
<b>Reference</b>	FSC US National Standard, Indicator 1.6.a

<b>Nonconformity:</b> MDNRE has not documented, in brief, the reasons for seeking partial certification that complies with National Indicator 1.6.a.	
<b>Minor CAR 2010.2</b>	Convey to SCS a document that, in brief, explains the reasons for seeking partial certification, referencing FSC-POL-20-002, describing the locations of other managed forest units, the natural resources found on the holdings being excluded from certification, and the activities planned for the excluded lands.
<b>Deadline</b>	30 days after award of certification
<b>Reference</b>	FSC US National Standard, Indicator 1.6.b

<b>Nonconformity:</b> MDNRE's consultation with native American tribes does not presently comply with National Indicators 3.3.a, 3.3.b, & 8.2.d.5.	
<b>Minor CAR 2010.3</b>	Review and revise methods for outreach to native American tribes with an aim at securing a higher level of response and collaboration, by employing more culturally appropriate consultative procedures.
<b>Deadline</b>	2011 annual surveillance audit
<b>Reference</b>	FSC US National Standard, Indicators 3.3.a, 3.3.b, 8.2.d.5

<b>Nonconformity:</b> Forest workers and DNRE employees do not consistently demonstrate adherence to a safe work environment in the field.	
<b>Minor CAR 2010.4</b>	Design, implement and document actions to assure more consistent forest worker and DNRE employee adherence to the DNRE's safety policies, guidelines and contract terms.
<b>Deadline</b>	2011 annual surveillance audit
<b>Reference</b>	FSC US National Standard, Indicator 4.2.b

<b>Nonconformity:</b> People who are subject to direct adverse effects of management operations are not being adequately apprised of relevant activities in advance of the actions.	
<b>Minor CAR 2010.5</b>	Pursue measures to inform adjacent landowners of pending harvest or other site disturbing activities occurring at the boundary of State Forest property.
<b>Deadline</b>	2011 annual surveillance audit
<b>Reference</b>	FSC US National Standard, Indicator 4.4.c

<b>Nonconformity:</b> DNRE does not presently have policies in place for assuring that all areas meeting the FSC definition of Type I and Type II Old Growth (see Glossary to the FSC US National Standard) are protected from harvest, while allowing for the exceptions stated in Indicator 6.3.a.3.	
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<b>Minor CAR 2010.6</b>	Develop and implement policies assuring conformance with the old growth protection requirements contained in Indicator 6.3.a.3.
<b>Deadline</b>	2011 annual surveillance audit
<b>Reference</b>	FSC US National Standard, Indicator 6.3.a.3

<b>Nonconformity:</b> The MDNRE retention guidelines do not assure adequate conformity with Indicators 6.3.f and 6.3.g.1. There is presently incomplete and inconsistent understanding by MDNRE personnel of the Department’s retention guidelines.	
<b>Minor CAR 2010.7</b>	<ul style="list-style-type: none"> <li>a) Revise the retention guidelines to assure that all trees meeting the FSC definition of “legacy tree” are protected from harvest (see Glossary to the FSC US National Standard).</li> <li>b) Revise the retention guidelines to assure that “habitat components and associated stand structures” are retained during harvest operations “in abundance and distribution that could be expected from naturally occurring processes” and that include the elements articulated in Indicator 6.3.f (a) &amp; (b). For even-aged regeneration harvests and for salvage harvests, assure that “live trees and other native vegetation are retained within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime unless retention at a lower level is necessary for purposes of restoration or rehabilitation.”</li> <li>c) Upon completing revisions to the retention guidelines, conduct training to assure consistent and accurate understanding by employees who implement the guidelines.</li> </ul>
<b>Deadline</b>	2011 annual surveillance audit
<b>Reference</b>	FSC US National Standard, Indicators 6.3.f, 6.3.g.1 & 7.3.a

