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# FOREST MANAGEMENT AND STUMP-TO-FOREST GATE CHAIN-OF-CUSTODY CERTIFICATION EVALUATION REPORT

V1-0

## Ohio DNR-Division of Forestry

**SCS-FM/COC-00130N**

ODNR-Division of Forestry  
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CERTIFIED	EXPIRATION
<b>1/6/11</b>	<b>1/6/16</b>

DATE OF FIELD AUDIT
<b>09/14/2010</b>
DATE OF LAST UPDATE
<b>01/06/11</b>

### 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 FSC Certificate Database (<http://info.fsc.org/>) no less than 30 days after issue of the certificate. Section B contains more detailed results and information for the use of the Ohio DNR.

## **FOREWARD**

Scientific Certification Systems (SCS) is a certification body accredited by the Forest Stewardship Council and was retained by Ohio Department of Natural Resources to conduct a certification evaluation of its public State Forest System. Under the FSC/SCS certification system, forest management enterprises (FMEs) meeting international standards of forest stewardship can be certified as “well managed,” thereby permitting the FME’s use of the FSC endorsement and logo in the marketplace subject to FSC/SCS oversight.

In September, 2010, an interdisciplinary team of natural resource specialists was empanelled by SCS to conduct the evaluation. The team collected and analyzed written materials, conducted interviews with FME staff and key stakeholders, and completed a 4-day field and office audit of the subject forest management operation (FMO) as part of the certification evaluation. Upon completion of the fact-finding phase of the evaluation, the team assessed conformance to the FSC Principles and Criteria.

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**Section A – Public Summary**

**1.0 GENERAL INFORMATION**

**1.1 Certificate Registration Information**

**1.1.1.a Name and Contact Information**

Organization name	Ohio Department of Natural Resources (ODNR)-Division of Forestry		
Contact person	Chad Sanders - Land Management Administrator		
Address	ODNR-Division of Forestry 2045 Morse Road, Bldg H-1 Columbus, Ohio 43229-6693	Telephone	614-265-6701
		Fax	614-447-9231
		e-mail	Chad.Sanders@dnr.state.oh.us
		Website	http://www.dnr.state.oh.us/DivisionofForestryHomepage/tabid/4803/Default.aspx

**1.1.1.b FSC Sales Information**

<input checked="" type="checkbox"/> FSC Sales contact information same as above.			
FSC salesperson			
Address		Telephone	
		Fax	
		e-mail	
		Website	

**1.1.2 Scope of Certificate (see [Appendix 1](#) for further details)**

Certificate Type	<input checked="" type="checkbox"/> Single FMU	<input type="checkbox"/> Multiple FMU†
	<input type="checkbox"/> Group	
SLIMF <i>if applicable</i> <i>All items marked with an asterisk (*) are not required for single SLIMFs.</i>	<input type="checkbox"/> Small SLIMF certificate	<input type="checkbox"/> Low intensity SLIMF certificate
	<input type="checkbox"/> Group SLIMF certificate	
Group Members <i>if applicable</i>	n/a	
Number of FMU's in scope of certificate	1 FMU, divided into 21 "state forest" units, totaling 202,927 acres	
Geographic location of non-SLIMF FMU(s)‡	Latitude: 82deg 57' 55.45" West	
	Longitude: 40deg 03' 33.61" North	
Forest zone <sup>1,2</sup>	<input type="checkbox"/> Boreal	<input checked="" type="checkbox"/> Temperate

<sup>1</sup> According to the Holdridge life zone classification scheme.

<sup>2</sup> If more than one zone is applicable, please include the total area for each forest zone.

		<input type="checkbox"/> Subtropical	<input type="checkbox"/> Tropical
<b>Total forest area in scope of certificate which is:</b>			
<b>privately managed<sup>3</sup></b>			
<b>state managed</b>		202,927 acres	
<b>community managed<sup>4</sup></b>			
<b>Number of FMUs in scope that are:</b>			
less than 100 ha in area	0	100 - 1000 ha in area	0
1000 - 10 000 ha in area	0	more than 10 000 ha in area	1
<b>Total forest area in scope of certificate which is included in FMUs that:</b>			
are less than 100 ha in area		0	
are between 100 ha and 1000 ha in area		0	
meet the eligibility criteria as <i>low intensity</i> SLIMF FMUs		0	
<b>Division of FMUs into manageable units:</b>			
		<b>Administrative</b>	
<b>State Forest Units</b>	<b>District</b>	<b>Office</b>	<b>Acres</b>
Beaver Creek	North		1,107
Blue Rock	South		4,535
Brush Creek	South		13,272
Chapin Forest Reservation	North		369
Dean	South		2,828
Fernwood	North	X	3,035
Gifford	South		314
Harrison	North		1,363
Hocking	South		9,464
Maumee	North	X	3,118
Mohican-Memorial	North	X	4,633
Perry	South		4,639
Pike	South	X	11,840
Vinton Furnace	South		15,850
Richland Furnace	South		2,512
Scioto Trail	South	X	9,484
Shade River	South		2,973
Shawnee	South	X	65,376
Sunfish Creek	North		657

<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.

Tar Hollow	South		16,205	
Yellow Creek	North		749	
Zaleski	South	X	28,604	
			<b>202,927</b>	Total DOF State Forests 21 State Forests 1 Forest Reservation managed by third party
†Audit team must complete Appendix 5				
‡See section 1.1.3 for Non-SLIMF group members				

### 1.2 Areas outside of the scope of certification

Applicability of FSC partial certification and excision policy (FSC-POL-20-002 and SCS-SOP-FM-10)		
<b>1. Are there any lands owned or managed by the applicant not included in the scope of the certification evaluation?</b>	<input type="checkbox"/> Yes <i>Continue to question 2.</i>	<input checked="" type="checkbox"/> No, all forestland owned or managed by the applicant is included in the scope. <i>Finished with this section.</i>
<b>2. What is the nature of the land(s) outside of the scope of evaluation? Check all that apply.</b>	<input type="checkbox"/> Applicant owns and/or manages other forestland (FMUs) not under evaluation. <i>Complete this section.</i>	<input type="checkbox"/> Applicant wishes to excise portions of the FMU(s) under evaluation from the scope of certification. <i>Complete this section.</i>
<b>Explanation for exclusion of FMUs and/or excision:</b>		
<b>Control measures to prevent mixing of certified and non-certified product</b>		
<b>Description of FMUs excluded from or forested area excised from the scope of certification:</b>		
<b>Name of FMU or Stand</b>	<b>Location (city, state, country)</b>	<b>Size (ha or ac)</b>
<i>FSC will only allow its association with organizations that are not directly or indirectly involved in the unacceptable activities defined in FSC-POL-01-004.</i>		

### 1.3 Standards Used

Box 1.3.1.1 – Applicable FSC-Accredited Standards		
Title	Version	Date of Finalization
FSC National Standard for the U.S.	1.0	July 8, 2010
All standards employed are available on the websites of FSC International ( <a href="http://www.fsc.org">www.fsc.org</a> ), the FSC-US ( <a href="http://www.fscus.org">www.fscus.org</a> ) or the SCS Forest Conservation Program homepage ( <a href="http://www.scs-certified.com/forestry">www.scs-certified.com/forestry</a> ).		

Standards are also available, upon request, from Scientific Certification Systems ([www.scscertified.com](http://www.scscertified.com)).

#### 1.4 Conversion Table English Units to Metric Units (Omit if not necessary)

Length Conversion Factors		
To convert from	To	multiply by
Mile (US Statute)	Kilometer (km)	1.609347
Foot (ft)	Meter (m)	0.3048
Yard (yd)	Meter (m)	0.9144
Area Conversion Factors		
To convert from	To	multiply by
Square foot (sq ft)	Square meter (m <sup>2</sup> )	0.09290304
Acre (ac)	Hectare (ha)	0.4047
Volume Conversion Factors		
To convert from	To	multiply by
Cubic foot (cu ft)	Cubic meter (m <sup>3</sup> )	0.02831685
Gallon (gal)	Liter (l)	4.546
Quick reference		
1 acre	= 0.404686 ha	
1,000 acres	= 404.686 ha	
1 board foot	= 0.00348 cubic meters	
1,000 board feet	= 3.48 cubic meters	
1 cubic foot	= 0.028317 cubic meters	

## 2.0 Description of Forest Management

### 2.1 Management Context

The forest management estate (FME) is a publicly owned network of state forests administered by the Division of Forestry within the Ohio Department of Natural Resources. ODOF, by statute and/or longstanding policy, collaborates with other Divisions within the Department, such as the Division of Wildlife (DOW) as well as outside agencies (e.g., the USDA Forest Service) and organizations (e.g., The Nature Conservancy).

#### 2.1.1 Regulatory context

Box 2.1.1.1.	
<b>Pertinent Regulations at the National Level</b>	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 Lacey Act
<b>Pertinent Regulations and the State/Local Level</b>	Ohio Revised Code Chapter 1503 – Division of Forestry Ohio Revised Code Chapter 1501.5 – Agricultural Pollution Abatement Ohio Revised Code Chapter 1518 – Rare Species Ohio Revised Code Chapter 1531.25 – Rare Species Ohio Revised Code Chapter 921 – Pesticides Ohio Revised Code Chapter 149.51 – Desecration of known archeological sites. Ohio Revised Code Chapter 1509 – Oil and Gas Drilling. Ohio Administrative Code Chapter 1501.3 – Forest Rules. Ohio Administrative Code Chapter 901 – Dept of Agriculture rules. Ohio Fence Law Ohio Ditch Law

### 2.1.2 Environmental Context

<b>Box 2.1.2.1.</b>
<b>Environmental safeguards:</b>
<p>The Ohio DNR-Division of Forestry has environmental safeguards in place through several programs mostly outlined in their Land Management Manual. These programs are considered policy and all state foresters are trained and obligated to implement these programs. This manual includes a description of how all state forests are delineated into one of 5 major conservation zones that have defined management objectives. Ohio DOF has programs in place for the protection of soil and water resources, to protect streamside management zones, to address wet-weather logging, to conserve legacy trees and old growth forests, and to protect special sites and species. Ohio DOF relies on the Ohio Biodiversity Database to for locations of rare, threatened, and endangered species. Further, Ohio DOF has completed a High Conservation Value Forest Assessment and a Representative Sample Area Assessment for the entire FMU.</p>
<b>Management strategy for the identification and protection of rare, threatened and endangered</b>

### species and their habitats:

Ohio DOF relies on landscape level data such as LANDFIRE, USFS Forest Inventory and Analysis Program, and other in-house assessments to determine assessments of the landscape condition. At the local level, pre-activity assessments are completed for each activity that consider data from the Ohio Biodiversity Database for the presence of RTE species or their habitats. By policy, state forest managers are required to have on-the-ground consultations with biologists or botanists to confirm the findings of the database search. Concentrations of rare species or habitats are placed into more protected conservation zones. Outside experts recommend mitigation practices to Ohio DOF on the activities that are proposed.

### 2.1.3 Socioeconomic Context

Ohio's forests provide the public with many economic benefits, social benefits and services. In 2007, Ohio ranked sixth nationally in GDP from manufacturing of furniture and related products. A recent study found that Ohio's forest products industry contributes \$15.1 billion to Ohio's economy and employs over 119,000 people. Other economic benefits of forests include nature-based tourism and non-timber forest products (e.g., ginseng, maple syrup, Christmas trees). However, the benefits that forests provide goes beyond forest products and tourism and include numerous ecosystem services that may not have a dollar amount assigned to them. Some examples of ecosystem services include improved air and water quality, carbon sequestration, biodiversity, energy reduction in urban areas, and scenic landscapes for recreation. On the 12% of Ohio's forest land that is publicly owned, management often focuses on sustaining some or all of these benefits and services. While many private forest land owners enjoy many of these benefits and also manage for them, a recent woodland owner survey found that the vast majority are not seeking management advice from natural resource professionals (only 13% of family forest owners have sought advice). Investments of time, money, and expertise on all forest lands are necessary to sustain the important and diverse benefits and services that Ohio's forests provide to individual forest landowners and the general public.

#### *Wood Products*

Ohio is regularly one of the top 15 states for wood products and furniture manufacturing. The Gross Domestic Product (GDP) for wood-related industries in Ohio has been relatively stable over the past decade, with furniture prices showing a gradual increase. Timber prices in Ohio, however, have declined significantly since 2005. The total volume of roundwood harvests in Ohio was similar between 1989 and 2006, but the proportion of sawlog harvests increased during that time while pulpwood harvests decreased. Oak continues to be the dominant species harvested, although its relative dominance has decreased. The harvest of other species, like maple and yellow poplar, has increased. Economics and policy are driving the development of energy production from woody biomass. Planning for biomass-fueled power plants is underway but further analyses are needed to quantify potential sources of biomass and evaluate their sustainable use. Eighty-one percent of logs utilized by Ohio sawmills were harvested in Ohio, indicating that Ohio's wood products industry meets the majority of its demand using local (in-state) sources.

### *Non-timber Forest Products*

Some important non-timber forest products in Ohio are maple syrup, ginseng, and Christmas trees. In recent years, Ohio ranked 6<sup>th</sup> among states for annual production of maple syrup and ginseng, and 9<sup>th</sup> for Christmas trees. Of Ohio's various non-timber forest products, maple syrup has the greatest economic value (almost \$3.8 million in 2008).

### *Outdoor Recreation*

Public forest lands in Ohio are used for a variety of recreational activities, including hiking, camping, wildlife watching/photography, and trail riding (horses, mountain-bikes, ATVs). Nationally, Ohio continues to rank poorly for per capita outdoor recreation acreage. While the Ohio State Parks system is the principal land area devoted to meeting the Ohio citizenry's outdoor recreation use demands, the State Forests administered by the ODOF also provide important outdoor recreation use opportunities including camping, fishing, boating, hunting, shooting and hiking.

### *Investments*

Significant investments are being made in forest health, management, and research in Ohio. One important program that supports management on Ohio's private forest lands is the USDA Environmental Quality Incentive Program (EQIP), which invested \$1.8 million in 2009. The Ohio DOF has also invested over \$1 million in the last few years to procure and implement a forest information system, new imagery for state forests, and a comprehensive inventory of 80% of state forest acreage.

### *Indigenous People's Issues*

Ohio has no state or federally recognized tribes. There are no tribes that have current legal rights or other binding agreements on state forest land. Nonetheless, Native Americans still reside in Ohio. And tribes and other less formally structured Native American groups residing elsewhere trace their histories back to Ohio and, as such, have varying levels of interest in land management activities on public lands in Ohio.

In Ohio, the vast majority of indigenous sites are ceremonial earthen mounds which were constructed in pre-historic times and still exist throughout the landscape. These sites, which were important to pre-historic cultures, were often used and adopted by more recent indigenous cultures. Locations are known mound sites are held and managed by the Ohio Historical Preservation Office (OHPO) and are cataloged in a spatial database. Ohio – DOF as a regular practice consults the OHPO database during pre-activity assessments. Ohio is home to two protected concentrations of mounds; the Hopewell National Historic Park (NPS), and the Newark Earthworks Center (Ohio State University). Staff foresters have visited these sites and have received training on the importance and recognition of mounds and appropriate forest management practices near these sites. Current efforts in Ohio revolve around the formation of an advisory committee, consisting of archeologists, Native Americans, and other tribal representatives, who would offer consultation and development of best management practices for forest management in order to further protect these sites.

#### 2.1.4 Land use, Ownership, and Land Tenure

Ohio DNR-DOF manages over 203,000 acres of forestland divided into 21 separate state forests. Most of the state forest acreage (80%) is located in the southern un-glaciated hill country of Ohio. The largest state forest is over 64,000 acres and the smallest is around 300 acres. Currently, state forests are multiple-use forests with DOF having statutory authority to manage the forest sustainably. All state forests are open to the public for hunting, hiking, and other passive forms of recreation. Historically, many state forests were marginal farm or grazing land and received heavy-handed land use from timber extraction for iron-ore furnaces and mineral extraction. Many state forests were protected during the early part of the 20<sup>th</sup> century through efforts from agencies such as the Civilian Conservation Corps. State forests are now primarily managed for the sustainability of native forest ecosystems. There are some limited uses of state forests for oil and gas production and two state forests have leases for underground storage of natural gas. State forests are an important part of local rural economies due to recreation and tourism opportunities and the distribution of timber revenue to local counties, townships, and school district governments.

Eighty-eight percent of Ohio’s forest land is privately owned with the largest ownership category being family forests, which represent 73% of the state’s forests. The State of Ohio owns 5% or 423,000 acres of forest land in Ohio, with the Ohio Department of Natural Resources owning the largest block of that area. A total of 806,600 acres of forests is protected by ownership from land-use conversion, including local, state, and federally-owned government lands, as well as lands owned by non-governmental organizations like The Nature Conservancy. An additional 13,000 acres are protected through conservation easements held by the Ohio Division of Forestry. The Ohio Division of Forestry administers the Ohio Forest Tax Law program, which offers a property tax reduction for private forest lands that are maintained as forests. The program allows timber harvesting but does not allow clearing of forests for land-use conversion. Currently, over 177,000 acres of forest lands are enrolled in the Ohio Forest Tax Law program

### 2.2 Forest Management Plan

#### Box 2.2.1.1. – Forest Management Plan

##### Management objectives:

Ohio DOF has five-year state forest-specific management plans and associated supporting documents that relate back to the overall strategic plan objectives which are to:

- Manage forests to ensure the health and sustainability of forest systems.
- Produce high-quality forest products that contribute to local communities.
- Provide recreational opportunities that require a large forest land base.
- Provide unique forestry education sites and promote outreach and long-term research.

- Maintain a highly trained and well equipped work force.

**Forest Composition and Rationale for Species Selection:**

Ohio is fortunate to have a moderate amount of forestland. Of the State's 26.2 million acres, 7.86 million acres, or 30% of the total land area, is forested. Of this area, 7.57 million acres are considered productive forestland according to US Forest Service surveys. Within a state where agriculture represents an overwhelming percentage of the land use, this figure is significant. Of even more significance however, is the distribution of public and private forestland ownership. Approximately 93% of all forestland in Ohio is owned privately while the remaining 7% is owned by various public organizations. The Division of Forestry manages 203,000 acres or 2.4% of Ohio's forestland. Private forestlands are usually characterized by small, unmanaged or little managed parcels used for any single or variety of reasons with no coordination among parcels. Public forests on the other hand are generally extensive areas of forest cover with management objectives delineated and continuous throughout the ownership.

Ohio's state forests exist mostly in southern un-glaciaded portion of the state and exist on relatively xeric sites and are dominated mostly by oak/hickory forest types. Inventory data show that the majority of stands are dominated by oak/hickory forest types (75%); are in the saw timber size class (75%); and have relatively high stand densities (82%). Eighty-eight percent of state forest stands are between 40 and 80 years old. While oak species are prevalent in the overstory, they make up a very small percentage of the composition of the mid-story and understory suggesting that they will be replaced during succession. USFS FIA statewide data and other sources show that oak species are in decline in Ohio and are being replaced by more mesic shade tolerant species. Ohio DOF has an oak management strategy to promote the new oak regeneration in order to conserve oak forests.

**General Description of Land Management System(s):**

Silvicultural systems on state forests are outlined in the management guidelines for each of the conservation zones. Primarily, Ohio DOF has an oak management focus and relies on even-aged techniques such as shelterwood systems coupled with prescribed burning or other release techniques to promote new oak regeneration. Intermediate treatments (thinning and improvement harvests) are standard practice. Other silviculture systems such as single-tree selection and group selection are employed on more mesic sites. Forest compartments are reviewed on a 20-year cycle at which time foresters determine the prescriptions for each stand within a compartment. Foresters rely on USFS SILVAH Oak program to help determine appropriate prescriptions. All silvicultural systems are employed in natural forests and rely on natural regeneration techniques.

Ohio DOF, as a public land manager, has a robust recreation program with law enforcement obligations.

Ohio DOF actively manages forest-based recreational opportunities and facilities such as hiking and bridle trails, primitive camp sites, and shooting ranges. There are over 350 miles of recreation trails on state forests.

<b>Silvicultural System(s)</b>	<b>Area under type of management (ha or ac)</b>
<b>Even-aged management</b>	1,950 acres per year average
<b>Clearcut (clearcut size range)</b>	530 acres per year (17 acre average per site) average.
<b>Shelterwood</b>	320 acres per year average
<b>Other (e.g., coppice, variable retention, seed-tree)</b>	1100 acres of intermediate treatments (thinning, or improvement harvests) per year average.
<b>Uneven-aged management</b>	370 acres per year average
<b>Individual tree selection</b>	300 acres per year average
<b>Group selection</b>	70 acres per year average
<b>Other</b>	
<b>Non-timber Forest Products (NTFPs)</b>	0
<b>Silvo-pastoral production systems</b>	0
<b>Agro-forestry production systems</b>	0
<b>Other <sup>[1]</sup></b>	0
<b>Other</b>	0
<b>Harvest Methods and Equipment used:</b>	Conventional ground-based logging. Hand felling and rubber tired skidders. Cut-to-Length mechanized logging.
<b>Estimate of maximum sustainable yield for main commercial species (including NTFPs):</b>	41 million board feet

<sup>[1]</sup> For all bamboo management systems under the scope of the certificate, see FSC-ADV-30-502 for guidance.

**Explanation of the assumptions and reference to the data source upon which estimates are based:**

Over 80% of state forest acreage has a recent forest inventory data set. These data were “grown forward” using the publicly available Forest Vegetation Simulator (Northeast Variant) growth model. Net growth rates were summarized by forest and stand type and extrapolated to like stand types across the forest. The use of color infrared 4-band imagery contributed to the formation of canopy height models. The remaining 20% of state forest acreage inventory data were estimated using county averages from USFS FIA data. Other assumptions employed by DOF were to exclude non-productive forest land and to exclude conservation zones where special sites occur and timber extraction is limited or restricted.

**Explanation of the management structures:**

The Chief of the Division of Forestry has broad authority to manage state forestlands for multiple purposes. The Ohio Revised Code, Sections 1503.03, 1503.04 and 1503.05 empowers the Chief to “...acquire land suitable for forestry purposes . . . expend funds for the management, development and utilization of such lands . . . plant such trees as he deems expedient and take such measures as are necessary to bring about a profitable growth of timber. . .” The Chief “. . . has entire custody of such forest lands and . . . may sell timber and other forest products from the state forests whenever he considers such sale desirable. . . may grant easements and leases on portions of state forest lands . . . and may grant mineral rights on a royalty basis.”

In addition to this authority, the Chief receives advice from the Forestry Advisory Council (FAC). The FAC is a legally authorized body composed of eight members representing forest-based research activities, small private forestland owners, large private forest landowners, the pulp and paper industry, other forest industries, soil science, forest recreation and the public. “The Council may advise and make recommendations to the chief of the Division of Forestry concerning forestry practices and programs in the State, and may assist the division in promoting cooperation on forestry practices and programs with other agencies, political subdivisions, and private interest.” (ORC 1503.40)

State forests are grouped into eight administrative units; with each unit having a manager and associated support staff. There are approximately 70 employees on state forests; approximately 20 professional foresters or administrators and 50 support staff. There are eleven) Division of Forestry field offices located throughout the State. The ODNR-DOF is headquartered at 2045 Morse Road, Building H-1, Columbus, OH 43229-6693.

**2.2 Monitoring Systems**

**Box 2.3.1.1 – Monitoring procedures**

**Growth and Yield**

DOF has an integrated forest information system through which harvest levels and inventory data are tracked. DOF compiles inventory data each year from post-harvest cruising and prescription cruising and updates the database. These data are “grown forward” using the USFS Forest Vegetation Simulator (Northeast Variant) by stand and extrapolated to like stand types of similar composition, size class, and density. Mean Annual Increments for a ten-year period are included in each state forest plan and used for harvest scheduling purposes. Results of growth and yield analysis are checked against current FIA county averages for consistency. Current efforts revolve around capturing data on small outlying forests for which good data do not exist.

### **Forest Dynamics and Changes in Composition of Flora and Fauna**

Ohio DOF maintains an inventory database as part of their integrated forest information system. Forests are compartmentalized and these compartments are reviewed on a 20-year cycle. The compartment review consists of inventory activities for each stand within the compartment as well as any other features or special sites that may need monitored. The compartment review process serves not only as a mechanism for prescribing silvicultural activities but also as a mechanism to monitor changes in species composition, volumes, stocking, regeneration, stand composition and structure, and timber quality. The results of the compartment review are summarized in the compartment review report and loaded into the forest information system.

### **Environmental Impacts**

All prescribed activities, as well as recreational facilities, that occur on state forests are inspected during the activity and post-activity. These inspections serve as not only a monitoring of contract compliance but also as a monitor of environmental impacts. Inspections are designed to monitor the effectiveness of Best Management Practices, SMZ’s, contract terms, roads, trails, landings, and site rehabilitation. Inspections are done usually at least once per week on active sites. Inspections are documented on forms that include criteria relating to wildlife, aesthetics, erosion, rutting, residual stand damage, etc. Upon completion of an activity, a final inspection of overall contract compliance and efficacy is completed and approved by management. Inspection reports are summarized for overall trends in contract compliance and BMP effectiveness.

DOF has a Forest Health program that conducts annual monitoring of forest pests and other health issues and disseminates results throughout the agency. Local unanticipated loss or vulnerability is documented, reviewed, and treated as needed.

DOF has several other program areas through which monitoring takes place such as the prescribed fire program and recreation programs. These monitoring efforts are incorporated into management decisions.

DOF regularly obtains data from the Ohio Biodiversity Database, the Ohio Historical Database, and from biologists and botanists on RTE species and protection mechanisms.

## Social Impacts

The evaluation of social and economic impacts is undertaken by periodically gathering and considering information from several sources. One significant source of social and economic evaluative information is the Ohio Statewide Forest Resource Assessment and Strategy (FRAS). The Food, Conservation, and Energy Act of 2008 (the 2008 Federal Farm Bill) requires each state to complete a *Statewide Forest Resource Assessment and Statewide Forest Resource Strategy* to continue to receive funds under the Cooperative Forestry Assistance Act). The results of the FRAS and the associated strategies to deal with the identified threats is one of the sources that state forest managers incorporate into DOF's understanding of social and economic impacts of state forest management.

Other efforts of social and economic evaluation are included in the suite of particular programs and efforts specific to state forest management. Many DOF staff participate in various civic activities in their local community. DOF distributes a portion of the proceeds of timber revenue to local counties, townships, and school districts. The DOF utilization and marketing program works cooperatively with several agencies and industry to enhance Ohio's wood products markets and also publishes a bi-annual timber price report. The DOF law enforcement and recreation program through the administration of the various recreational facilities that exist on state forests, is developing a backcountry recreation management plan with user input. The recreation program tracks user data through voluntary user registrations located at each recreation facility. DOF engages citizen's through open houses and public meetings during their planning process and solicits comments on each year's planned activities.

## Costs, Productivity, and Efficiency

DOF's budgeting process and fiscal staff review time and activity reports and monitor employee duties and program reports. DOF has an Integration Committee tasked with management review of all program monitoring reports. This committee analyzes each year's progress and efficiency and makes management decisions for future directions.

## 2.4 Pesticide and Other Chemical Use

Commercial name of pesticide/ herbicide	Active ingredient	Quantity applied annually	Size of area treated annually	Reason for use
Razor, Rodeo, others	Glyphosate	6 gallons	22 acres	Invasive Species Control
AGS 203, Polaris, Arsenal	Imazapyr	51 gallons	1,637 acres	Invasive Species Control

Escort XP	Metasulfuron Methyl	2 ounces	120 acres	Invasive Species Control
AGS 203, Garlon	Triclopyr	155 gallons	1,567 acres	Invasive Species Control
<i>See FSC-GUI-30-001 V2-0 for a list of prohibited ingredients and other information on chemical use in FSC-certified operations.</i>				

### 3.0 Certification Evaluation Process

#### 3.1 Evaluation Dates and Activities

##### 3.1.1 – Evaluation Itinerary and Activities

Date	Location/ sites visited*	Activities/ notes
September 14, 2010	ODNR Central office	Introductions and Opening Meeting; transit to the first two field sites (north/south) in the late afternoon
September 14, 2010	Mohican SF	Northern Audit Sub-Team --Opening discussion & overview of property history and activities (e.g., moratorium on timber harvesting) --Field examination of a well-head to discuss surface vegetation issues and mitigations --Field visit to Discovery Demonstration Forest to discuss white pine mgt., interpretive issues, clear cuts, --discussion of stimulus-funded job corps activities on the state forests
September 14, 2010	Pike SF	Southern Audit Sub-Team
September 15, 2010	Fernwood SF, Blue Rock SF	Northern Audit Sub-Team -- Fernwood: Opening discussion & overview of property history and activities --Field visit to a recreation site

		<p>including a campground and shooting ranges</p> <ul style="list-style-type: none"> <li>--Discussion of public use and resource interpretation</li> <li>--Field visit to a mine reclamation site to view tree growth and discuss evolution of remediation strategies</li> <li>--Blue Rock: Opening discussion &amp; overview of property history and activities</li> <li>--Examination of the effects of budget and staff reductions</li> <li>--Discussion of oil &amp; gas activities on the forest</li> <li>--Field visit to a red pine/white pine timber sale (approx. 64 acres); examination of stream buffers and in-stand retention, ODOF oversight of loggers; interview of two contract loggers</li> <li>--Field visit to an ailanthus ("tree of heaven," a noxious weed) clearing project being implemented by a OWJC crew; discussion of exotic control and the use of job corps labor</li> </ul>
September 15, 2010	Brush Creek SF, Shawnee SF	Southern Audit Sub-Team
September 16, 2010	Zaleski SF	Southern Audit Sub-Team
September 16, 2010	Shawnee SF	<p>Northern Audit Sub-Team</p> <ul style="list-style-type: none"> <li>-- Opening discussion &amp; overview of property history and activities</li> <li>--Field visit to the April 2009 wildlife site (3,000 acres); examination of salvaged versus unsalvaged areas; discussion of fire rehab activities including road management</li> <li>--Field visit to Blackburn Ridge to</li> </ul>
September 17, 2010	ODNR Central office	Closing meeting and briefing.

### 3.1.2 – Individuals with Whom the Audit Team Interacted

#### Opening Meeting

9/14//2010 Columbus, OH

<u>Name</u>	<u>Position/Title</u>
Mike Ferrucci	Lead Auditor
Robert Hrubes	Lead Auditor
Gary Zimmer	Auditor
Andy Dickerson	Auditor
Andy Ware	Division of Forestry
David Lytle	Chief-DOF
Gregg Maxfield	District Forester-North
Andy Sabula	Utilization + Mktg.
Richard Lusk	Law Enf./ Rec. Program Admin.
Greg Smith	Information + Education Administration
Rick Miller	Land Management Forester Southern District
Greg Guess	Silviculturalist
Dan Balsler	Forest Health Program Mgr.
Chad Sanders	Land Mgt. Administrator
Bob Boyles	Dist. Manager
Nathan Kirk	State Forest Admin.
Mike Bowden	State Fire Supervisor
Jennifer Windeis	DOW-Biologist
Daniel Yousi	USDA Research
Greg Schneider	DOW- Ex-Botanist, Now Ohio Biodiversity Database

#### Mohican State Memorial Forest

9/14/2010

<u>Name</u>	<u>Position/Title</u>
Robert Hrubes	Lead Auditor
Gary Zimmer	Auditor
Tim Humphrey	Property Manager
Mark Thompson	Forestry Tech.

Rick Miller	Land Management Forester
Nathan Kirk	State Forest Admin.
Frank Barry	Columbia Gas

**Fernwood State Forest**

**9/15/2010**

<u>Name</u>	<u>Position/Title</u>
Robert Hrubes	Lead Auditor
Gary Zimmer	Auditor
Frank Corona	Forest Manager
Rick Miller	Forester

**Pike State Forest**

**9/15/ 2010**

<u>Name</u>	<u>Position/Title</u>
Mike Ferrucci	Auditor
Andy Dickerson	Auditor
Chad Sanders	Land Management Administrator
Dick Lusk	Law Enforcement/Recreation
Bob Boyles	Southern District Forest Manager
Greg Guess	Southern District Land Management Coordinator
John Bauerbach	Forester
Steve Rist	Forester

**Blue Rock State Forest**

**9/15/2010**

<u>Name</u>	<u>Position/Title</u>
Robert Hrubes	Lead Auditor
Gary Zimmer	Auditor
Dave Glass	Forest Manager
Charlie Lee	Land Management Forester
Todd Vorhees	LA Horn Logging & Land Clearing
Timmy Bingham	LA Horn Logging & Land Clearing

**Brush Creek and Shawnee State Forests**

**9/15/2010**

<u>Name</u>	<u>Position/Title</u>
Mike Ferrucci	Auditor
Andy Dickerson	Auditor
John Bauerbach	Forester
Steve Rist	Forester
Nate Jester	Shawnee State Forest Property Manager
Brad Wireman	Forester
Mike Bowden	Fire Program Coordinator
Chad Sanders	Land Management Administrator
Bob Boyles	Southern District Forest Manager, ODOF
Greg Guess	Southern District Land Management Coordinator, ODOF
Randy Bobbins	Crew Leader, Ohio Jobs Corps
James Wallace, Adam Groomes, Josh Garland,	Crew Members, Ohio Jobs Corps

### **Shawnee State Forest**

**9/16/2010**

<u>Name</u>	<u>Position/Title</u>
Robert Hrubes	Lead Auditor
Nate Jester	Forest Manager
Brad Wireman	Land Management Forester
Chad Saunders	Land Management Administrator
Mike Bowden	State Fire Supervisor
Bob Boyles	District Mgr.
Greg Guess	Dist. Silviculturist

### **Zaleski State Forest**

**9/16//2010**

<u>Name</u>	<u>Position/Title</u>
Gary Zimmer	Auditor
Ronald Collins	Forest Tech. Zalesky
Danzil Walhur	Forester
Tom Shuman	Forest Manager
Nathan Kirk	State Forest Admin.
Richard Lusk	Law Enf/ Rec. Admin.
Mike Reynolds	Biologist, Division of Wildlife
Mike Ferrucci	Lead Auditor
Andy Dickerson	Auditor

### **Closing Meeting**

**9/17/2010 Columbus, OH**

<u>Name</u>	<u>Position/Title</u>
Chad Sanders	Land Mgt. Administrator
Rick L. Miller	Forest
Andy Ware	Assistant Chief
	Information + Education
Greg Smith	Administration
Nathan Kirk	State Forest Admin.
Richard Lusk	LE/ Rec. Admin.
David Lytle	Chief
	Forest Health Program
Dan Balsler	Mgr.
Bob Boyles	Dist. Manager
Mike Bowden	Fire Supervisor
Aaron Kloss	Forest Planner
Gregg Maxfield	Dist. Manager-North
	Special Projects
	Administrator/ Forest
Cotton Randall	Legacy Mgr.

### 3.1.2 – Total Auditor Time Spent on the Evaluation\*

• Number of audit team days spent on-site assessing the applicant:	4
• Number of auditors participating in on-site evaluation:	4
• Additional auditor days spent on stakeholder consultation (prior to and after the field work):	3
• Number of auditor days spent on report preparation	4
• <b>Total number of auditor days expended in the evaluation:</b>	<b>23</b>

### 3.1.3 – Evaluation Team

**Robert J. Hrubes, Ph.D.**

**Role: Lead Auditor**

Dr. Hrubes is a California registered professional forester (#2228) and forest economist with over 30 years of professional experience in both public and public forest management issues. He is presently Senior Vice-President of Scientific Certification Systems. In addition to serving as team leader for the Ohio 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 SCS Forest Conservation Program evaluations of North American public forests, 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, economics and resource systems management 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.

**Michael Ferrucci**

**Role: Audit Team Member**

Mike Ferrucci has over 30 years of experience in the forestry industry with expertise ranging from sustainable forest management planning and certification to the application of easements for large-scale working forests. Mr. Ferrucci has conducted audits of forest management operations throughout the United States and abroad, with field experience in 4 countries and 30 U.S. states, including 7 field audits of the Michigan State Forest System.

Mr. Ferrucci currently serves as SFI Program Manager for NSF International Strategic Registrations (NSF-ISR) where he is responsible for all aspects of the SFI Certification program. He is qualified as a Lead Auditor to conduct Chain of Custody, Procurement System or Sustainable Forest Management audits under the Sustainable Forestry Initiative Standard® (SFI), the Forest Stewardship Program (FSC), and the Tree Farm Group Certification programs. Mike is also credentialed as a Lead Auditor under RAB-QSA (ISO 14001 Environmental Management Systems) and is a Greenhouse Gas Lead Auditor.

**Mr. Gary Zimmer**

**Audit Team Member:**

Gary Zimmer is a certified wildlife biologist with 21 years of professional experience in public and private forest management. A native of Northern Wisconsin, Gary is currently the Western Great Lakes Regional Biologist with the Ruffed Grouse Society. He holds a M.S. degree in natural resources from the University of Wisconsin – Stevens Point and also received a B. S. degree from the same academic institution, in wildlife management. He was employed for 18 years with the USDA Forest Service in a variety of positions ranging from forestry technician to district biologist. Since leaving federal service in 2000, Gary has worked closely with public and private land managers throughout a five-state region managing forest wildlife habitat.

**Andy Dickerson**

**Audit Team Member:**

Mr. Dickerson is an environmental scientist and ecologist with almost 20 years of professional experience with both for-profit and not-for-profit private entities in the Midwest. He holds a M.S. degree for the University of Wisconsin-Green Bay in Environmental Science and Policy-Ecosystem Management and a B.A. degree from Miami University in Zoology. He is a nationally certified Burn Boss and a licensed herbicide applicator. Mr. Dickerson's professional experience includes employment with The Nature Conservancy in both Kentucky and Ohio as well as holding senior-level professional positions with private sector firms such as BHE Environmental, Little Miami, Inc., and MTM Environmental.

## **3.2 Evaluation of Management System**

### **3.2.1 – Methodology and Strategies Employed**

The audit employed a number of different strategies to conduct the audit and to obtain the necessary documentation and input.

The audit team met at the ODNR Offices in Columbus for the opening meeting and discussion with key ODNR staff; USDA Forest Service personnel also participated in the opening meeting. At this time management information was obtained from discussions and presentations by ODNR. During the break-out sessions and working lunch, interviews were conducted, along with a review of documents, including deeds, tax receipts, financial statements, training records, annual reports, contracts for a variety of operations, road management plans, cruise manual, marking rules, pesticide reports and prescriptions, programmatic stream alterations agreement, and others.

Following the office session the audit team was split into two teams in the field. The auditors on each team toured pre-selected sites to field verify the operations. For the days in the field, the team was split into two sub-teams, one with field tour sites in the northern/eastern and the other with field tour sites in southern portions of the State.

On the fourth day, the audit team again met in the ODNR Offices in Columbus to gather remaining required documents, and a closing meeting was held with key ODNR staff in attendance to go over the preliminary findings of the audit.

The team worked independently on stakeholder consultation using a public meeting (held in Chillicothe on the second night of the audit), email correspondence, and telephone contacts as the means of gathering stakeholder input. The audit team leader drafted the initial audit report with input provided by the other team members.

### **3.2.2 – Preliminary Evaluation**

Per FSC requirements, ODOF underwent a preliminary evaluation prior to pursuing a full evaluation. See Appendix 8 of this document for the Preliminary Evaluation Audit Report, conducted in January, 2010.

### 3.3 Stakeholder Consultation Process

Per FSC requirements and established procedures under the SCS Forest Conservation Program, the following actions were undertaken for the purpose of soliciting stakeholder input and comments on DOF's management of the Ohio State Forests:

- A public announcement was widely distributed via email and surface mail prior to the preliminary assessment of the Ohio State Forests that was conducted in January, 2010; stakeholder comments were solicited as part of this public notice.
- A similar public notice was widely distributed via email and surface mail 30 days prior to the September 2010 full certification evaluation; as with the pre-assessment public notice, the full evaluation public notice included a solicitation of stakeholder comments and the announcement of the public meeting that was to be held during the week of the full evaluation. Approximately 175 individuals received the public notice, directly. As was requested in the public notice, we expected and were able to confirm that the public notice was forwarded by direct recipients to others.
- A public meeting (announced as part of the 30-day public notice for the full evaluation) was held in Chilicothe, OH. The meeting, held on the evening of September 15<sup>th</sup>, drew 18 attendees representing a cross-section of stakeholder interests. See the table, below, for the list of attendees at the public meeting.