<b>Nonconformity:</b> Because the Department’s silvicultural guidelines are outdated for some cover types, silvicultural systems employed by MDNRE do not assure that ecosystems present on the FMU will be sustained for the long term. Some field foresters are imprecise in their use of silvicultural terminology and concepts.	
<b>Minor CAR 2010.8</b>	Update outdated elements of the Department’s silvicultural guidelines. Conduct additional training to assure more consistent and complete understanding of silvicultural principles and terminology.
<b>Deadline</b>	2011 annual surveillance audit
<b>Reference</b>	FSC US National Standard, Indicator 7.1.1

<b>Nonconformity:</b> The collection of publicly available documents constituting the management plan for the lands managed by MDNRE do not describe how species selection and harvest rate calculations are developed and how the method meets the requirements	
<b>Minor CAR</b>	Develop as an element of the management plan a written description

<b>2010.9</b>	of the species selection and harvest rate calculation process, as required in Indicator 7.1.m.
<b>Deadline</b>	2011 annual surveillance audit
<b>Reference</b>	FSC US National Standard, Indicators 7.1.m

<b>Nonconformity:</b> The full array of results of monitoring activities undertaken on the “in scope” forestlands is not all publicly available. As well, the breadth and complexity of monitoring activities is such that results are not reasonably accessible to the public in the absence of a summary.	
<b>Minor CAR 2010.10</b>	MDNRE must develop and make publicly available a summary of monitoring results covering the subject areas listed in Criterion 8.2. The summary must be periodically updated.
<b>Deadline</b>	2011 Annual Surveillance audit
<b>Reference</b>	FSC US National Standard, Indicator 8.5.a

### 5.3 Observations

<b>OBS 2010.1</b>	Eroding compensation received by DNRE employees will further complicate the Department’s challenge of maintaining its stewardship of the State Forest lands in the face of shrinking staffs and budgets.
<b>Reference</b>	FSC US National Standard, Indicator 4.1.a

<b>OBS 2010.2</b>	DNRE should devote more effort at safety training for logging contractors and their employees. The requirement that one person who supervises a contract have logger training is marginal, at best.
<b>Reference</b>	FSC US National Standard, Indicator 4.2.c

<b>OBS 2010.3</b>	Continued staff and budget reductions will strain the ability of DNRE to maintain conformity to the certification standard.
<b>Reference</b>	FSC US National Standard, Indicator 5.1.a

<b>OBS 2010.4</b>	There is active collection of non-timber forest products and some of this activity is acknowledged to likely have a commercial component (e.g., morel collection and sale to buyers). MDNRE could increase its level of attention to managing NTFP collection activities.
<b>Reference</b>	FSC US National Standard, Indicator 5.6.d

<b>OBS 2010.5</b>	The effects of high densities of deer in some regions and the
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	associated impact on the natural species diversity in the forest, as well as the ability to adequately regenerate a productive forest, continues to be a concern expressed by stakeholders and some FMD foresters. A Cervid Herbivory Team was appointed to address this issue, but little progress has been made.
<b>Reference</b>	FSC US National Standard, Indicator 6.3.d

<b>OBS 2010.6</b>	There is an inconsistent level of attention being paid to invasive exotic species. The March 2009 Framework for Action needs to be followed up with tangible actions.
<b>Reference</b>	FSC US National Standard, Indicator 6.3.h

<b>OBS 2010.7</b>	There is an inconsistent level of understanding on the part of field personnel regarding the purpose of Biodiversity Stewardship Areas, especially whether or not (for some BSA's) their purpose is to serve as reference areas.
<b>Reference</b>	FSC US National Standard, Indicator 6.4.c

<b>OBS 2010.8</b>	The frequency and severity of ORV-related "RDRs" would be reduced by additional efforts to counter the unintended consequence of the ORV trail system—that they are vectors for unauthorized ORV activity that is causing resource damage.
<b>Reference</b>	FSC US National Standard, Indicator 6.5.b