#### Attendees at Public Stakeholder Meeting

9/15/2010

<u>Name</u>	<u>Affiliation</u>
Joanne Rebbeck	USFS Northern Research Station
Jim Robertson	Great Seal Volunteers
Robert Klouman	Adams County Landowner
Kim Klouman	Adams County Landowner
Annette McCormick	Richland Co. Ohio
Jan Kennedy	Richland Co. Ohio
Cheryl Carpenter	Lucasville, Ohio
Tony Machamer	Superior Hardwoods of Ohio

Susi Ronkis	Rural Action Inc.
Eric Roush	Glatfelter
Kelly Snyder	Glatfelter
Nathan Johnson	Buckeye Forest Council
Cheryl Johncox	Buckeye Forest Council
Jamie A. Sharp	River's Bend
Barbara A. Land	Save our Shawnee Forest
Robert Kyle	Sierra Club
Dave Minney	The Nature Conservancy
Jarel Bartig	Wayne National Forest

- The SCS lead auditor engaged in numerous email exchanges and telephone interviews with approximately 15 stakeholders, some of which also attended the public meeting in Chillicothe. These one-on-one email and telephone exchanges occurred prior to the pre-assessment, between the pre-assessment and the full evaluation, during the field audit portion of the full evaluation, and after the field audit was concluded.

The following were distinct purposes to the stakeholder consultations:

1. To solicit input from affected parties as to the strengths and weaknesses of ODOF’s management of the Ohio State Forests, relative to the FSC National Standard, and the nature of the interaction between the Division and the surrounding communities.
2. To solicit input on whether the forest management operation has consulted with stakeholders regarding identifying any high conservation value forests (HCVFs).

Principal stakeholder groups relevant to this evaluation were identified based upon results from the preliminary evaluation, lists of stakeholders provided by DOF, and additional stakeholder contacts from other sources (e.g., chair of the regional FSC working group). The following types of groups and individuals were determined to be principal stakeholders, with local environmental or concerned citizen groups being the most active in responding to our solicitations:

<b>Box 3.3.1 –Categories of Stakeholders Consulted During the Ohio State Forests Evaluation</b>	
FME Management and staff	Pertinent Tribal members and/or representatives
Consulting foresters	Members of the FSC National Initiative

Contractors	Members of the regional FSC working group
Lease holders (e.g., oil & gas)	FSC International
Adjacent property owners	Local and regionally-based environmental and conservation organizations and conservationists
Local and regionally-based social interest and civic organizations	Forest industry groups and organizations
Purchasers of logs harvested on the state forestlands	Local, state, and federal agency personnel
User groups, such as hikers, ATV users, and others	Other relevant groups

The stakeholder consultation activities were organized to give participants the opportunity to provide comments according to general categories of interest based on the three FSC chambers. The table below summarizes the major comments received from stakeholders and the assessment team’s response. Where a stakeholder comment has triggered a subsequent investigation during the evaluation, the corresponding follow-up action and conclusions from SCS are noted below.

<b>Box 3.3.2 – Summary of Stakeholder Comments and Responses from the Team Where Applicable</b>	
<b>Stakeholder comments</b>	<b>SCS Response</b>
<b>Economic Comments</b>	
The forest products industry in Ohio will benefit if the state forests get certified; FSC certification has been instrumental in the survival of wood processing companies in Ohio	Duly noted
Recreation use opportunities on the state forests are not commensurate with outdoor recreation pursuits of Ohio citizens	Duly noted
Receipts from timber sales “pays the bills” for public activities such as schools	Duly noted
State timber is “under sold”	Timber sales are sold in competitive bids and, as such, generally reflect market value
<b>Social Comments</b>	
Certification would be beneficial in that it would bring an additional set of standards against DOF must operate	Duly noted
The Ohio Forest Resource Assessment and Strategy (FRAS) report does not accurately reflect desires of Ohioans	Duly noted
DOF should be applauded for engaging in certification	Duly noted
Certification of lands in the tax law program should be encouraged	Duly noted
Bicycle riders would like to have access to trails on Tar Hollow State Forest	This comment was passed onto DOF

ODOF is not adequately considering the perspectives of stakeholders when formulating and executing policies such as those related to the use of prescribed fire.	A corrective action request was issued relative to this topic (CAR 2010.1)
There is inadequate transparency in DOFs operations; the open houses, by themselves, does not provide adequate transparency and opportunities for public input	A corrective action request was issued relative to this topic (CAR 2010.1)
Selection harvesting is much more aesthetically acceptable	Duly noted
The state forests should be state preserves; certification should not be extended to the state forests	Duly noted
Biodiversity rather than timbering should be the focus of management	Duly noted
<b>Environmental Comments</b>	
Elimination of DNAP will raise issues of non-conformity	Duly noted; the implications of eliminating the DNAP were investigated during the audit
In the past, DOF documents have stated that fire is not a natural part of the forest ecosystem	Prescribed fire was investigated thoroughly as part of this certification evaluation
Clearcutting is creating significant adverse impacts; there has been an increase in the use of clearcutting	Even-aged harvesting is the subject of several findings resulting from the certification evaluation
Prescribed fire is not being analyzed sufficiently in advance	A finding <sup>5</sup> was issued relative to this topic (OBS 2010.4)
Logging slash is creating a fire hazard	DOF is placing a high priority on fuels management
Clearcuts and logging slash are impacting recreational trails	The audit team did not see evidence of a problem in this regard but we will look into this issue in subsequent audits
Summer logging has more impacts	Duly noted
Low intensity prescribed fire is ecologically justified	Duly noted
There are major road erosion problems on Blackburn Ridge	This site was visited and a corrective action request was issued (CAR 2010.5)

<sup>5</sup> Per FSC conventions, a “finding” can be either a major or minor “corrective action request” (CAR) or an “observation” (OBS).

#### 4.0 Results of the Evaluation

Table 4.1.1 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) and Observation (OBS) numbers related to each principle.

**Table 4.1.1 Notable strengths and weaknesses of the forest management enterprise relative to the FSC P&C.**

Principle/ Subject Area	Strengths Relative to the Standard	Weaknesses Relative to the Standard
<b>P1: FSC Commitment and Legal Compliance</b>	<p>DOF operates in strong conformance with applicable laws and regulations.</p> <p>DOF’s management planning documents indicate a strong commitment to managing the state forests in conformity with the FSC certification standard.</p>	
<b>P2: Tenure &amp; Use Rights &amp; Responsibilities</b>	<p>DOF’s rights and authorities to manage the Ohio State Forests is beyond question.</p> <p>There are appropriate mechanisms in place for resolving disputes over tenure claims and use rights.</p>	
<b>P3: Indigenous Peoples’ Rights</b>	<p>DOF has recently initiated a focused effort to make contact with tribal representatives for the purpose of offering opportunities for input and collaboration.</p>	
<b>P4: Community Relations &amp; Workers’ Rights</b>	<p>Communities within and adjacent to the state forests are provided opportunities for employment, training and other services.</p> <p>Forest work is offered in ways that create high quality job opportunities for employees.</p> <p>Hiring practices and conditions of employment are non-discriminatory.</p>	<p>Stakeholder consultation procedures could be more robust.</p> <p>DOF’s dispute resolution mechanism needs to be more widely known and accessible.</p>

	<p>Forest management operations meet or exceed applicable health and safety requirements.</p> <p>The rights of forest workers to organize and voluntarily negotiate are assured.</p> <p>DOF has enhanced its efforts and mechanisms for keeping track of and considering possible social impacts of management policies and practices.</p> <p>Appropriate mechanisms are available for resolving employee disputes and grievances.</p>	
<p><b>P5: Benefits from the Forest</b></p>	<p>DOF’s forest management and marketing operations encourage optimal use and local processing,</p> <p>DOF timber sales are structured so that small businesses can bid competitively.</p> <p>Management practices are employed to minimize the loss and waste of harvested forest products.</p> <p>Timber harvest levels are clearly conservative and sustainable relative to periodic increment.</p> <p>DOF strives to diversify the economic uses of the State Forests.</p>	<p>The process employed for establishing the annual allowable harvest (AAC) is not adequately documented.</p> <p>The FMU-wide assessment of forest conditions is not documented in a fully coordinated and coherent manner.</p> <p>There is an opportunity to engage in additional scientific consultation regarding the use of prescribed fire as a tool for achieving desired forest cover conditions.</p>
<p><b>P6: Environmental Impact</b></p>	<p>Prior to commencing site-disturbing activities, DOF assesses and documents the potential environmental impacts of planned management activities.</p>	<p>DOF management programs and activities, as articulated in management plans need to more effectively contribute to landscape-level biodiversity conservation goals.</p>

	<p>Environmental assessment documents are publicly available.</p> <p>DOF management policies comply with FSC requirements regarding old growth.</p> <p>Riparian management zones (buffers) conform to FSC requirements and are effective and minimizing impacts to watercourses.</p> <p>DOF has completed a representative sample area (RSA) assessment that is responsive to the FSC requirements.</p> <p>DOF has promulgated written guidelines for controlling erosion, minimizing adverse impacts of timber harvesting, road construction, and protection of water resources.</p> <p>Forest practices are undertaken in a manner leading to solid overall conformance with state BMPs.</p> <p>Chemical use is limited in extent and conducted under properly controlled procedures.</p> <p>GMO's are not deployed on the FMU.</p> <p>DOF actively engages in efforts to monitor and control invasive exotic species.</p> <p>DOF is committed to minimizing the loss of forest cover to non-forest uses.</p>	<p>There needs to be improved coordination with the Division of Wildlife with regard to Guidelines for the Management of Forestland Habitats.</p> <p>More consistent conformance with road maintenance BMPs is needed.</p> <p>Ongoing staff reductions and the elimination of the Division of Natural Areas and Preserves is straining the Department's ability to conform to the RTE assessment and survey requirements.</p> <p>Retention of residual live trees within an even-aged regeneration harvest must be 20 square feet of basal area per acre in order to comply with Appendix C of the National Standard.</p> <p>Not all field foresters demonstrate an adequate working knowledge of stream buffer guidelines.</p>
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<b>P7: Management Plan</b>	<p>DOF has developed a compendium of management planning documents that area explicitly designed to comply with FSC requirements.</p> <p>All management planning documents are publicly available.</p>	<p>The compendium of documents comprising the management plan does not address all topics required by the FSC certification standard, Principle 7.</p> <p>The Land Management Manual is not readily accessible to the public.</p> <p>ODNR should incorporate into its planning documentation an explicit and affirmative statement that management plan revisions will take place on a frequency no longer than every 10 years.</p>
<b>P8: Monitoring &amp; Assessment</b>	<p>DOF engages in a robust array of monitoring activities.</p> <p>Monitoring results are publicly available.</p>	<p>More systematic post-treatment monitoring of prescribed fire prescriptions is needed.</p> <p>Road system monitoring procedures are not being consistently implemented in the field.</p>
<b>P9: High Conservation Value Forests</b>	<p>DOF has designed and completed an HCVF analysis expressly intended to comply with FSC requirements.</p>	<p>A public summary of HCVF monitoring is needed.</p>

**Table 4.1.2 Summarized Presentation of Findings Relative to FSC Criteria**

<i>For Criteria without any non-conformances or observations, the audit team determined that the FME met the requirements of the applicable FSC standards. Table 4.1.1 above summarizes the notable strengths that led to findings of conformance. As further elaborated in sections 4.2.2-4.2.4, non-conformances and/or observations were raised for the following Indicators:</i>		
<b>Principle/ Subject Area</b>	<b>Non-conformances</b>	<b>Observations</b>
<b>P1: FSC Commitment and Legal Compliance</b>	No non-conformances raised relative to this Principle	OBS 2010.1—Indicator 1.5.b
<b>P2: Tenure &amp; Use Rights &amp; Responsibilities</b>	No non-conformances raised relative to this Principle	No observations raised relative to this Principle
<b>P3: Indigenous Peoples'</b>	No non-conformances raised relative	No observations raised relative to

<b>Rights</b>	to this Principle	this Principle
<b>P4: Community Relations &amp; Workers' Rights</b>	CAR 2010.1—Indicator 4.4.b, 4.4.d CAR 2010.2—Indicator 4.5.b	No observations raised relative to this Principle
<b>P5: Benefits from the Forest</b>	No non-conformances raised relative to this Principle	OBS 2010.2—Indicator 5.6.a
<b>P6: Environmental Impact</b>	CAR 2010.3—Indicator 6.2.c CAR 2010.4—Indicator 6.3.f CAR 2010.5—Indicator 6.5.d	OBS 2010.3—Indicator 6.1.a OBS 2010.4—Indicator 6.1.b, 6.3.i OBS 2010.5—Indicator 6.2.a OBS 2010.6—Indicators 6.3.e & 6.9.a OBS 2010.7—Indicator 6.3.g.1 OBS 2010.8—Indicator 6.3.h OBS 2010.9—Indicator 6.5.e
<b>P7: Management Plan</b>	CAR 2010.6—Indicator 7.1.p CAR 2010.7—Indicator 7.4.b	OBS 2010.10—Indicator 7.1.b OBS 2010.11—Indicator 7.2.a OBS 2010.12—Indicator 7.3.a
<b>P8: Monitoring &amp; Assessment</b>	CAR 2010.8—Indicator 8.2.d.1 CAR 2010.9—Indicator 8.2.d.2	No observations raised relative to this Principle
<b>P9: High Conservation Value Forests</b>	CAR 2010.10—Indicator 9.1.c Major CAR 2010.1—Indicator 9.4.a <sup>6</sup>	No observations raised relative to this Principle
<b>P10: Plantations</b>	Not applicable to this evaluation	Not applicable to this evaluation
<b>Group Management</b>	Not applicable to this evaluation	Not applicable to this evaluation

## 4.2 Process of Determining Conformance

### 4.2.1 Structure of Standard and Degrees of Non-Conformance

FSC-accredited forest stewardship standards consist of a three-level hierarchy: principle, the criteria that correspond to that principle, and then the performance indicators that elaborate 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 therefore must use their collective judgment to assess each criterion and determine if the FME is in conformance. If the FME is

<sup>6</sup> As detailed elsewhere in this report, Major CAR 2010.1 is being closed concurrent with the issuance of the report on the basis of corrective actions undertaken by ODNR in response to the Major CAR.

determined to be in non-conformance at the criterion level, then at least one of the applicable indicators must be in major non-conformance.

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

<b>Box 4.2.1 - Interpretations of Major CARs (Preconditions), Minor CARs and Observations</b>
<i>Major CARs/Preconditions:</i> Major non-conformances, either alone or in combination with non-conformances of all other applicable 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 before a certificate can be awarded. If Major CARs arise after an operation is certified, the timeframe for correcting these non-conformances is typically shorter than for minor CARs. Certification is contingent on the certified FME’s response to the CAR within the stipulated time frame.
<i>Minor CARs:</i> 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. Most minor CARs are the result of non-conformity at the indicator-level. Corrective actions must be closed out within a specified time period of award of the certificate.
<i>Observations:</i> These are subject areas where the audit team concludes that there is conformance, but either future non-conformance may result due to inaction or the FME could achieve exemplary status through further refinement. Action on observations is voluntary and does not affect the maintenance of the certificate. However, observations can become CARs if performance with respect to the indicator(s) triggering the observation falls into non-conformance.

#### 4.2.2 Major Corrective Action Requests (CARs)—Pre-Conditions

<b>Nonconformity:</b> ODNR has not yet developed and begun to implement a program to annually monitor the status of specific HCV attributes including the effectiveness of the measures employed for their maintenance or enhancement.	
<b>Major CAR 2010.1</b>	Develop and document a procedure, including an implementation schedule, for annually monitoring the effectiveness of the measures employed to maintain or enhance high conservation values within delineated high conservation value forest areas.
<b>Deadline</b>	Prior to award of certification
<b>Reference</b>	FSC US National Standard, Criterion 9.4, Indicator 9.4.a
<b>ODOF Response</b>	From a letter of November 10, 2010 to the SCS Lead Auditor, signed by Chad Saunders, Land Management Administrator, Division of Forestry:  “In the time since our verification audit, the Division of Forestry has completed the following steps to address this nonconformity in order to be in conformance

	<p>with indicator 9.4.a.</p> <ol style="list-style-type: none"> <li>1) The ODNR – Division of Forestry and Division of Wildlife have agreed to cooperate on annual monitoring efforts of HCV attributes on state forest designated High Conservation Value Forests. The Division of Wildlife has offered their in-house botanist to work in conjunction with the Division of Forestry’s in-house botanist, local foresters, and district managers to complete monitoring activities.</li> <li>2) The Division of Forestry has updated Chapter 12 – Monitoring, of our Land Management Manual (attached) to describe the monitoring activities and the schedule of those activities.</li> <li>3) The Division of Forestry will revise its “Annual Work Plans” for each forest that contain HCVF to include a schedule of the HCVF’s that will be monitored in any given year.</li> <li>4) The Division of Forestry’s monitoring will also include a review of the zoning system and any proposed changes in the zones will be reviewed in order to further protect HCV attributes.”</li> </ol> <p>Chapter 12 of the Land Management Manual, revised and appended to the November 10<sup>th</sup> letter, was reviewed by the Lead Auditor and it was found that the additions to this Chapter do, indeed, implement the actions bulleted, above. The monitoring protocols, as now memorialized, constitute appropriate responses to National Indicator 9.4.a. In subsequent annual surveillance audits, the audit team will follow-up and confirm that the HCVF monitoring protocols are being properly implemented.</p>
<b>Status</b>	<p><b>Closed</b></p> <p>On the basis of the actions undertaken by ODOF in response to this Major CAR, we conclude that the non-conformity has now been adequately addressed, warranting closure of this Major CAR. Accordingly, this matter no longer constitutes a barrier to the award of certification.</p>

### 4.2.3 Minor Corrective Action Requests (CARs)

<p><b>Nonconformity:</b> The manner and methods by which ODOF seeks and considers input in management planning from people who would likely be affected by management activities, while having been enhanced in the past year, is not yet resulting in an adequate level of satisfaction amongst stakeholders that their views are being appropriately solicited and considered. As a public agency, the adequacy of ODOF’s stakeholder consultation procedures is in no small part reflected by overall level of citizen satisfaction in engaging in those procedures.</p>	
<b>Minor CAR 2010.1</b>	<p>Develop and implement more robust methods for seeking and considering stakeholder input as part of the management planning processes, both tactical (e.g., project planning) and strategic (e.g., statewide forest plans).</p>

<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Indicator 4.4.b

<b>Nonconformity:</b> The availability of the ODNR’s dispute resolution mechanism is not adequately known and, as such, is not adequately accessible to interested stakeholders wishing to voice grievances and have them resolved.	
<b>Minor CAR 2010.2</b>	Take actions to make widely known and accessible the Department’s dispute resolution mechanism.
<b>Deadline</b>	Three months after award of certification
<b>Reference</b>	FSC US National Indicator 4.5.b

<b>Nonconformity:</b> There is insufficient evidence that management plans and operations on the Ohio State Forests are designed to meet landscape-level biodiversity conservation goals.	
<b>Minor CAR 2010.3</b>	Review, revise and better document, as appropriate, management planning and operations so as to better meet landscape-level biodiversity conservation goals
<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Indicator 6.2.c

<b>Nonconformity:</b> There is inadequate coordination between the Division of Forestry and the Division of Wildlife regarding the “Guidelines for Management of Forestland Habitats.” There is a lack of clarity as to the intent of the Guidelines and references to the Guidelines in the Manual appear to be overstated.	
<b>Minor CAR 2010.4</b>	Develop improved modes of coordination with the Division of Wildlife regarding the “Guidelines for Management of Forestland Habitats” and clarify the manner in which these Guidelines will be employed in the field.
<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Standard, Indicator 6.3.f

<b>Nonconformity:</b> The Blackburn Ridge road does not meet the Department’s best management practices and, by extension, the FSC requirement that the road system is maintained to reduce short and long-term environmental impacts.	
<b>Minor CAR 2010.5</b>	Correct the situation on the Blackburn Ridge road and confirm and document that this is an isolated incident; if other situations exist of inadequate compliance with the Ohio BMPs, take appropriate actions with documentation that will provide evidence to SCS so as to assure full compliance with road related BMPs.

<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Indicator 6.5.d

<b>Nonconformity:</b> Management plans do not adequately describe and justify the types and sizes of harvesting machinery and harvesting techniques employed on the FMU.	
<b>Minor CAR 2010.6</b>	Incorporate into the body of documents constituting the management plan for the Ohio State Forests (e.g., the property specific management plans)a description and justification for the types and sizes of harvesting machinery and harvesting techniques that are used.
<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Indicator 7.1.p

<b>Nonconformity:</b> The Land Management Manual is not easily accessible to the public, thus constituting a non-conformance with the FSC requirement that managers of public forests make draft management plans, revisions and supporting documentation easily accessible for public review and comment.	
<b>Minor CAR 2010.7</b>	Make the Land Management Manual easily accessible to the public.
<b>Deadline</b>	Three months after award of certification.
<b>Reference</b>	FSC US National Indicator 7.4.b

<b>Nonconformity:</b> ODOF is not adequately engaging in post-treatment monitoring of prescribed fire prescriptions to ensure that they are properly implemented, that any possible adverse environmental impacts are identified and minimized, and that the prescriptions are effective in achieving the desired outcomes.	
<b>Minor CAR 2010.8</b>	With input from the scientific community, design and implement improved and more structured post-treatment evaluation procedures for assessing the effectiveness of prescribed fire treatments in achieving desired forest cover conditions.
<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Indicators 8.2.d.1

<b>Nonconformity:</b> Road system monitoring procedures are not being consistently implemented in the field.	
<b>Minor CAR 2010.9</b>	Take actions that will assure a higher and more consistent level of implementation of the road system monitoring procedures.
<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Indicator 8.2.d.2

<b>Nonconformity:</b> A summary of the assessment of results for identifying areas possessing high conservation values and the management strategies employed for maintaining or enhancing those values is not readily available to the public.	
<b>Minor CAR 2010.10</b>	Prepare and make readily available to the public a summary of the assessment results for identifying areas possessing high conservation values and the management strategies employed for maintaining or enhancing those values
<b>Deadline</b>	2011 surveillance audit
<b>Reference</b>	FSC US National Indicator 9.1.c

<b>Nonconformity:</b> The chain-of-custody procedures prepared for the audit were adequate to cover merchandizing log yards, but did not properly address stumpage sales.	
<b>Minor CAR 2010.11</b>	Extend the stump to gate chain-of-custody procedures to cover stumpage sales
<b>Deadline</b>	Three months after award of certification
<b>Reference</b>	FSC US National Indicator 8.3.a

#### 4.2.4 Observations (OBS)

<b>OBS 2010.1</b>	ODOF should continue to actively guard against the risks of timber theft. The Strickland/Brush Creek incident that arose during the field evaluation is a case in point that merits additional oversight.
<b>Reference</b>	FSC US National Indicator 1.5.b

<b>OBS 2010.2</b>	The process employed for establishing the annual allowable harvest (AAC) is not adequately documented.
<b>Reference</b>	FSC US National Indicator 5.6.a

<b>OBS 2010.3</b>	The FMU-wide assessment of forest conditions is not documented in a fully coordinated and coherent manner. Demonstrating conformity to the six subject areas of this Indicator would be better served with a more focused treatment.
<b>Reference</b>	FSC US National Indicator 6.1.a

<b>OBS 2010.4</b>	There is an opportunity to engage in additional scientific consultation
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	regarding the use of prescribed fire as a tool for achieving desired forest cover conditions (re-establishment of oak). Likewise, there is an opportunity to seek additional expert input on the manner and timing of prescribed fire with regard to efficacy.
<b>Reference</b>	FSC US National Indicator 6.1.b & 6.3.i

<b>OBS 2010.5</b>	Ongoing staff reductions and the elimination of the Division of Natural Areas and Preserves is straining the Department's ability to conform to the RTE assessment and survey requirements.
<b>Reference</b>	FSC US National Indicator 6.2.a

<b>OBS 2010.6</b>	Use of a local, native erosion control seed mix would assure better conformity to the requirements that use of non-native species occurs only where justified and risk assessments have been completed.
<b>Reference</b>	FSC US National Indicators 6.3.e & 6.9.a

<b>OBS 2010.7</b>	Through additional training, ODOF should clarify its policy, found in the Land Management Manual, that retention of residual live trees within an even-aged regeneration harvest must be 20 square feet of basal area <i>per acre</i> in order to comply with Appendix C of the National Standard.
<b>Reference</b>	FSC US National Indicator 6.3.g.1

<b>OBS 2010.8</b>	The stimulus-funded Ohio Woodland Job Corps (OWJC) has proven to be of great value to the Department over the past two years. Unfortunately, funding for this program ends as of 12/31/10 which will have an adverse impact on the Department's ability to manage invasive species control in a manner that will demonstrate ongoing compliance with the certification standard.
<b>Reference</b>	FSC US National Indicator 6.3.h

<b>OBS 2010.9</b>	Not all field foresters demonstrate an adequate working knowledge of Section D of Chapter 4 of the Manual, pertaining to stream buffer guidelines.
<b>Reference</b>	FSC US National Indicator 6.5.e

<b>OBS 2010.10</b>	Conformity to the requirement that there be a description of the history of land use, past management, current conditions, desired future conditions and applicable management objectives (and other topics mentioned in Indicators 7.1.b&c) would be enhanced by more property-specific content within the management plans.
<b>Reference</b>	FSC US National Indicator 7.1.b&c

<b>OBS 2010.11</b>	ODOF should incorporate into its planning documentation an explicit and affirmative statement that management plan revisions will take place on a frequency no longer than every 10 years, rather than the present statement that it is the Department’s “intent” to do so.
<b>Reference</b>	FSC US National Indicator 7.2.a

<b>OBS 2010.12</b>	Employees of contractors are a weaker aspect of ODOF’s training policies and procedures, constituting an opportunity for improvement.
<b>Reference</b>	FSC US National Indicator 7.3.a

**5.0 Certification Decision**

<b>Certification Recommendation</b>	
<b>FME be awarded FSC certification as a “Well-Managed Forest” subject to the minor corrective action requests stated in Section 4.2.3.</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
The SCS evaluation team makes the above recommendation for certification based on the full and proper execution of the SCS Forest Conservation Program evaluation protocols. If certification is recommended, the FME has satisfactorily demonstrated the following without exception:	
FME has addressed all Major CAR(s) assigned during the evaluation.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
FME has demonstrated that their system of management is capable of ensuring that all of the requirements of the applicable standards are met over the forest area covered by the scope of the evaluation.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
FME has demonstrated that the described system of management is being implemented consistently over the forest area covered by the scope of the certificate.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

**6.0 Surveillance Evaluations**

Note: This Section of the report is reserved for use after each annual surveillance audit that is conducted after award of certification.

SECTION B – APPENDICES

**Appendix 1 – FSC Data Request (Public)**

<b>Social Information</b>	
Number of forest workers (including contractors) working in forest within scope of certificate (differentiated by gender):	
Number of male workers     110	Number of female workers     20

<b>Production Forests</b>	
<b>Timber forest products</b>	
Total area of production forest (i.e. forest from which timber may be harvested)	<i>164,556 acres</i>
Area of production forest classified as 'plantation'	<i>0</i>
Area of production forest regenerated primarily by replanting or by a combination of replanting and coppicing of the planted stems <sup>[2]</sup>	<i>0</i>
Area of production forest regenerated primarily by natural regeneration, or by a combination of natural regeneration and coppicing of the naturally regenerated stems	<i>164,556 acres</i>
The sustainable rate of harvest (usually the AAC where available) of commercial timber (cubic meters of round wood)	<i>41 million board feet (International ¼ log rule)</i>
<b>Non-timber forest products</b>	
Area of forest protected from commercial	<i>0</i>

<sup>[2]</sup> The area is the *total* area being regenerated primarily by planting, *not* the area which is replanted annually. NB 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.

harvesting of timber and managed primarily for the production of NTFPs or services	
Approximate annual commercial production of non-timber forest products included in the scope of the certificate, by product type	0
<b>Species and product categories in scope of joint FM/COC certificate</b>	
<b>Scientific/ Latin Name (Common/ Trade Name)</b>	
Eastern White Pine	<i>Pinus strobus</i>
Red Pine	<i>Pinus resinosa</i>
Pitch Pine	<i>Pinus rigida</i>
Shortleaf Pine	<i>Pinus echinata</i>
Virginia Pine	<i>Pinus virginiana</i>
Tamarack	<i>Larix laricina</i>
Eastern Hemlock	<i>Tsuga canadensis</i>
Eastern Red Cedar	<i>Juniperus virginiana</i>
Sugar Maple	<i>Acer saccharum</i>
Boxelder	<i>Acer negundo</i>
Red Maple	<i>Acer rubrum</i>
Silver Maple	<i>Acer saccharinum</i>
Black Maple	<i>Acer nigrum</i>
White Ash	<i>Fraxinus americana</i>
Black Ash	<i>Fraxinus nigra</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Yellow Buckeye	<i>Aesculus octandra</i>
Ohio Buckeye	<i>Aesculus glabra</i>
Black Walnut	<i>Juglans nigra</i>
Butternut	<i>Juglans cinerea</i>
Bitternut Hickory	<i>Carya cordiformis</i>
Mockernut Hickory	<i>Carya tomentosa</i>
Shellbark Hickory	<i>Carya laciniosa</i>
Shagbark Hickory	<i>Carya ovata</i>
Pignut Hickory	<i>Carya glabra</i>
Honey Locust	<i>Gleditsia triacanthos</i>
Black Locust	<i>Robinia pseudoacacia</i>
Sassafras	<i>Sassafras albidum</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
Yellow Poplar	<i>Liriodendron tulipifera</i>
American Basswood	<i>Tilia americana</i>
American Elm	<i>Ulmus americana</i>
Slippery Elm	<i>Ulmus rubra</i>

Hackberry	<i>Celtis occidentalis</i>
Eastern cottonwood	<i>Populus deltoides</i>
Bigtooth Aspen	<i>Populus grandidentata</i>
Black Cherry	<i>Prunus serotina</i>
American Beech	<i>Fagus grandifolia</i>
Northern Red Oak	<i>Quercus rubra</i>
Scarlet Oak	<i>Quercus coccinea</i>
Pin Oak	<i>Quercus palustris</i>
Black Oak	<i>Quercus velutina</i>
White Oak	<i>Quercus alba</i>
Chestnut Oak	<i>Quercus prinus</i>

<b>FSC Product Classification</b>			
<b>Product class</b>	<b>Product type</b>	<b>Product sub-type &amp; notes</b>	
<input checked="" type="checkbox"/>	031 Logs/ Wood in the rough	0311 Logs of coniferous wood	
<input checked="" type="checkbox"/>	031 Logs/ Wood in the rough	0312 Logs of non-coniferous wood	
<b><i>For a full list of FSC product classes, product types, and product sub-types, see FSC-STD-40-004a (Version 1-0) EN – FSC Product Classification.</i></b>			

Conservation Areas				
Area of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation objectives				16156 ac
High Conservation Value Forest/ Areas				
High Conservation Values present and respective areas				
	Code	HCV Type <sup>7</sup>	Description & Location	Area
<input checked="" type="checkbox"/>	HCV1	Forests or areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).	Cantwell Cliffs area Pine Cr / Conkles Hollow / Crane Hollow Muck Farm prairie remnant Raccoon Creek Bottom Shawnee Wilderness Area Snake Hollow Rock Run	5130 ac
<input checked="" type="checkbox"/>	HCV2	Forests or areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.	Raccoon Creek Bottom Muck Farm prairie remnant Shawnee Wilderness Area Oak Openings Restoration	2809 ac
<input checked="" type="checkbox"/>	HCV3	Forests or areas that are in or contain rare, threatened or endangered ecosystems.	Shawnee Wilderness Area Oak Openings Restoration Mohican zone A - Old Growth Mgmt Mohican zone B- Old Growth Mgmt Mohican zone B - Future Old Growth Mgmt	6639 ac
<input checked="" type="checkbox"/>	HCV4	Forests or areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).	Beaver Creek watershed Cantwell Cliffs area Pine Cr / Conkles Hollow / Crane Hollow Raccoon Creek Bottom	1571 ac
<input checked="" type="checkbox"/>	HCV5	Forests or areas fundamental to meeting	Cultural area	7 ac

<sup>7</sup> High conservation values should be classified following the numbering system given in the ProForest High Conservation Value Forest Toolkit (2003) available at [www.ProForest.net](http://www.ProForest.net) or at [www.wwf.org](http://www.wwf.org)

		basic needs of local communities (e.g. subsistence, health).		
<input type="checkbox"/>	HCV6	Forests or areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).		
<b>Total Area of forest classified as 'High Conservation Value Forest/ Area'</b>				<b>16,156 acres</b>

## Appendix 2 – Current and Projected Annual Harvest for Main Commercial Species

Annual harvest levels are known for last several decades. Average harvest levels for last ten years are calculated per forest and included in the 5-year plans. A rolling 10-year average annual harvest for DOF is calculated to be at 17% of growth.

The average annual harvest level (actual) over the last ten years is **7,036,519 board feet** of hardwood sawtimber (International ¼ Log Rule) and **33,000 tons** of mixed pulpwood.

Average annual harvest levels (actual) over the last ten years by species are:

- 2,814,607 board feet *Quercus alba / Quercus prinus*
- 1,548,034 board feet *Quercus velutina / Quercus rubra / Quercus coccinea*
- 1,407,303 board feet *Liriodendron tulipifera*
- 422,191 board feet *Acer spp.*
- 844,382 board feet miscellaneous species

Projected annual harvest levels are anticipated to remain relatively unchanged compared to past ten years.

### Appendix 3 – Certification Standard Conformance Table (CONFIDENTIAL)

Legend:

- C conformity with the Criterion
- NC non-conformity with the Criterion
- + conformity with the Indicator
- +/- marginal conformity with the Indicator
- /+ marginal non-conformity with the Indicator
- non-conformity with the Indicator

REQUIREMENT	C/N C	COMMENT/CAR
<b>P1 Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.</b>		
<b>C1.1 Forest management shall respect all national and local laws and administrative requirements.</b>	C	<b>The audit team has found adequate overall conformity with this Criterion.</b>
1.1.a. <b>Forest</b> management plans and operations demonstrate compliance with all applicable federal, state, county, municipal, and tribal laws, and <b>administrative requirements</b> (e.g., regulations). Violations, outstanding complaints or investigations are provided to the <b>Certifying Body</b> (CB) during the annual audit.	+	List of relevant laws are incorporated into Chapter 1 of the land management manual.  State Forest plans include a section on law compliance. DNR exhibits strong commitment to conforming to laws, rules, and regulations.  Numerous inquiries revealed no enforcement actions in recent years against DNR related to compliance with applicable federal, state, or local forestry and related environmental laws and regulations
1.1.b. To facilitate legal compliance, the <b>forest owner or manager</b> ensures that employees and contractors, commensurate with their responsibilities, are duly informed about applicable laws and regulations.	+	A list of relevant natural resources laws, treaties, and agreements are outlined for all managers in Chapter 1 (Authority of State Forest Management) of the Land Management Manual.  Ohio Master Loggers are required on all timber sales.  Prior to each harvest, there is a meeting with buyer to review sale conditions and contract.
<b>C1.2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.</b>		
1.2.a. The forest owner or manager provides written evidence that all applicable and legally prescribed fees, royalties, taxes and other charges are being paid in a timely manner. If payment is beyond the control of the landowner or manager, then there is evidence that every attempt at payment was made.	+	A letter signed by the Chief of the Division stating the nature and timing of payments made the previous fiscal year was furnished on September 10, 2010  Each timber sale’s documentation contains calculations of the distribution of each sale’s proceeds based on analysis of sale maps and political jurisdiction. Stakeholders indicate that the state make’s timely

		<p>payments.</p> <p>The Department's accounts payable are kept appropriately current.</p>
<b>C1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
1.3.a. Forest management plans and operations comply with relevant provisions of all applicable binding international agreements.	+	Chapter 1 of Land Management Manual is evidence of a self-assessment.
<b>C1.4. Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
1.4.a. Situations in which compliance with laws or regulations conflicts with compliance with FSC Principles, Criteria or Indicators are documented and referred to the CB.	+	A written statement contained in Chapter 1 of Land Management Manual answers this requirement as a matter of policy.
<b>C1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
1.5.a. The forest owner or manager supports or implements measures intended to prevent illegal and unauthorized activities on the <b>Forest Management Unit</b> (FMU).	+	<p>DOF has a fully funded Law Enforcement and Recreation program. There are 10 commissioned officers with responsibility to enforce forest rules and laws. Officers are responsible for patrols and custody of the forest. Law enforcement maintains special operations regarding theft, drugs, arson, and illegal ATV use. The Special Use Permit process ensures groups comply with laws and rules.</p> <p>Signs and gates were regularly observed to be utilized on the state forests during the field audit.</p>
1.5.b. If illegal or unauthorized activities occur, the forest owner or manager implements actions designed to curtail such activities and correct the situation to the extent possible for meeting all land management objectives with consideration of available resources.	+	<p>Prosecutions, citations, special use permits.</p> <p>DOF prepared document to describe response to illegal ATV use.</p> <p>Strickland/Brush Creek is a management situation that merits additional oversight.</p> <p><b>See OBS 2010.1</b></p>
<b>C1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
1.6.a. The forest owner or manager demonstrates a long-term commitment to adhere to the FSC Principles and Criteria and FSC and FSC-US policies, including the FSC-US Land Sales Policy, and has a publicly available statement of commitment to manage the FMU in conformance with FSC standards and policies.	+	<p>The Directive from Governor Strickland, October, 25, 2007 is directly responsive to this Indicator</p> <p>There is a written statement of commitment from Chief included in the Land Management Manual for all state forest staff and posted on the internet for public</p>

		viewing  Certification costs are listed as a line item in budgets. Letter dated 5.20.10 signed by the Chief.
1.6.b. If the certificate holder does not certify their entire holdings, then they document, in brief, the reasons for seeking partial certification referencing FSC-POL-20-002 (or subsequent policy revisions), the location of other managed forest units, the natural resources found on the holdings being excluded from certification, and the management activities planned for the holdings being excluded from certification.	N.A.	All 21 of Ohio's State Forests are in the scope of the certification evaluation.
1.6.c. The forest owner or manager notifies the Certifying Body of significant changes in ownership and/or significant changes in management planning within 90 days of such change.	+	Land Management Manual Chapter 1, page 10 constitutes fully adequate compliance with this Indicator
<b>P2 Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.</b>		
<b>C2.1. Clear evidence of long-term forest use rights to the land (e.g., land title, customary rights, or lease agreements) shall be demonstrated.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
2.1.a. The forest owner or manager provides clear evidence of <i>long-term</i> rights to use and manage the FMU for the purposes described in the management plan.	+	Title, deeds, and leases are on record and available on all lands and are kept at the Department level as well as the Division level
2.1.b. The forest owner or manager identifies and documents legally established use and access rights associated with the FMU that are held by other parties.	+	Mineral, subsurface rights are well understood.  The audit team takes positive note of this statement from DOF: "The Division has a Contracts Database and detailed maps of mineral ownership and lease agreements. GIS data is in-progress. Div of Engineering also has a set of land records used by the Division. As policy, prior to any transfer of ownership or rights, a thorough and complete title search is completed to whereby any outstanding rights are identified and extinguished prior to any transaction."
2.1.c. Boundaries of land ownership and use rights are clearly identified on the ground and on maps prior to commencing management activities in the vicinity of the boundaries.	+	DOF field personnel apply blazing on property lines  Property boundaries are shown on maps  Signage and gating is extensively employed
<b>C2.2. Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.</b>  <i>Applicability Note: For the planning and management of publicly owned forests, the local community is defined as all residents and property owners of the relevant</i>	<b>N.A.</b>	<b>Given the definition of "legal or customary or use rights" in the FSC National Standard ("force of law") there are no customary tenure or use rights on the Ohio state forests; as such, this Criterion is not applicable.</b>

<i>jurisdiction.</i>		
2.2.a. The forest owner or manager allows the exercise of <b>tenure</b> and <b>use rights</b> allowable by law or regulation.		
2.2.b. In FMUs where tenure or use rights held by others exist, the forest owner or manager consults with groups that hold such rights so that management activities do not significantly impact the uses or benefits of such rights.		
<b>C2.3. Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.</b>	N.A.	Same reasoning as C2.2
2.3.a. If <b>disputes</b> arise regarding tenure claims or use rights then the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If these good-faith efforts fail, then federal, state, and/or local laws are employed to resolve such disputes.		
2.3.b. The forest owner or manager documents any significant disputes over tenure and use rights.		
<b>P3 The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.</b>		
<b>C3.1. Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.</b>	N.A.	This Criterion applies only in audits conducted on tribally owned or managed lands; as such, it is not applicable to this evaluation.
3.1.a. Tribal forest management planning and implementation are carried out by authorized tribal representatives in accordance with tribal laws and customs and relevant federal laws.		
3.1.b. The manager of a tribal forest secures, in writing, informed consent regarding forest management activities from the tribe or individual forest owner prior to commencement of those activities.		
<b>C3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.</b>	C	The audit team finds adequate overall conformity with this Criterion.
3.2.a. During management planning, the forest owner or manager consults with American Indian groups that have legal rights or other binding agreements to the FMU to avoid harming their resources or rights.	N.A.	This Indicator is not applicable because no American Indian groups have or are asserting legal rights or other binding agreements to the Ohio state forests
3.2.b. Demonstrable actions are taken so that forest management does not adversely affect tribal resources. When applicable, evidence of, and measures for, protecting tribal resources are incorporated in the management plan.	+	ODNR has, over the past half-year, initiated an affirmative outreach to tribes and tribal organizations, seeking their input. This is an ongoing effort and the audit team is fully satisfied with the priority being placed on this initiative by senior management.