<b>OBS 2010.9</b>	There is insufficient investment in road maintenance. This is likely to result in future non-conformities if surveillance audits reveal adverse environmental impacts from poor road maintenance.
<b>Reference</b>	FSC US National Standard, Indicator 6.5.d

<b>OBS 2010.10</b>	Overall management of the State Forest lands would be enhanced by completion of the access plan.
<b>Reference</b>	FSC US National Standard, Indicator 6.5.d

<b>OBS 2010.11</b>	Although progress has been made in the past 5 years, DNRE should maintain and enhance efforts to control and minimize adverse environmental impacts from unauthorized ORV activities.
<b>Reference</b>	FSC US National Standard, Indicator 6.5.g

<b>OBS 2010.12</b>	Conversion of natural forests such as hardwood stands to red pine,
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	even if such stands are considered “off site,” needs to be done in a manner that does not constitute a conversion to a plantation, as defined by the FSC. In such cover type conversions, efforts at maintaining hardwood elements and generally assuring a level of biodiversity above a traditional red pine row-planted stand, will help to avoid a finding that MDNRE is engaging in conversion to “FSC plantations.”
<b>Reference</b>	FSC US National Standard, Indicator 6.10.d

<b>OBS 2010.13</b>	While meaningful progress has been made in the regional state forest management planning process since the 2009 audit, the task remains highly complex and challenging and still not yet completed. Marshalling additional resources and, if need be, streamlining some of the procedures in order to complete all three regional plans by the time of the 2011 audit would be clearly advantageous.
<b>Reference</b>	FSC US National Standard, Indicator 7.2.a

<b>OBS 2010.14</b>	Logger training requirements are weak and do not include basic silviculture training.
<b>Reference</b>	FSC US National Standard, Indicator 7.3.a

<b>OBS 2010.15</b>	Draft elements of regional state forest management plans are being used without easily accessible opportunities for public review and comment prior to their use. While we acknowledge the rationale for doing so (the benefit of incorporating, for instance, new scientific information as it become available rather than waiting for an indefinite period of time for a plan to be completed), we note that such a practice, if not carefully limited, can reduce the degree to which the plan development process is consultative.
<b>Reference</b>	FSC US National Standard, Indicator 7.4.b

<b>OBS 2010.16</b>	Only 1 of 3 districts has completed a draft of Chapter 6 of the regional state forest management plans. Conformance to this Indicator will be enhanced if MDNRE hastens the completion and implementation of monitoring protocols.
<b>Reference</b>	FSC US National Standard, Indicator 8.1.a

<b>OBS 2010.17</b>	MDNRE’s current inventory system is not in strong conformance with regard to the requirements in this Indicator pertaining to volumes and regeneration.
<b>Reference</b>	FSC US National Standard, Indicator 8.2.a.1

<b>OBS 2010.18</b>	There is uncertainty amongst some stakeholders who have been
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	actively engaged in MDNRE’s biodiversity planning, including the identification of biodiversity stewardship areas, as to the compatibility of BSA designation on private lands with the requirements for partnership in the CFA program.
<b>Reference</b>	FSC US National Standard, Indicator 9.3.c

<b>OBS 2010.19</b>	In selection harvests where trees to be cut are marked with paint, DNRE’s interests would be better served if there were more diligent efforts to assure that the butts of cut trees are also clearly painted. Without clear butt marks, it is impossible to know, after the fact, if trees not marked for harvest were in fact cut.
<b>Reference</b>	FSC US National Standard, Indicator 5.3.a

## **6.0 SURVEILLANCE EVALUATIONS**

If certification is awarded, FSC protocols require that a surveillance audit will take place at least annually to monitor the status of any open corrective action requests and review the continued conformance of Michigan DNRE’s management of the in-scope state forestlands to the FSC-US Forest Stewardship Standard. Public summaries of surveillance evaluations will be posted separately on the SCS website ([www.scscertified.com](http://www.scscertified.com)).