<b>C3.3. Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
3.3.a. The forest owner or manager invites consultation with tribal representatives in identifying sites of current or traditional cultural, archeological, ecological, economic or religious significance.	+	An invitation for cooperation has been extended  The audit team takes positive note of this statement from DOF: "DOF has subscription service to the OHPO database and checks this data during pre-activity assessments. DOF offered cooperation opportunity to tribal contacts via letters and contacts provided by the Newark Earthworks Center and others. DOF initiated relationship with the Hopewell NHP and Dr. Richard Sheils with the Newark Earthworks Center. Further, DOF is attempting to organize an advisory committee of experts who can offer consultation on these issues."
3.3.b. In consultation with tribal representatives, the forest owner or manager develops measures to protect or enhance areas of special significance (see also Criterion 9.1).	+/-	An advisory committee of experts is being formed  Special sites are mapped  DOF has trained staff in the recognition and protection of cultural resources, including receiving training from Hopewell National Park staff  Field personnel query the Ohio database prior to site disturbing activities
<b>C3.4. Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.</b>	<b>N.A.</b>	<b>The audit team found that this Criterion is not applicable to the evaluation of the Ohio state forest system since traditional knowledge is not being used.</b>
3.4.a. The forest owner or manager identifies whether <b>traditional knowledge</b> in forest management is being used.		
3.4.b. When traditional knowledge is used, written protocols are jointly developed prior to such use and signed by local tribes or tribal members to protect and fairly compensate them for such use.		
3.4.c. The forest owner or manager respects the confidentiality of tribal traditional knowledge and assists in the protection of such knowledge.		
<b>P4 Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.</b>		
<b>C4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
4.1.a. Employee compensation and hiring practices meet or exceed the prevailing <b>local</b> norms within the forestry	+	Strong benefits package; salaries commensurate with professional norms in Ohio

industry.		State employees are unionized, and union agreements govern compensation.
4.1.b. Forest work is offered in ways that create high quality job opportunities for employees.	+/-	DNR employees interviewed during the course of the audit responded in positive terms about the quality of their work experiences  However, workloads are increasing as staff numbers are reduced and this unavoidably is resulting in a degradation of the quality of the work experience for those remaining
4.1.c. Forest workers are provided with fair wages.	+	Confirmed by employees; when the overall compensation package is considered, the relatively attractiveness of state employment compares favorably with professional norms for natural resources positions in Ohio
4.1.d. Hiring practices and conditions of employment are non-discriminatory and follow applicable federal, state and local regulations.	+	Yes, by law.  The State of Ohio and the Department have non-discrimination policies that govern DOF hiring practices.
4.1.e. The forest owner or manager provides work opportunities to qualified local applicants and seeks opportunities for purchasing local goods and services of equal price and quality.	+	The audit team takes positive note of this statement by DOF: "The state has programs such as "Buy Ohio" whereby Ohio bidders receive a 5% price premium. Programs such as EDGE and Minority Business Enterprise promote small business and minority business opportunities. All of these programs are designed for local and minority opportunities with the state of Ohio. DOF timber sales are advertised to over 100 local businesses. Purchasers of timber are local sawmills. Logging contractors are local."  From the evidence gathered during the field audit, it is very clear that DOF complies with this Indicator.
4.1.f. Commensurate with the size and scale of operation, the forest owner or manager provides and/or supports learning opportunities to improve public understanding of forests and forest management.	+	Information and education activities occur on most of the state forests. A list of educational activities over past few years was provided. The organization considers demonstration of good forestry to be a major goal of the entire state forest management program. Use signs and other methods to promote the spread of best practices. Division of Forestry Communications Team; Division of Forestry Communications Strategy. Forestry Advisory Council. A notable example is the Mohican Discovery Forests, a self-guided demonstration area. Another example is the Zaleski State Forest Management Driving Tour, with 17 numbered stations keyed to an interpretive brochure that is well-written and informative.

		<p>Other examples provided by Ohio Division of Forestry:</p> <ul style="list-style-type: none"> <li>• The Vinton Furnace Exp Forest holds a variety of tours with several thousand visitors per year.</li> <li>• The DOF website provides many educational materials.</li> <li>• The Ohio Woodland Job Corp is primarily a training program.</li> <li>• State Forests have interpretive sites.</li> </ul>
4.1.g. The forest owner or manager participates in local economic development and/or civic activities, based on scale of operation and where such opportunities are available.	+	<p>Employees are socially integrated into the communities where they reside and contribute to their local communities through a variety of civic engagements</p> <p>DOF has a marketing and utilization program that assists in economic development activities</p>
<b>C4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
4.2.a. The forest owner or manager meets or exceeds all applicable laws and/or regulations covering health and safety of employees and their families (also see Criterion 1.1).	+	<p>Hard hats are used by Departmental personnel when in the field.</p> <p>Safety training is undertaken.</p> <p>Safety equipment is used.</p> <p>The audit team takes positive note of this statement from DOF: "Health and Safety are mandated by ORC, the department and the division. DOF has a Safety Committee and promotes monthly meetings and yearly all-staff safety meeting. Department level trainings for all supervisors on topics such as workplace violence, harassment, defensive driving, etc. DOF maintains a record of safety training held and attended."</p>
4.2.b. The forest owner or manager and their employees and contractors demonstrate a safe work environment. Contracts or other written agreements include safety requirements.	+	<p>The standardized contract includes safety provisions.</p> <p>Safe felling practices by loggers were observed during the field audit.</p>
4.2.c. The forest owner or manager hires well-qualified service providers to safely implement the management plan.	+	<p>Master Logger status is required for at least one individual in every logging contractor</p> <p>Training of Job Corp enrollees was extensive</p> <p>Safe practices were observed in the field</p>
<b>C4.3 The rights of workers to organize and voluntarily</b>	<b>C</b>	<b>The audit team has found adequate overall</b>

<p><b>negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labor Organization (ILO).</b></p>		<p><b>conformity with this Criterion.</b></p>
<p>4.3.a. Forest workers are free to associate with other workers for the purpose of advocating for their own employment interests.</p>	<p>+</p>	<p>The workforce is unionized, clearly confirming compliance with this Indicator</p>
<p>4.3.b. The forest owner or manager has effective and culturally sensitive mechanisms to resolve disputes between workers and management.</p>	<p>+</p>	<p>An employee grievance process exists.</p> <p>The audit team takes positive note of the following statement provided by DOF: “The Department and Division have an employee grievance process. This process ensures that employees have a voice to air their concerns and disagreements. Grievances are reviewed and hearings may be held. Resolutions may be appealed.”</p> <p>During employee interviews conducted as part of the audit, no complaints surfaced about the Departments grievance/dispute resolution procedures.</p>
<p><b>C4.4. Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.</b></p>	<p><b>C/NC</b></p>	<p><b>The audit team has found marginally adequate overall conformity with this Criterion.</b></p>
<p>4.4.a. The forest owner or manager understands the likely social impacts of management activities, and incorporates this understanding into management planning and operations. Social impacts include effects on:</p> <ul style="list-style-type: none"> <li>• Archeological sites and sites of cultural, historical and community significance (on and off the FMU);</li> <li>• Public resources, including air, water and food (hunting, fishing, collecting);</li> <li>• Aesthetics;</li> <li>• Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health;</li> <li>• Community economic opportunities;</li> <li>• Other people who may be affected by management operations.</li> </ul> <p>A summary is available to the CB.</p>	<p>+/-</p>	<p>DOF is clearly making substantive progress in more explicitly and directly endeavoring to understand the likely social impacts of its management activities.</p> <p>The FRAS report (related to the 2008 Farm Bill) provides a statewide summary that includes social context aspects</p> <p>A relatively unique public meeting was held in Athens earlier in 2010 that provided a new opportunity to receive and consider stakeholder input</p> <p>Archeological sites and sites of historical/cultural importance are duly identified and protected</p> <p>DOF is engaging in greater use of the internet as a mechanism for interacting with stakeholders and better understanding stakeholder concerns</p> <p>The state forest plans could do a better job of incorporating social issues and impacts</p> <p>The effects on employee morale of RIFs and consolidations have not been assessed and monitored</p>

		as thoroughly as they could/should be
4.4.b. The forest owner or manager seeks and considers input in management planning from people who would likely be affected by management activities.	-	<p>The manner and methods by which ODNR seeks and considers input in management planning from people who would likely be affected by management activities is not resulting in an adequate level of satisfaction amongst stakeholders that their views are being adequately solicited and considered.</p> <p>The Pathway to Participation document is a positive step but insufficient in and of itself</p> <p>There is a need for additional transparency and opportunities for stakeholder input</p> <p><b>See Minor CAR 2010.1</b></p>
4.4.c. People who are subject to direct adverse effects of management operations are apprised of relevant activities in advance of the action so that they may express concern.	+	<p>Post cards are mailed out prior to prescribed fire treatments; radio announcements are also employed</p> <p>Direct neighbors are notified prior to site disturbing activities; some field personnel embrace this practice more thoroughly than others but, overall, there appears to be a good level of practice</p> <p>There is a prescribed fire checklist that includes notification of neighbors</p> <p>Signage is employed throughout the state forests, many of which are intended to provide interpretative/explanatory information to visitors</p>
<p>4.4.d. For <b>public forests</b>, consultation shall include the following components:</p> <ol style="list-style-type: none"> <li>1. Clearly defined and accessible methods for public participation are provided in both long and short-term planning processes, including harvest plans and operational plans;</li> <li>2. Public notification is sufficient to allow interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management;</li> <li>3. An accessible and affordable appeals process to planning decisions is available.</li> </ol> <p>Planning decisions incorporate the results of public consultation. All draft and final planning documents, and their supporting data, are made readily available to the public.</p>	-/+	<p>The Pathways to Participation is helpful</p> <p>Advanced notice of many activities is widely viewed by stakeholders as being insufficient</p> <p>News releases are employed but the distribution list is relatively limited (less than 100 out of 700 on a contact list have email addresses)</p> <p>Increasing use of public meetings is a positive development</p> <p>On an informal yet rather effective basis, field personnel maintain regular contact with local citizens</p> <p>Reliance on FOIA is not sufficient; DOF are now increasingly understanding this</p> <p><b>See Minor CAR 2010.1</b></p>
<b>C4.5. Appropriate mechanisms shall be employed for</b>	<b>C</b>	<b>The audit team has found adequate overall</b>

<p><b>resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.</b></p>		<p><b>conformity with this Criterion.</b></p>
<p>4.5.a. The forest owner or manager does not engage in negligent activities that cause damage to other people.</p>	<p>+</p>	<p>There is a new/revised procedure for resolving citizen grievances; all forest managers and forests have received training</p> <p>There is an active program to remove hazard trees in campgrounds and other recreational facilities</p> <p>The audit team takes positive note of this statement from DOF: “Activities require an assessment and assorted documents such as a burn plan or a timber sale plan where issues are identified and mitigation is recommended. Management activities in the forest are well signed and in some cases have a public information officer on site (prescribed fire). Log truck traffic is signed on active haul roads. Timber sales contract language requires posting of lookouts on recreation trails during active harvesting. Recreational facilities are periodically reviewed and maintained yearly with mowing, cutting hazard trees, posting of closures. Recent tornado storm at Maumee State Forest required multiple signs and statewide news release of trail closures. Employees are required to inspect and maintain forest equipment for safety. “</p>
<p>4.5.b. The forest owner or manager provides a known and accessible means for interested stakeholders to voice grievances and have them resolved. If significant disputes arise related to resolving grievances and/or providing fair compensation, the forest owner or manager follows appropriate dispute resolution procedures. At a minimum, the forest owner or manager maintains open communications, responds to grievances in a timely manner, demonstrates ongoing good faith efforts to resolve the grievances, and maintains records of legal suites and claims.</p>	<p>-/+</p>	<p>The audit team takes positive note of the following statement from DOF: “DOF has a Dispute Resolution process to address informal and formal disputes. All staff are trained on the process. The Integration Committee is tasked with resolving formal disputes. Recreational facilities take local written comments in comment box at the forest and reviewed by the forest manager. Comments are received through our website and are resolved by the program or the Integration Committee. General issues are local and specific and are handled by the local forest manager.”</p> <p>However, the availability of the ODNR’s dispute resolution mechanism is not adequately known and, as such, is not adequately accessible to interested stakeholders wishing to voice grievances and have them resolved.</p> <p><b>See Minor CAR 2010.2</b></p>
<p>4.5.c. Fair compensation or reasonable mitigation is provided to local people, communities or adjacent</p>	<p>+</p>	<p>The Ohio court system constitutes an effective forum/venue for assigning fair compensation in cases</p>

<p>landowners for substantiated damage or loss of income caused by the landowner or manager.</p>		<p>of damage</p> <p>The audit team takes positive note of this statement from DOF: "DOF from time-to-time is involved with civil claims from recreation users or visitors and DOF can provide a list of these claims and evidence that we have followed the requirements of the judgments."</p>
<p><b>P5 Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.</b></p>		
<p><b>C5.1. Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.</b></p>	<p><b>C</b></p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>5.1.a. The forest owner or manager is financially able to implement core management activities, including all those environmental, social and operating costs, required to meet this Standard, and investment and reinvestment in forest management.</p>	<p>+/-</p>	<p>Budget cuts are making this more challenging, but core activities are still being completed</p> <p>The audit team takes positive note of this statement from DOF: "Several difficult years of budget cuts have reduced DOF and programs. However, levels of staff and programs are at a level to account for sustainable forest management and certification. DOF has had to alter business practices to facilitate more support to the division through merchandising log sales and reliance on federal grants instead of state general revenue. DOF maintains a cash reserve to deal with changes in budgetary cycles. Despite difficulties, DOF has managed to invest nearly \$1 million in recent years with the acquisition of a new forest information system and GIS, a forest inventory and imagery data set on 80% of our forests, handheld data collectors, heavy equipment purchases, certification, and the acquisition of an additional 16,000 acres."</p>
<p>5.1.b. Responses to short-term financial factors are limited to levels that are consistent with fulfillment of this Standard.</p>	<p>+</p>	<p>Harvest levels are not driven by economics or other top-down imperatives.</p> <p>The recent efforts at merchandizing logs from centralized log yards is a positive example of trying to derive more income from the state forests without resorting to overharvesting them.</p> <p>The audit team takes positive note of this statement from DOF: "DOF is committed to sustainable forest management and certification. In difficult financial years, DOF has attempted to increase income from merchandised log sales and acquiring more federal grant dollars."</p>
<p><b>C5.2. Forest management and marketing operations should encourage the optimal use and local processing of</b></p>	<p><b>C</b></p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>

<b>the forest's diversity of products.</b>		
5.2.a. Where forest products are harvested or sold, opportunities for forest product sales and services are given to local harvesters, value-added processing and manufacturing facilities, guiding services, and other operations that are able to offer services at competitive rates and levels of service.	+	<p>Almost all sales are purchased by buyers from within the region, almost all of which or Ohio-based companies.</p> <p>The audit team takes positive note of this statement from DOF: "The timber bid list is over 100 companies. Merchandized log sales are competitively bid and advertised to over 60 companies. Merchandised logs are sorted and companies have opportunity to select the products they desire."</p>
5.2.b. The forest owner or manager takes measures to optimize the use of harvested forest products and explores product diversification where appropriate and consistent with management objectives.	+/-	<p>The log merchandizing program is a positive example of DOF's efforts to optimize the use of harvested forest products; however, there remain opportunities for improved utilization in terms of product recovery from the harvest sites</p> <p>Having a utilization specialist on staff is a positive relative to this Indicator</p> <p>The audit team takes positive note of this statement from DOF: "DOF has contract language and guidelines in the Land Management Manual chapter 8 on utilization. DOF's Marketing and Utilization program responds to this indicator with the myriad of projects that are designed to promote better utilization. DOF is active in promoting utilization of salvage Ash timber from EAB mortality. DOF has a firewood program and sells permits to citizen's to remove firewood in order to promote utilization. DOF has a small sawmill that generates products for use by other public agencies and sells by-products to local citizens."</p>
5.2.c. On public lands where forest products are harvested and sold, some sales of forest products or contracts are scaled or structured to allow small business to bid competitively.	+	<p>Virtually all sales are purchased by small operators, as confirmed by this statement from DOF: "The nature of our stumpage and merchandising sales account for this in that most sales of stumpage or logs are small. The up-front costs are structured to allow for small business to participate (\$5000 up front deposit). Therefore this broadens the pool of potential purchasers. All purchasers of state forest timber are considered small businesses relatively speaking."</p>
<b>C5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
5.3.a. Management practices are employed to minimize the loss and/or waste of harvested forest products.	+/-	<p>Andy Sabula, Ohio Forest Industries Forester (his forest utilization program provides marketing and utilization assistance for economic development) is working to improve markets for smaller, poor-quality trees. Recent success in Chillicothe for wood-powered district</p>

		heating. He conducts periodic survey of wood use with published results (significant import of wood from WV) pertaining to: manufacturing in Ohio; primary and secondary manufacturing directories; BMP manual; price surveys and price reports; fairly new Ohio State Forest Merchandizing Program. His job includes the exploration of markets for low-grade wood /alternative markets. Examples include a grant received for the "Mid-Ohio River Valley Woody Biomass Feedstock Zone" and VA Hospital Biomass Study which has led to the conversion of the boiler to wood use.
5.3.b. Harvest practices are managed to protect residual trees and other forest resources, including: <ul style="list-style-type: none"> <li>• soil compaction, <b>rutting</b> and erosion are minimized;</li> <li>• residual trees are not significantly damaged to the extent that health, growth, or values are noticeably affected;</li> <li>• damage to NTFPs is minimized during management activities; and</li> <li>• techniques and equipment that minimize impacts to vegetation, soil, and water are used whenever feasible.</li> </ul>	+	Foresters oversee all aspect of harvest design and implementation  Field observations confirm that soil compaction, rutting and erosion are minimized and residual trees are not significantly damaged to the extent that health, growth, or values are noticeably affected.
<b>C5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
5.4.a. The forest owner or manager demonstrates knowledge of their operation's effect on the local economy as it relates to existing and potential markets for a wide variety of timber and non-timber forest products and services.	+ /-	Data exists but it is not compiled and summarized in a form that can be readily utilized by managers  Generally, DOF managers demonstrate a good awareness of the potential effects of state forest operations on regional and local economies
5.4.b The forest owner or manager strives to diversify the economic use of the forest according to Indicator 5.4.a.	+	The leasing of a site for the Youth Rehabilitation Center is an example of efforts to diversify economic uses of the forest  DOF is presently exploring the potential for carbon sequestration and biomass production as additional economic uses of the forest.  The audit team takes positive note of this statement provided by DOF: "DOF can demonstrate a diverse offering of timber sales in a wide range of locations throughout the state including merchandised log sales. DOF directly benefits two local service contractors in the merchandising program. Services were competitively bid. DOF benefits local economy thru the revenue return to local governments. DOF's marketing and utilization program can demonstrate a

		host of economic development projects ranging from greenhouse biomass boilers to marketing of low grade salvage ash trees.”
<b>C5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
5.5.a. In developing and implementing activities on the FMU, the forest owner or manager identifies, defines and implements appropriate measures for maintaining and/or enhancing forest services and resources that serve public values, including municipal watersheds, fisheries, carbon storage and sequestration, recreation and tourism.	+	DOF managers do endeavor to develop and implement appropriate measures for maintaining and/or enhancing forest services and resources that serve public values; examples include sensitivity to watershed values, recreation opportunities and, more recently, carbon sequestration.  The audit team takes positive note of this statement from DOF: “DOF can demonstrate 3 carbon-storage leases and can demonstrate our harvest levels are modest thereby ensuring carbon stores are reliable. DOF discuss the forest services considered in the 5-year management plans. Further, DOF has worked with Div of Soil and Water and DNAP to identify quality waters and habitats on state forests and zoned them appropriately.”
5.5.b The forest owner or manager uses the information from Indicator 5.5.a to implement appropriate measures for maintaining and/or enhancing these services and resources.	+	Our examination of management practices employed on the state forests leads to a conclusion that DOF does indeed attempt to serve public values through its planned actions
<b>C5.6. The rate of harvest of forest products shall not exceed levels which can be permanently sustained.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
5.6.a. In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the planning unit. The sustained yield harvest level calculation is documented in the Management Plan.  The sustained yield harvest level calculation for each planning unit is based on: <ul style="list-style-type: none"> <li>• documented growth rates for particular sites, and/or acreage of forest types, age-classes and species distributions;</li> <li>• mortality and decay and other factors that affect net growth;</li> <li>• areas reserved from harvest or subject to harvest restrictions to meet other management goals;</li> <li>• silvicultural practices that will be employed on the FMU;</li> <li>• management objectives and desired future conditions.</li> </ul>	+ / -	First and foremost, harvest levels on the state forests are clearly well below maximum sustained yield harvest levels (roughly 17% of calculated annual increment). This reduces the urgency or importance of having a “state of the art” allowable harvest calculation process  DOF has recently completed a forest inventory on 8 of its 21 state forest units; FIA inventory data is being utilized on the other 13 units  The forest plans include a presentation on harvest levels relative to known/estimated growth levels  Growth estimates take into account “constrained” versus “unconstrained” areas within the state forests

<p>The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.</p>		<p>The audit team takes positive note of this statement from DOF: “DOF procured inventory services on 8 state forests in 2009. Those data were grown using FVS. Other 13 state forests G&amp;Y calculated using FIA averages for county. Historical harvesting data is available for decades. 10 average harvest level is 17% of calculated growth. Discussion of G&amp;Y and harvest levels included in the 5-year forest specific. G&amp;Y calculations were based on strata and stand type. G&amp;Y calculated mean annual increment over a 10 year period. G&amp;Y calculated for both “un-constrained” and “constrained” acreages based on our zones in Chapter 2 of the Land Management Manual. G&amp;Y assumed no growth impact from harvest or silviculture this run in order to establish a base line for monitoring. Successive runs will include harvest/silviculture impacts in future but data do not yet have data to support this run. Desired Future Condition document is written and included in the 5-year plans.”</p> <p><b>See OBS 2010.2</b></p>
<p>5.6.b. Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.</p>	<p>+</p>	<p>Average annual harvest levels are less than 20% of calculated periodic increment, which serves as a reasonable proxy for a sustained yield harvest level; that is, there is no question that harvest levels on the Ohio state forests are well below any reasonable calculation of a sustained yield harvest level</p> <p>The process employed for establishing the annual allowable harvest (AAC) is not adequately documented.</p> <p><b>See OBS 2010.2</b></p>
<p>5.6.c. Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that have been depleted or rendered to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.</p>	<p>+/-</p>	<p>Through focused efforts, DOF has had success in reversing a historical pattern on mixed hardwood forests throughout the eastern U.S.—conversion to shade tolerant maples, displacing higher valued species</p> <p>The audit team takes positive note of this statement from DOF: “DOF outlines this in the DFC doc and in Chapter 3 of the Land Management Manual. DFC included in the 5-year management plans. Reacting to sobering data presented in FIA that show oak decline and the “mesification” of Ohio forests, DOF is focused on Oak management and a full discussion of this focus is outlined in all our documents. DOF is committed to training all foresters on this new focus and shifting our treatments to those that promote oak.”</p>

<p>5.6.d. For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary use rights may be impacted by such harvests. In other situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.</p>	<p>N.A.</p>	<p>DOF does not manage or allow of the commercial collection of NTFPs. As such, this Indicator is not applicable as it applies in situations of “significant commercial operations.”</p> <p>Forest visitors are allowed to collect mushrooms and berries on a recreational basis.</p> <p>Ginseng and roots are regulated by law and prohibited from collecting on DOF land.</p> <p>DOF has no income from NTFP. DOF has a firewood program.</p>
<p><b>P6 Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.</b></p>		
<p><b>C6.1. Assessments of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources -- and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.</b></p>	<p>C</p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>6.1.a. Using the results of <i>credible scientific analysis, best available information</i> (including relevant databases), and local knowledge and experience, an assessment of conditions on the FMU is completed and includes:</p> <ol style="list-style-type: none"> <li>1) Forest community types and development, size class and/or successional stages, and associated <i>natural disturbance regimes</i>;</li> <li>2) <i>Rare, Threatened and Endangered (RTE) species</i> and <i>rare ecological communities</i> (including plant communities);</li> <li>3) Other habitats and species of management concern;</li> <li>4) Water resources and associated riparian habitats and hydrologic functions;</li> <li>5) <i>Soil resources</i>; and</li> <li>6) <i>Historic conditions</i> on the FMU related to forest community types and development, size class and/or successional stages, and a broad comparison of historic and current conditions.</li> </ol>	<p>+ / -</p>	<p>Forest community types are listed in state forest management plans</p> <p>Prior to site disturbing activities, field personnel query state databases for the presence of RTE species</p> <p>Compartment exams constitute an assessment of site-specific forest conditions</p> <p>Landscape analyses conducted on the two largest state forests constitute a higher level of environmental analysis</p> <p>The audit team takes positive note of the following statement from DOF: “Landscape Level: Sources and activities are listed below that compare current and historic conditions that DOF considers: DOF inventory data, FIA data, The Shawnee and Zaleski landscape analysis completed with other partners, The RSA and HCVF assessments (detailed in other indicators), LANDFIRE analysis, and the compendium of research and symposiums dealing with oak and fire ecology. DOW Wildlife Action Plans for RTE species. Unit Level: Sources and activities are listed below that</p>

		<p>DOF considers at the unit level: Consideration made during the pre-activity assessment. DOF maintains a layer of special sites. Consultation with the Biodiversity Database. Consultation with the database of historical sites DOW biologists review of activities. Review for rattlesnake impacts at Shawnee. Consultation with Web Soil Survey Submission of NOI-THP with local SWCD. Follow-up surveys with botanist and biologist if something found or predicted on a database.”</p> <p>The FMU-wide assessment of forest conditions is not documented in a fully coordinated and coherent manner. Demonstrating conformity to the 6 subject areas of this Indicator would be better served with a more focused treatment.”</p> <p>While present procedures constitute marginally adequate conformance to this Indicator, a more robust set of analyses would enhance conformity</p> <p><b>See OBS 2010.3</b></p>
<p>6.1.b. Prior to commencing site-disturbing activities, the forest owner or manager assesses and documents the potential short and long-term impacts of planned management activities on elements 1-5 listed in Criterion 6.1.a.</p> <p>The assessment must incorporate the <b>best available information</b>, drawing from scientific literature and experts. The impact assessment will at minimum include identifying resources that may be impacted by management (e.g., streams, habitats of management concern, soil nutrients). Additional detail (i.e., detailed description or quantification of impacts) will vary depending on the uniqueness of the resource, potential risks, and steps that will be taken to avoid and minimize risks.</p>	<p>+/-</p>	<p>Compartment reviews are responsive to this Indicator, as are pre-prescribed fire assessments and pre-activity assessments</p> <p>Forest zoning is a manifestation of assessments of potential short- and long-term impacts of forest management activities</p> <p>The audit team takes positive note of the following statement from DOF: “DOF has a zoning system whereby a form of assessment was completed to compartmentalize areas into different management zones. DOF has a compartment review process and a pre-activity assessment process that includes a pre harvest checklist. Marking estimate and Burn Plan include mitigation sections to describe what was found and considered and mitigation steps. DOF has mapped special sites, reviews databases for RTE species and historical sites, has consultations with DOW biologists on management plans and activity plans. DOF considers the landscape level environmental impact supporting data (listed above) as providing evidence of positive environmental impact due to our shift to oak ecology.”</p> <p>There is an opportunity to engage in additional scientific consultation regarding the use of prescribed</p>

		<p>fire as a tool for achieving desired forest cover conditions (re-establishment of oak). Likewise, there is an opportunity to seek additional expert input on the manner and timing of prescribed fire with regard to efficacy.</p> <p><b>See OBS 2010.4</b></p>
<p>6.1.c. Using the findings of the impact assessment (Indicator 6.1.b), management approaches and field prescriptions are developed and implemented that: 1) avoid or minimize negative short-term and long-term impacts; and, 2) maintain and/or enhance the long-term ecological viability of the forest.</p>	+	<p>Field observations by the audit team confirm:</p> <ul style="list-style-type: none"> <li>• limited rutting, within appropriate limits</li> <li>• no evidence to suggest that the long-term ecological viability is being compromised due to management activities</li> </ul> <p>Chapter 11 of the Land Management Plan describes Prescribed Burn Plans which are responsive to this Indicator.</p> <p>The audit team takes positive note of the following statement from DOF: “All activities have a plan on each individual unit that detail the activities, impacts, and mitigation. Timber sales have a “Marking Estimate”, prescribed fires have a “Burn Plan” and precommercial activities have a “Precommercial Project Prescription”.”</p>
<p>6.1.d. On public lands, assessments developed in Indicator 6.1.a and management approaches developed in Indicator 6.1.c are made available to the public in draft form for review and comment prior to finalization. Final assessments are also made available.</p>	+	<p>Per state law, all documents are publicly available, at a minimum through Public Record Law requests which typically require about 2 weeks for the requested documents to be made available.</p> <p>Most if not all documents are made available at Open Houses.</p> <p>The audit team takes positive note of the following statement from DOF: “All DOF records are public record and are displayed at Open Houses and public meetings in draft form for comment and input prior to finalizing. Management Review Committee (Integration Committee) evaluates and considers public comments in regular meetings.”</p>
<p><b>C 6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping, and collecting shall be controlled.</b></p>	<b>C</b>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>6.2.a. If there is a likely presence of RTE species as identified in Indicator 6.1.a then either a field survey to verify the species' presence or absence is conducted prior</p>	+/-	<p>DOF's management approaches for Indiana Bat and the eastern rattlesnake are clearly responsive to this Indicator</p>

<p>to site-disturbing management activities, or management occurs with the assumption that potential RTE species are present.</p> <p>Surveys are conducted by biologists with the appropriate expertise in the species of interest and with appropriate qualifications to conduct the surveys. If a species is determined to be present, its location should be reported to the manager of the appropriate database.</p>		<p>Natural Heritage Database queries are being done.</p> <p>DOF doesn't engage in much in the way of population surveys but DOW does do so</p> <p>The audit team takes positive note of this statement from DOF "DOF policy states that we follow-up with any positive "hit" on any database. Policy also states all activities at Shawnee are reviewed by the rattlesnake biologists prior to commencing. DOW biologist review our management plans and our activity plans and view our GIS data. They provide feedback and comment as necessary. DOF has in-house botanist who reviews certain sites based on heritage data and provides a thorough field survey for rare plants."</p> <p>Ongoing staff reductions and the elimination of the Division of Natural Areas and Preserves (merged into the Division of Wildlife) is straining the Department's ability to conform to the RTE assessment and survey requirements.</p> <p><b>See OBS 2010.5</b></p>
<p>6.2.b. When RTE species are present or assumed to be present, modifications in management are made in order to maintain, restore or enhance the extent, quality and viability of the species and their habitats. <b>Conservation zones</b> and/or <b>protected areas</b> are established for RTE species, including those S3 species that are considered rare, where they are necessary to maintain or improve the short and long-term viability of the species. Conservation measures are based on relevant science, guidelines and/or consultation with relevant, independent experts as necessary to achieve the conservation goal of the Indicator.</p>	<p>+</p>	<p>Bat Strategy is responsive to the requirements of this Indicator, as are re-zoning and buffering</p> <p>DOF is largely relying on field foresters for identifying the possible presence of RTE species; more frequent training of field foresters in RTE identification would make this approach more robust</p> <p>The audit team takes positive note of the following statement from DOF: "DOF approach is outlined in the Land Management Manual and documented in marking estimates, burn plans, etc. There is a mitigation section to document what was found and adjustments to the activity. Training on RTE species has been included in regular trainings. DOF has a zone system that includes HCVF (HCVF includes areas of RTE species concentrations) and RSAs. "</p>
<p>6.2.c. For medium and large public forests (e.g. state forests), forest management plans and operations are designed to meet species' recovery goals, as well as landscape level biodiversity conservation goals.</p>	<p>-/+</p>	<p>The audit team takes positive note of this statement from DOF: "DOF participates and complies with DOW Wildlife Action Plans (recovery goals) for forest dwelling RTE species. They are referenced in the 5-year management plans. DOF is an active contributor to the Indiana Bat Management Strategy and the Karner Blue Butterfly Recovery Team."</p>

		<p>However, and while recognizing these larger-scale initiatives, the audit team concludes that there is insufficient evidence that management plans and operations on the Ohio State Forests are adequately designed to meet landscape level biodiversity conservation goals.</p> <p><b>See Minor CAR 2010.3</b></p>
6.2.d. Within the capacity of the forest owner or manager, hunting, fishing, trapping, collecting and other activities are controlled to avoid the risk of impacts to vulnerable species and communities (See Criterion 1.5).	+	<p>DOF actively engages in the monitoring and control of unauthorized activities, including those that might adversely impact RTE species</p> <p>The audit team takes positive note of the following statement from DOF: "DOF has a Law Enforcement program and patrols the forest and enforces laws including poaching. All state forests are open for public hunting. DOW enforces RTE species laws on state forests."</p>
<b>C6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
<b>C6.3.a. Landscape-scale indicators</b>		
6.3.a.1. The forest owner or manager maintains, enhances, and/or restores under-represented <i>successional</i> stages in the FMU that would naturally occur on the types of sites found on the FMU. Where old growth of different community types that would naturally occur on the forest are under-represented in the landscape relative to natural conditions, a portion of the forest is managed to enhance and/or restore old growth characteristics.	+	<p>Old growth reserves on the Mohican Forest contributes to conformity with this Indicator</p> <p>DOF's HCVF initiative does a good job of addressing old growth as do backcountry and wilderness areas</p> <p>Grouse management areas help to provide for a diversity of successional stages</p> <p>Very old forest cover remains under-represented across the landscape</p> <p>The audit team takes positive note of this statement from DOF: "DOF's approach to dealing with under-represented successional stages is outlined in the DFC document. DOF policies also deal with Legacy Trees, SMZ's and zones that include HCVF and Wilderness. Mohican State Forest has a DFC of old growth. The context here is that we believe that <i>oak</i> regeneration is an "under-represented" successional stage and our management is trying to promote oak in our future forests."</p>
6.3.a.2. When a <i>rare ecological community</i> is present,	+	Designated HCVFs include rare ecological communities

<p>modifications are made in both the management plan and its implementation in order to maintain, restore or enhance the viability of the community. Based on the vulnerability of the existing community, <b>conservation zones</b> and/or <b>protected areas</b> are established where warranted.</p>		<p>Zaleski Flood Plain Forest and Maumee SF have special management areas that are designed to protect rare ecological communities</p> <p>The zoning system and delineations of areas to be set aside in more restrictive zones is a mechanism for protecting rare ecological communities.</p> <p>Site level assessments are designed to capture special resource areas not considered during the zoning process.</p> <p>DOF manages Maumee State Forest that lies within the Oak Openings region (a notably unique ecosystems); DOF has recognized restoration at Maumee as necessary.</p>
<p>6.3.a.3. When they are present, management maintains the area, structure, composition, and processes of all <b>Type 1</b> and <b>Type 2 old growth</b>. Type 1 and 2 old growth are also protected and buffered as necessary with conservation zones, unless an alternative plan is developed that provides greater overall protection of old growth values.</p> <p>Type 1 Old Growth is protected from harvesting and road construction. Type 1 old growth is also protected from other timber management activities, except as needed to maintain the ecological values associated with the stand, including old growth attributes (e.g., remove exotic species, conduct controlled burning, and thinning from below in dry forest types when and where restoration is appropriate).</p> <p>Type 2 Old Growth is protected from harvesting to the extent necessary to maintain the area, structures, and functions of the stand. Timber harvest in Type 2 old growth must maintain old growth structures, functions, and components including individual trees that function as refugia (see Indicator 6.3.g).</p> <p>On public lands, old growth is protected from harvesting, as well as from other timber management activities, except if needed to maintain the values associated with the stand (e.g., remove exotic species, conduct controlled burning, and thinning from below in forest types when and where restoration is appropriate).</p> <p>On American Indian lands, timber harvest may be permitted in Type 1 and Type 2 old growth in recognition of their sovereignty and unique ownership. Timber harvest</p>	<p>+</p>	<p>Old growth, what little exists on the state forests, is protected by policy.</p> <p>2009 inventory dataset indicator 300+ acres of greater than 200 year old trees. These acres will be protected until such time as future inventory data is acquired.</p> <p>The audit team takes positive note of the following statement from DOF: "Ohio state forests exist in the context of heavy-handed anthropogenic influences including widespread iron-ore furnaces in the mid to late 1800's. These furnaces required vast quantities of wood material to fire the furnaces. Subsequent land use was mostly in the form of low-intensity farming and woodlot grazing. These influences leave us with a forest that is relatively even-aged and less than 120 years old. DOF believes that, based on inventory data, we do not have any type 1 or type 2 old growth. 40 years of compartment reviews have helped discern the lack of old growth. However, our 2009 inventory dataset does in fact show the presence of 300+ acres of greater than 200 year old trees. This data is modeled data and not measured, actual data. The data is derived from CIR imagery, soil data, canopy height modeling, and site index curves. DOF has reasons to be skeptical of this data, however, DOF commits to identify and delineate these acres and target them for future inventory work and possible inclusion into the HCVF zone. These acres will be protected until such time as future inventory data is acquired."</p> <p>DOF has management zones intended to promote future old growth. In those zones, no activities, except invasive species control, is allowed.</p> <p>DOF has developed policies to identify and protect</p>

<p>is permitted in situations where:</p> <ol style="list-style-type: none"> <li>1. Old growth forests comprise a significant portion of the tribal ownership.</li> <li>2. A history of forest stewardship by the tribe exists.</li> <li>3. High Conservation Value Forest attributes are maintained.</li> <li>4. Old-growth structures are maintained.</li> <li>5. Conservation zones representative of old growth stands are established.</li> <li>6. Landscape level considerations are addressed.</li> <li>7. Rare species are protected.</li> </ol>		<p>Legacy Trees and Retention Trees</p> <p>Mohican State Forest as well as the Shawnee Wilderness and other RSA's have old growth forest as their desired future condition.</p>
<p>6.3.b. To the extent feasible within the size of the ownership, particularly on larger ownerships (generally tens of thousands or more acres), management maintains, enhances, or restores habitat conditions suitable for well-distributed populations of animal species that are characteristic of forest ecosystems within the landscape.</p>	<p>+</p>	<p>DOF, in collaboration with DOW, has special management initiatives for black bears, bats, cerulean warblers and snakes</p> <p>DOF's oak management focus has positive implications for a host of wildlife species that would predictably suffer if the forests were allowed to transition to mesic species.</p> <p>DOW, USFS research, and other partners and publications support DOF in their oak management effort.</p> <p>The zoning system on the state forests, all the more so since DOF revised the system in advance of undergoing the certification evaluation, is responsive to this Indicator.</p> <p>DOF has 2 Ruffed Grouse management areas and 1 Wild Turkey management area.</p> <p>Shawnee and Zaleski are identified by DOW as "forest focus areas" for most if not all important wildlife species and have associated tactical plans.</p> <p>DOF has active invasive species monitoring and control programs.</p> <p>Rattlesnake habitat is a key focus on the Shawnee SF.</p> <p>Backcountry management area, HCVFs, and RSAs help provide for key wildlife habitat.</p> <p>The Indiana Bat Management Strategy that has a habitat component.</p>

		DOF cooperates with TNC to provide a corridor between the Edge of Appalachia Preserve and Shawnee State Forest.
6.3.c. Management maintains, enhances and/or restores the plant and wildlife habitat of <b>Riparian Management Zones (RMZs)</b> to provide: <ul style="list-style-type: none"> <li>a) habitat for aquatic species that breed in surrounding uplands;</li> <li>b) habitat for predominantly terrestrial species that breed in adjacent <b>aquatic habitats</b>;</li> <li>c) habitat for species that use riparian areas for feeding, cover, and travel;</li> <li>d) habitat for plant species associated with riparian areas; and,</li> <li>e) stream shading and inputs of wood and leaf litter into the adjacent aquatic ecosystem.</li> </ul>	+	<p>Section D of Chapter 4 of the land management manual contains the streamside management zone guidelines and policies that all timber sales must abide by; the quantitative buffer width guidelines look to be sufficient to provide for the habitat protections contained in this Indicator</p> <p>The audit team takes positive note of this statement from DOF: “DOF zone system outlined in Land Management Manual chapter 2 contains a “Resource Protection” zone that includes all of the major floodplain forests that we manage. Management guidelines prevent clearcutting and heavy equipment use in the zone. DOF has an SMZ policy. DOF identified OEPA designated high quality streams located on state forests. DOF solicited input from the fisheries section of DOW for identification of important stream habitats and zoned them as appropriate.”</p>
<p><b>Stand-scale Indicators</b></p> <p>6.3.d Management practices maintain or enhance plant species composition, distribution and frequency of occurrence similar to those that would naturally occur on the site.</p>	+/-	<p>DOF’s prescribed fire initiative is explicitly driven by stand-scale and landscape-scale habitat objectives (restoring oak)</p> <p>We note that some stakeholders are of a strong opinion that restoring a greater presence of oak through prescribed fire is not ecologically appropriate although the weight of scientific opinion is supportive of the effort</p> <p>DOF staff foresters will receive training on SILVAH Oak; the first surveillance audit will follow-up on whether this training has taken place.</p> <p>All foresters have received silviculture training</p> <p>DOF’s pine management policy is another example of an initiative aimed at restoring more natural conditions.</p>
6.3.e. When planting is required, a local source of known provenance is used when available and when the local source is equivalent in terms of quality, price and productivity. The use of non-local sources shall be justified, such as in situations where other management objectives (e.g. disease resistance or adapting to climate change) are best served by non-local sources. <b>Native species</b> suited to the site are normally selected for regeneration.	+/-	<p>Very little tree planting is done on the state forests (reliance on natural regeneration); but when tree planting does occur, DOF uses locally purchased planting stock.</p> <p>The land management manual contains guidance on pre-commercial timber management activities</p> <p>Use of a local, native erosion control seed mix would</p>

		<p>assure better conformity to the requirements that use of non-native species occurs only where justified and risk assessments have been completed.</p> <p><b>See OBS 2010.6</b></p>
<p>6.3.f. Management maintains, enhances, or restores habitat components and associated stand structures, in abundance and distribution that could be expected from naturally occurring processes. These components include:</p> <p>a) large live trees, live trees with decay or declining health, <b>snags</b>, and well-distributed coarse down and dead woody material. <b>Legacy trees</b> where present are not harvested; and</p> <p>b) vertical and horizontal complexity.</p> <p>Trees selected for <b>retention</b> are generally representative of the dominant species found on the site.</p>	-	<p>The audit team takes due note of this statement from DOF: “Our <i>oak ecology and management</i> focus responds to this indicator. Further, DOF has guidelines relating to Legacy Trees and Retention Trees in the Land Management Manual. Further guidance on retention trees is outlined in DOW documents such as the Indiana Bat Management Strategy and others.”</p> <p>These efforts notwithstanding, there is inadequate coordination between the Division of Forestry and the Division of Wildlife regarding the “Guidelines for Management of Forestland Habitats.” There is a lack of clarity as to the intent of the Guidelines and references to the Guidelines in the Manual appear to be overstated.</p> <p><b>See Minor CAR 2010.4</b></p>
<p>6.3.g.1 In the Southeast, Appalachia, Ozark-Ouachita, Mississippi Alluvial Valley, and Pacific Coast Regions, when <b>even-aged systems</b> are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit as described in Appendix C for the applicable region.</p> <p>In the Lake States Northeast, Rocky Mountain and Southwest Regions, when even-aged silvicultural systems are employed, and during salvage harvests, 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 the purposes of restoration or rehabilitation. See Appendix C for additional regional requirements and guidance.</p>	+	<p>Policy now found in the land management manual: Chapter 2 (Zoning), Chapter 4 (Timber Management)</p> <p>Retention of residual live trees within an even-aged regeneration harvest must be 20 square feet of basal area per acre in order to comply with Appendix C of the National Standard. Some recent even-aged harvest units have not met this residual requirement and it is apparent from interviews that not all field foresters have an adequate awareness of this FSC requirement</p> <p><b>See OBS 2010.7</b></p>
<p>6.3.g.2 Under very limited situations, the landowner or manager has the option to develop a qualified plan to allow minor departure from the opening size limits described in Indicator 6.3.g.1. A qualified plan:</p> <ol style="list-style-type: none"> <li>1. Is developed by qualified experts in ecological and/or related fields (wildlife biology, hydrology, landscape ecology, forestry/silviculture).</li> <li>2. Is based on the totality of the <b>best available information</b> including peer-reviewed science regarding natural disturbance regimes for the</li> </ol>	+	<p>The team will examine variations in future audits.</p> <p>The audit team takes note of this statement from DOF: “There are only 3 situations where we may depart from retention guidelines. 1) The Grouse Management Areas – clearcut treatments are used, generally less than 10 acres, however some are between 10 and 15 acres. These areas are managed per agreements with the Ruffed Grouse Society; 2) Pine clearcut harvests – biologists and foresters agree that pine retention trees are not appropriate given</p>

<p>FMU.</p> <ol style="list-style-type: none"> <li>3. Is spatially and temporally explicit and includes maps of proposed openings or areas.</li> <li>4. Demonstrates that the variations will result in equal or greater benefit to wildlife, water quality, and other values compared to the normal opening size limits, including for sensitive and rare species.</li> <li>5. Is reviewed by independent experts in wildlife biology, hydrology, and landscape ecology, to confirm the preceding findings.</li> </ol>		<p>that the intent is to promote hardwood regeneration; and 3) Salvage – responses to catastrophic events such as tornado, ice storm, and wildlife will likely not meet retention goals given that there are no trees left to retain.”</p> <p>Notably, all these circumstances have nothing to do with departing from the opening size limits for economic reasons</p>
<p>6.3.h. The forest owner or manager assesses the risk of, prioritizes, and, as warranted, develops and implements a strategy to prevent or control <i>invasive species</i>, including:</p> <ol style="list-style-type: none"> <li>1. a method to determine the extent of invasive species and the degree of threat to native species and ecosystems;</li> <li>2. implementation of management practices that minimize the risk of invasive establishment, growth, and spread;</li> <li>3. eradication or control of established invasive populations when feasible: and,</li> <li>4. monitoring of control measures and management practices to assess their effectiveness in preventing or controlling invasive species.</li> </ol>	<p>+ / -</p>	<p>Management of invasive species is addressed in Chapter 10, Section B.4., of the land management manual</p> <p>An invasive species forester has been hired who gives assistance to private landowners and other public land managers</p> <p>The stimulus-funded OWJC (job corps) has proven to be of great value to the Department over the past two years. Unfortunately, funding for this program ends as of 12/31/10 which will have an adverse impact on the Department’s ability to manage invasive species control in a manner that will demonstrate ongoing compliance with the certification standard.</p> <p><b>See OBS 2010.8</b></p>
<p>6.3.i. In applicable situations, the forest owner or manager identifies and applies site-specific fuels management practices, based on: (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, (4) public safety, and (5) applicable laws and regulations.</p>	<p>+</p>	<p>DOF has a fire management program that is responsive to this Indicator</p> <p>There remains a spirited debate over the ‘naturalness’ of fire in the forest ecology of this region but the weight of scientific opinion is that anthropomorphic fire has been part of the forest ecosystem for thousands of years</p> <p>DOF’s response to the ice storm on the Shawnee is an example effort to manage fuels</p>
<p><b>C6.4. Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.</b></p>	<p><b>C</b></p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>6.4.a. The forest owner or manager documents the ecosystems that would naturally exist on the FMU, and assesses the adequacy of their representation and</p>	<p>+</p>	<p>The representative sample area analysis that DOF conducted was completed in a manner that is very responsive to this Indicator</p>

<p>protection in the <i>landscape</i> (see Criterion 7.1). The assessment for medium and large forests include some or all of the following: a) <i>GAP analyses</i>; b) collaboration with state natural heritage programs and other public agencies; c) regional, landscape, and watershed planning efforts; d) collaboration with universities and/or local conservation groups.</p> <p>For an area that is not located on the FMU to qualify as a Representative Sample Area (RSA), it should be under permanent protection in its natural state.</p>		<p>DOF has completed a reasonable GAP analysis and is open to collaboration with universities, federal research scientists and conservation organizations such as TNC</p>
<p>6.4.b. Where existing areas within the landscape, but external to the FMU, are not of adequate protection, size, and configuration to serve as representative samples of existing ecosystems, forest owners or managers, whose properties are conducive to the establishment of such areas, designate ecologically viable RSAs to serve these purposes.</p> <p>Large FMUs are generally expected to establish RSAs of purpose 2 and 3 within the FMU.</p>	<p>+</p>	<p>DOF has established RSAs within the state forests and, as such, is not relying on other ownerships such as the national forest to provide these areas</p>
<p>6.4.c. Management activities within RSAs are limited to low impact activities compatible with the protected RSA objectives, except under the following circumstances:</p> <ul style="list-style-type: none"> <li>a) harvesting activities only where they are necessary to restore or create conditions to meet the objectives of the protected RSA, or to mitigate conditions that interfere with achieving the RSA objectives; or</li> <li>b) road-building only where it is documented that it will contribute to minimizing the overall environmental impacts within the FMU and will not jeopardize the purpose for which the RSA was designated.</li> </ul>	<p>+</p>	<p>Management activities within RSAs are limited to low impact activities</p>
<p>6.4.d. The RSA assessment (Indicator 6.4.a) shall be periodically reviewed and if necessary updated (at a minimum every 10 years) in order to determine if the need for RSAs has changed; the designation of RSAs (Indicator 6.4.b) is revised accordingly.</p>	<p>+</p>	<p>DOF has committed to review its RSA allocations on a 10-year interval</p> <p>This Indicator will be evaluated in future annual audits, as the initial RSA assessment was recently completed</p>
<p>6.4.e. Managers of large, contiguous public forests establish and maintain a network of representative protected areas sufficient in size to maintain species dependent on interior core habitats.</p>	<p>+</p>	<p>Both Shawnee and Zileski—the two state forests that meet the FSC definition of a large, contiguous public forest—have RSA protected areas that have been designated</p>
<p><b>C6.5. Written guidelines shall be prepared and implemented to control erosion; minimize forest damage</b></p>	<p><b>C</b></p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>

<p><b>during harvesting, road construction, and all other mechanical disturbances; and to protect water resources.</b></p>		
<p>6.5.a. The forest owner or manager has written guidelines outlining conformance with the Indicators of this Criterion.</p>	<p>+</p>	<p>The Land Management Manual was developed in order to provide written guidelines that are responsive to this Indicator</p> <p>State BMPs (written and published) are treated as mandatory on the state forests</p> <p>The audit team takes positive note of the following statement from DOF: “BMP’s in Ohio are voluntary, however DOF requires BMPs as mandatory on all state forest timber harvests. DOF consults soil data as part of the pre-activity assessment. DOF has a Wet Weather Logging Policy and an inspection and shutdown process in order to deal with soil impacts as soon as they occur. Guidelines are in place to deal with minimizing forest damage – in the contract, etc. Water resources are protected with proper BMPs and following SMZ guidelines.”</p>
<p>6.5.b. Forest operations meet or exceed Best Management Practices (BMPs) that address components of the Criterion where the operation takes place.</p>	<p>+</p>	<p>Final inspections by foresters who administer the harvests and by their supervisors include a review of BMPs. Monitoring activities are discussed in chapter 12 of the Land Management Manual. All foresters receive TSA training as part of their normal training; this covers monitoring protocols. All harvests are planned, laid out, and supervised by trained foresters, who are supervised by experienced forest managers. Forest managers (who supervise foresters conducting the timber management program but who are also responsible for all management activities) ensure BMPs are used as needed.</p> <p>One notable exception to DOF’s overall strong level of conformance to the BMPs was observed: road maintenance on Blackburn Ridge</p>
<p>6.5.c. Management activities including site preparation, harvest prescriptions, techniques, timing, and equipment are selected and used to protect soil and water resources and to avoid erosion, landslides, and significant soil disturbance. Logging and other activities that significantly increase the risk of landslides are excluded in areas where risk of landslides is high. The following actions are addressed:</p> <ul style="list-style-type: none"> <li>• Slash is concentrated only as much as necessary to achieve the goals of site preparation and the reduction of fuels to moderate or low levels of fire hazard.</li> <li>• Disturbance of topsoil is limited to the minimum</li> </ul>	<p>+</p>	<p>Based on field observations, the audit team concludes that DOF is in compliance with each of the actions listed in the Indicator. The elements are addressed in Ohio BMPs.</p> <p>The audit team takes positive note of this statement from DOF: “DOF promotes low-impact equipment by advertising low-impact only timber sales. DOF manages an incentive program (Linked Deposit) whereby loggers can purchase low impact equipment at reduced interest rates.”</p>

<p>necessary to achieve successful regeneration of species native to the site.</p> <ul style="list-style-type: none"> <li>• Rutting and compaction is minimized.</li> <li>• Soil erosion is not accelerated.</li> <li>• Burning is only done when consistent with natural disturbance regimes.</li> <li>• Natural ground cover disturbance is minimized to the extent necessary to achieve regeneration objectives.</li> <li>• Whole tree harvesting on any site over multiple rotations is only done when research indicates soil productivity will not be harmed.</li> <li>• Low impact equipment and technologies is used where appropriate.</li> </ul>		
<p>6.5.d. The transportation system, including design and placement of permanent and temporary haul roads, skid trails, recreational trails, water crossings and landings, is designed, constructed, maintained, and/or reconstructed to reduce short and long-term environmental impacts, habitat fragmentation, soil and water disturbance and cumulative adverse effects, while allowing for customary uses and use rights. This includes:</p> <ul style="list-style-type: none"> <li>• access to all roads and trails (temporary and permanent), including recreational trails, and off-road travel, is controlled, as possible, to minimize ecological impacts;</li> <li>• road density is minimized;</li> <li>• erosion is minimized;</li> <li>• sediment discharge to streams is minimized;</li> <li>• there is free upstream and downstream passage for aquatic organisms;</li> <li>• impacts of transportation systems on wildlife habitat and migration corridors are minimized;</li> <li>• area converted to roads, landings and skid trails is minimized;</li> <li>• habitat fragmentation is minimized;</li> <li>• unneeded roads are closed and rehabilitated.</li> </ul>	+/-	<p>The Blackburn Ridge road does not meet the Department’s best management practices and, by extension, the FSC requirement that the road system is maintained to reduce short and long-term environmental impacts.</p> <p>This appears to be an isolated incident, but the team will follow up in future audits.</p> <p><b>See Minor CAR 2010.5</b></p>
<p>6.5.e.1. In consultation with appropriate expertise, the forest owner or manager implements written <b>Streamside Management Zone (SMZ) buffer</b> management guidelines that are adequate for preventing environmental impact, and include protecting and restoring water quality, hydrologic conditions in rivers and stream corridors, wetlands, vernal pools, seeps and springs, lake and pond shorelines, and other hydrologically sensitive areas. The guidelines include vegetative buffer widths and protection measures that are acceptable within those buffers.</p> <p>In the Appalachia, Ozark-Ouachita, Southeast, Mississippi Alluvial Valley, Southwest, Rocky Mountain, and Pacific Coast regions, there are requirements for minimum SMZ</p>	+/-	<p>The audit team agrees with DOF’s assertion that their written guidelines for SMZs provide greater protection--on paper--than defined in the FSC standard.</p> <p>Guidelines are codified in the Land Management Manual</p> <p>Not all field foresters demonstrate an adequate working knowledge of Section D of Chapter 4 of the Manual, pertaining to stream buffer guidelines.</p> <p><b>See OBS 2010.9</b></p>

widths and explicit limitations on the activities that can occur within those SMZs. These are outlined as requirements in Appendix E.		
6.5.e.2. Minor variations from the stated minimum SMZ widths and layout for specific stream segments, wetlands and other water bodies are permitted in limited circumstances, provided the forest owner or manager demonstrates that the alternative configuration maintains the overall extent of the buffers and provides equivalent or greater environmental protection than FSC-US regional requirements for those stream segments, water quality, and aquatic species, based on site-specific conditions and the best available information. The forest owner or manager develops a written set of supporting information including a description of the riparian habitats and species addressed in the alternative configuration. The CB must verify that the variations meet these requirements, based on the input of an independent expert in aquatic ecology or closely related field.	+	<p>No such variations were observed during the field visits, which suggests that they are limited and infrequent. There is a policy in place that requires guidelines to be followed; this appears to be enforced and implemented.</p> <p>In cases where variations from the stated minimum buffer widths have occurred, DOF states that it has been due to contract non-compliance and those are handled via the mechanisms afforded to DOF in the timber sale contract.</p>
6.5.f. Stream and wetland crossings are avoided when possible. Unavoidable crossings are located and constructed to minimize impacts on water quality, hydrology, and fragmentation of <b>aquatic habitat</b> . Crossings do not impede the movement of aquatic species. Temporary crossings are restored to original hydrological conditions when operations are finished.	+	Field observations confirm that DOF uses guidelines outlined in the BMP manual for Ohio that respond to this indicator, as well as those outlined in the Land Management Manual.
6.5.g. Recreation use on the FMU is managed to avoid negative impacts to soils, water, plants, wildlife and wildlife habitats.	+	<p>Enforcement Division takes the lead to control recreational uses like hunting, fishing, trapping, collecting and other activities. DNR administers a host of regulations, licenses, and permits to protect state resources.</p> <p>There are trail construction and maintenance standards and guidelines.</p> <p>The recreation committee sets forth policy and standards relating to trails.</p> <p>DOF has partnerships with OHC, BT, and other groups to deal with trail maintenance. As needed, trails are re-routed in cooperation with external groups.</p> <p>RTP grants and commitment for funds for maintenance provide the financial resources to manage adverse impacts of recreational activities on the state forests.</p>
6.5.h. Grazing by domesticated animals is controlled to protect in-stream habitats and water quality, the species composition and viability of the riparian vegetation, and	+	There is no grazing by domesticated animals on Ohio State Forest land.

the banks of the stream channel from erosion.		
<p><b>C6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.</b></p>	C	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>6.6.a. No products on the FSC list of Highly Hazardous Pesticides are used (see FSC-POL-30-001 EN FSC Pesticides policy 2005 and associated documents).</p>	+	<p>DOF's approach to chemical use is outlined in Chapter 9 of the Land Management Manual.</p> <p>Chemical use is a very minor activity on the state forests; due to silvicultural methods that are employed, DOF does not have operational need for or large scale use of pesticides.</p> <p>In recent years, grant dollars have afforded the creation of two invasive species control programs. Specifically, the Ohio Woodland Job Corps is actively treating invasive species with herbicides. The approved state forest list of herbicides is in the manual. Members of the OWJC receive certified pesticide applicator training.</p> <p>DOF is in compliance and the list of chemicals used is in the Land Management Manual.</p>
<p>6.6.b. All toxicants used to control pests and competing vegetation, including rodenticides, insecticides, herbicides, and fungicides are used only when and where non-chemical management practices are: a) not available; b) prohibitively expensive, taking into account overall environmental and social costs, risks and benefits; c) the only effective means for controlling invasive and exotic species; or d) result in less environmental damage than non-chemical alternatives (e.g., top soil disturbance, loss of soil litter and down wood debris). If chemicals are used, the forest owner or manager uses the least environmentally damaging formulation and application method practical.</p> <p>Written strategies are developed and implemented that justify the use of chemical pesticides. Whenever feasible, an eventual phase-out of chemical use is included in the strategy. The written strategy shall include an analysis of</p>	+	<p>DOF's use of pesticides is primarily associated with invasive species control efforts.</p> <p>All staff and workers receive applicator training.</p>

options for, and the effects of, various chemical and non-chemical pest control strategies, with the goal of reducing or eliminating chemical use.		
6.6.c. Chemicals and application methods are selected to minimize risk to non-target species and sites. When considering the choice between aerial and ground application, the forest owner or manager evaluates the comparative risk to non-target species and sites, the comparative risk of worker exposure, and the overall amount and type of chemicals required.	+	Chemicals selected for use are responsive to this Indicator
6.6.d. Whenever chemicals are used, a written prescription is prepared that describes the site-specific hazards and environmental risks, and the precautions that workers will employ to avoid or minimize those hazards and risks, and includes a map of the treatment area. Chemicals are applied only by workers who have received proper training in application methods and safety. They are made aware of the risks, wear proper safety equipment, and are trained to minimize environmental impacts on non-target species and sites.	+	All projects that use chemicals have a written plan similar to the plans developed for timber sales or prescribed burns.
6.6.e. If chemicals are used, the effects are monitored and the results are used for adaptive management. Records are kept of pest occurrences, control measures, and incidences of worker exposure to chemicals.	+	Thorough records are maintained  Post treatment monitoring is undertaken
<b>C6.7. Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
6.7.a. The forest owner or manager, and employees and contractors, have the equipment and training necessary to respond to hazardous spills	+	Spill kits are provided by the state.  All OJWC members and most forest managers are certified pesticide applicators.  Spill kits are required to be on-site on timber sales and are present with the OWJC and in storage rooms.
6.7.b. In the event of a hazardous material spill, the forest owner or manager immediately contains the material and engages qualified personnel to perform the appropriate removal and remediation, as required by applicable law and regulations.	+	Covered in contract language.  Pertinent DOF staff have received training and spill kits are on hand.
6.7.c. Hazardous materials and fuels are stored in leak-proof containers in designated storage areas, that are outside of riparian management zones and away from other ecological sensitive features, until they are used or transported to an approved off-site location for disposal. There is no evidence of persistent fluid leaks from equipment or of recent groundwater or surface water	+	Each unit has a storage area with signage, spill kits and personal protective equipment.  Equipment inspections are periodically conducted.

contamination.		
<b>C6.8. Use of biological control agents shall be documented, minimized, monitored, and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
6.8.a. Use of <b>biological control agents</b> are used only as part of a pest management strategy for the control of invasive plants, <b>pathogens</b> , insects, or other animals when other pest control methods are ineffective, or are expected to be ineffective. Such use is contingent upon peer-reviewed scientific evidence that the agents in question are non-invasive and are safe for native species.	+	The gypsy moth control program is not currently active.  The audit team takes positive note of this statement from DOF: "The use of biological controls has either been in conjunction with research projects or as part of larger efforts to control Gypsy Moth (cooperation with ODA) or EAB. ODA has a gypsy moth "slow-the-spread" program whereby state forests may receive treatments of pheromone flakes, or other bio-controls. Treatments for gypsy moth also have included fungi and parasitic wasps. All applications were done using IPM techniques with written protocols and records. The intent of these efforts was to evaluate efficacy and appropriateness for other Ohio woodland owners. A full discussion and records are available."
6.8.b. If biological control agents are used, they are applied by trained workers using proper equipment.	+	No biological control agents are being deployed on the state forests
6.8.c. If biological control agents are used, their use shall be documented, monitored and strictly controlled in accordance with state and national laws and internationally accepted scientific protocols. A written plan will be developed and implemented justifying such use, describing the risks, specifying the precautions workers will employ to avoid or minimize such risks, and describing how potential impacts will be monitored.	+	None are used
6.8.d. Genetically Modified Organisms (GMOs) are not used for any purpose	+	No GMOs are used.
<b>C6.9. The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
6.9.a. The use of <b>exotic species</b> is contingent on the availability of credible scientific data indicating that any such species is non-invasive and its application does not pose a risk to native biodiversity.	+/-	By policy, DOF does not plant exotic species  Were ODOF to develop a policy of using local, native erosion control seed mix, there would be more robust conformance with the FSC requirement that use of non-native species occurs only where justified and risk assessments have been completed.

		<b>See OBS 2010.6</b>
6.9.b. If exotic species are used, their provenance and the location of their use are documented, and their ecological effects are actively monitored.	+	With the exception of erosion control seed mix, there is no use of non-native species
6.9.c The forest owner or manager shall take timely action to curtail or significantly reduce any adverse impacts resulting from their use of exotic species	NA	
<b>C6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:</b> <b>a) Entails a very limited portion of the forest management unit; and b) Does not occur on High Conservation Value Forest areas; and c) Will enable clear, substantial, additional, secure, long-term conservation benefits across the forest management unit.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
6.10.a Forest <i>conversion</i> to non-forest land uses does not occur, except in circumstances where conversion entails a very limited portion of the forest management unit (note that Indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).	+	DOF does not voluntarily convert any forestland to plantations or non-forest land.  The audit team takes positive note of this statement from DOF: "If there are conversions to non-forest, it is only due to utility or gas pipeline rights-of-way and obligated by agreement. DOF allowed for a new natural gas right-of-way across 2 state forests given the pipeline was of national importance (The Rockies Express Pipeline – connecting Wyoming and the Atlantic Ocean). This ROW was of minor scale – 53 acres. The REX agreement produced mitigation funds that were used towards the purchase of the Vinton Furnace Experimental Forest. DOF has a plantation (pine) management policy with the intent to convert those pine stands back to native hardwood stands. Two state forests – Mohican and Hocking – have sub-surface natural gas storage fields with an associate above-ground network of well heads. Acreage from these well heads are small <0.25 ac each."
6.10.b Forest <i>conversion</i> to non-forest land uses does not occur on high conservation value forest areas (note that Indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).	+	No evidence of adverse impacts to HCWFs due to forest conversion was uncovered during the audit
6.10.c Forest <i>conversion</i> to non-forest land uses does not occur, except in circumstances where conversion will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit (note that Indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).	+	No discretionary conversions are occurring; conversions associate with O&G development do generate revenues that in part are returned for the management of the state forests
6.10.d Natural or semi-natural stands are not converted to plantations. Degraded, semi-natural stands may be converted to restoration plantations.	+	Not occurring

6.10.e Justification for land-use and stand-type conversions is fully described in the long-term management plan, and meets the biodiversity conservation requirements of Criterion 6.3 (see also Criterion 7.1.l)	+	No such conversions are occurring that are not ecologically driven
6.10.f Areas converted to <i>non-forest use</i> for facilities associated with subsurface mineral and gas rights transferred by prior owners, or other conversion outside the control of the certificate holder, are identified on maps. The forest owner or manager consults with the CB to determine if removal of these areas from the scope of the certificate is warranted. To the extent allowed by these transferred rights, the forest owner or manager exercises control over the location of surface disturbances in a manner that minimizes adverse environmental and social impacts. If the certificate holder at one point held these rights, and then sold them, then subsequent conversion of forest to non-forest use would be subject to Indicator 6.10.a-d.	+	Two forests with subsurface storage sites, approximately 30 acres in total, are being reactivated as natural gas storage site  A new pipeline that in part runs across two state forests is generating revenues that are being put to positive conservation-driven uses such as acquisition of the Vinton forest
<b>P7 A management plan -- appropriate to the scale and intensity of the operations -- shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.</b>		
<p><b>C7.1. The management plan and supporting documents shall provide:</b></p> <p><b>a) Management objectives. b) description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands.</b></p> <p><b>c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories.</b></p> <p><b>d) Rationale for rate of annual harvest and species selection. e) Provisions for monitoring of forest growth and dynamics. f) Environmental safeguards based on environmental assessments. g) Plans for the identification and protection of rare, threatened and endangered species.</b></p> <p><b>h) Maps describing the forest resource base including protected areas, planned management activities and land ownership.</b></p> <p><b>i) Description and justification of harvesting techniques and equipment to be used.</b></p>	C	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p> <p>DOF has an expanding compendium of planning documents that, collectively, constitute the “management plan” for the state forests and that cover the subject areas required in this Criterion:</p> <ul style="list-style-type: none"> <li>• The Land Management Manual</li> <li>• The Shawnee Wilderness Plan</li> <li>• The 2008 Strategic Plan for State Forests</li> <li>• Forest-Specific 5-year management plans</li> <li>• Forest-Specific Annual Work Plans</li> <li>• The Backcountry Area Management Plan</li> <li>• Grouse and Turkey Area Management Plan</li> </ul>
7.1.a. The management plan identifies the ownership and legal status of the FMU and its resources, including rights held by the owner and rights held by others.	+	<p>Legal status of the state forests is clearly established and are addressed in Chapter 1 of the Land Management Manual</p> <p>Third party rights are known and the title review process ensures that unsubstantiated and unknown</p>

		rights are extinguished.
7.1.b. The management plan describes the history of land use and past management, current forest types and associated development, size class and/or successional stages, and natural disturbance regimes that affect the FMU (see Indicator 6.1.a).	+/-	<p>A history of land use is presented in each Forest-specific 5-year management plan.</p> <p>Current forest types and attributes are tracked in DOF's inventory and GIS database.</p> <p>Conformity to this Indicator would be enhanced by more property-specific content within the management plans.</p> <p><b>See OBS 2010.10</b></p>
7.1.c. The management plan describes: a) current conditions of the timber and non-timber forest resources being managed; b) desired future conditions; c) historical ecological conditions; and d) applicable management objectives and activities to move the FMU toward desired future conditions.	+	The forest-specific 5-year management plans, the DFC (Desired Future Conditions) document and the Land Management Manual collectively cover these subject areas.
7.1.d. The management plan includes a description of the landscape within which the FMU is located and describes how landscape-scale habitat elements described in Criterion 6.3 will be addressed.	+	<p>Landscape-scale habitat elements are addressed in the forest-specific management plans.</p> <p>The RSA and HCVF assessments also consider landscape-scale issues.</p>
7.1.e. The management plan includes a description of the following resources and outlines activities to conserve and/or protect: <ul style="list-style-type: none"> <li>• rare, threatened, or endangered species and natural communities (see Criterion 6.2);</li> <li>• plant species and community diversity and wildlife habitats (see Criterion 6.3);</li> <li>• water resources (see Criterion 6.5);</li> <li>• soil resources (see Criterion 6.3);</li> <li>• Representative Sample Areas (see Criterion 6.4);</li> <li>• High Conservation Value Forests (see Principle 9);</li> <li>• Other special management areas.</li> </ul>	+	Covered in the forest plans but also in the land management manual, the RSA assessment document, and the HCVF assessment document.
7.1.f. If invasive species are present, the management plan describes invasive species conditions, applicable management objectives, and how they will be controlled (see Indicator 6.3.j).	+	<p>Invasive species management is covered in the land management manual.</p> <p>Operational projects focusing on invasive species control are incorporated into forest-specific annual work plans.</p> <p>DOF also has state-wide and forest-wide invasive species control programs.</p>
7.1.g. The management plan describes insects and diseases, current or anticipated outbreaks on forest conditions and management goals, and how insects and diseases will be managed (see Criteria 6.6 and 6.8).	+	These topics are covered in Chapter 10 of the Land Management Manual
7.1.h. If chemicals are used, the plan describes what is	+	This topic is covered in Chapter 10 of the Land

being used, applications, and how the management system conforms with Criterion 6.6.		Management Manual
7.1.i. If biological controls are used, the management plan describes what is being used, applications, and how the management system conforms with Criterion 6.8.	+	This topic is covered in Chapter 10 of the Land Management Manual
7.1.j. The management plan incorporates the results of the evaluation of social impacts, including: <ul style="list-style-type: none"> <li>• traditional cultural resources and rights of use (see Criterion 2.1);</li> <li>• potential conflicts with customary uses and use rights (see Criteria 2.2, 2.3, 3.2);</li> <li>• management of ceremonial, archeological, and historic sites (see Criteria 3.3 and 4.5);</li> <li>• management of aesthetic values (see Indicator 4.4.a);</li> <li>• public access to and use of the forest, and other recreation issues;</li> <li>• local and regional socioeconomic conditions and economic opportunities, including creation and/or maintenance of quality jobs (see Indicators 4.1.b and 4.4.a), local purchasing opportunities (see Indicator 4.1.e), and participation in local development opportunities (see Indicator 4.1.g).</li> </ul>	+/-	<p>The management plans for each state forest include a section describing DOF's approach to social impact evaluation.</p> <p>A full discussion of social impact monitoring is found in Chapter 12 of the statewide land management manual.</p> <p>The audit team takes positive note of this statement from DAOF: "DOF uses the FRAS process, public participation process, civic activities, recreation program, and many other sources to determine social impacts. Results are considered in our Integration Committee (Management Review Committee) and our plans are updated every 5 years."</p> <p>Overall, the audit team is impressed with the enhanced focus that DOF has placed on tracking and considering the social dimension of their management program. But this is a relatively recent emphasis and there remain opportunities for even more systematic and robust tracking of social impacts.</p>
7.1.k. The management plan describes the general purpose, condition and maintenance needs of the transportation network (see Indicator 6.5.e).	+	<p>Annual work plans outline specific road maintenance activities.</p> <p>The 2008 strategic plan includes a discussion of forest infrastructure, including the road system.</p> <p>The forest plans for each state forest contain a discussion on infrastructure that includes an overview of the road system</p>
7.1.l. The management plan describes the silvicultural and other management systems used and how they will sustain, over the long term, forest ecosystems present on the FMU.	+/-	<p>Addressed primarily in the land management manual</p> <p>Focus on oak silviculture is most developed within the management plans; there is an opportunity to strengthen the discussion of silviculture in the compendium of planning documents</p>
7.1.m. The management plan describes how species selection and harvest rate calculations were developed to meet the requirements of Criterion 5.6.	+	A presentation of harvest levels and inventory is found in each forest plan and in the land management manual
7.1.n. The management plan includes a description of monitoring procedures necessary to address the requirements of Criterion 8.2.	+	<p>A section on monitoring is incorporated into each forest-specific plan</p> <p>An in-depth presentation of monitoring is found in the land management manual</p>

<p>7.1.o. The management plan includes maps describing the resource base, the characteristics of general management zones, special management areas, and protected areas at a level of detail to achieve management objectives and protect sensitive sites.</p>	<p>+/-</p>	<p>DOF has good map generating capacity, centralized at the headquarters office</p> <p>Large-scale maps are extensively displayed at open houses</p> <p>The forest-specific plans would benefit from inclusion of maps containing key resource information</p>
<p>7.1.p. The management plan describes and justifies the types and sizes of harvesting machinery and techniques employed on the FMU to minimize or limit impacts to the resource.</p>	<p>-</p>	<p>The management plan(s) do not adequately describe and justify the types and sizes of harvesting machinery and harvesting techniques employed on the FMU.</p> <p><b>See Minor CAR 2010.6</b></p>
<p>7.1.q. Plans for harvesting and other significant site-disturbing management activities required to carry out the management plan are prepared prior to implementation. Plans clearly describe the activity, the relationship to objectives, outcomes, any necessary environmental safeguards, health and safety measures, and include maps of adequate detail.</p>	<p>+</p>	<p>Stand-level prescriptions and compartment reviews constitute adequate if not exemplary compliance with this Indicator</p> <p>Additionally, burn plans and pre-commercial activity plans are responsive to this Indicator</p>
<p>7.1.r. The management plan describes the stakeholder consultation process.</p>	<p>+/-</p>	<p>The “Pathways to Participation” document, now part of the compendium of plan documents provides an overview of the stakeholder consultation process</p> <p>Awareness of this document is not as broad as would be ideal</p>
<p><b>C7.2. The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.</b></p>	<p><b>C</b></p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>7.2.a The management plan is kept up to date. It is reviewed on an ongoing basis and is updated whenever necessary to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances. At a minimum, a full revision occurs every 10 years.</p>	<p>+/-</p>	<p>ODNR should incorporate into its planning documentation an explicit and affirmative statement that management plan revisions will take place on a frequency no longer than every 10 years, rather than the present statement that it is the Department’s “intent” to do so.</p> <p><b>See OBS 2010.11</b></p>
<p><b>C7.3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plans.</b></p>	<p><b>C</b></p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>7.3.a. Workers are qualified to properly implement the management plan; All forest workers are provided with sufficient guidance and supervision to adequately implement their respective components of the plan.</p>	<p>+/-</p>	<p>DOF employees undergo training as part of their first year of employment and they undergo periodic training thereafter.</p> <p>Employees of contractors are a weaker aspect of the training process and constitutes an opportunity for improvement.</p>

		See OBS 2010.12
<b>C7.4. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1.</b>	C	The audit team has found adequate overall conformity with this Criterion.
7.4.a. While respecting landowner confidentiality, the management plan or a management plan summary that outlines the elements of the plan described in Criterion 7.1 is available to the public either at no charge or a nominal fee.	+	The entire management plan is publicly available
7.4.b. Managers of public forests make draft management plans, revisions and supporting documentation easily accessible for public review and comment prior to their implementation. Managers address public comments and modify the plans to ensure compliance with this Standard.	-	The land management manual, a central part of the overall management/planning system for the state forests, is not easily available to the public.  See Minor CAR 2010.7
<p><b>P8 Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -- to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.</b></p> <p><i>Applicability Note: On small and medium-sized forests (see Glossary), an informal, qualitative assessment may be appropriate. Formal, quantitative monitoring is required on large forests and/or intensively managed forests.</i></p>		
<b>C8.1. The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations, as well as, the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.</b>	C	The audit team has found adequate overall conformity with this Criterion.
8.1.a. Consistent with the scale and intensity of management, the forest owner or manager develops and consistently implements a regular, comprehensive, and replicable written monitoring protocol.	+	Chapter 12 of the land management manual covers this requirement  The audit team takes positive note of this statement from DOF: "DOF's approach to monitoring is outlined in Chapter 12 of the Land Management Manual. Monitoring is multi-faceted. Monitoring efforts include the compartment review process, GIS analysis, G&Y, logging inspections, forest health monitoring, and program reports."
<b>8.2. Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators: a) yield of all forest products harvested, b) growth rates, regeneration, and condition of the forest, c) composition and observed changes in the flora and fauna, d) environmental and social impacts of harvesting and other operations, and e) cost, productivity, and efficiency of forest management.</b>	C	The audit team has found adequate overall conformity with this Criterion.

<p>8.2.a.1. For all commercially harvested products, an inventory system is maintained. The inventory system includes at a minimum: a) species, b) volumes, c) stocking, d) regeneration, and e) stand and forest composition and structure; and f) timber quality.</p>	<p>+</p>	<p>DOF maintains a forest inventory program that relies on systematic inventory data collection, compartment reviews and supplementary FIA data</p> <p>80% of the state forest area has been inventoried in the past 5 years; FIA data is relied upon for the remaining 20%</p>
<p>8.2.a.2. Significant, unanticipated removal or loss or increased vulnerability of forest resources is monitored and recorded. Recorded information shall include date and location of occurrence, description of disturbance, extent and severity of loss, and may be both quantitative and qualitative.</p>	<p>+</p>	<p>The department's forest health program incorporates a monitoring process as a key element of the program</p> <p>DOF's responses to the 2003 ice storms and the Shawnee Wildfire of April 2009 (as well as the 2010 tornado on the Maumee) constitute positive evidence of conformity to this Indicator. These unanticipated events and associated losses were followed by appropriate environmental review, development of salvage prescriptions and subsequent monitoring</p>
<p>8.2.b The forest owner or manager maintains records of harvested timber and NTFPs (volume and product and/or grade). Records must adequately ensure that the requirements under Criterion 5.6 are met.</p>	<p>+</p>	<p>As a state agency responsible for assuring that the citizens of Ohio are properly compensated for the sale of timber from the state forests, DOF maintains an effective database of harvest volumes and values; the data spans several decades</p>
<p>8.2.c. The forest owner or manager periodically obtains data needed to monitor presence on the FMU of:</p> <ol style="list-style-type: none"> <li>1) Rare, threatened and endangered species and/or their <b>habitats</b>;</li> <li>2) Common and rare plant communities and/or habitat;</li> <li>3) Location, presence and abundance of invasive species;</li> <li>4) Condition of protected areas, set-asides and buffer zones;</li> <li>5) High Conservation Value Forests (see Criterion 9.4).</li> </ol>	<p>+</p>	<p>Re RTE species or habitats: DOW provides a key support role, augmented by staff training on RTE management; RTE management is outlined in the land management manual</p> <p>Re plant communities: the main focus is on the restoration of oak and hickory cover types; cooperation with Forest Service managers and researchers is also responsive to this requirement</p> <p>Re invasive species: DOF cooperates with the Forest Service experiment station on detection/monitoring of invasive species</p> <p>Re protected areas: collection of data on the condition of protected areas is an emerging area of activity for DOF; to date, the main focus has been on areas designated as HCVF</p>
<p>8.2.d.1. Monitoring is conducted to ensure that site specific plans and operations are properly implemented, environmental impacts of site disturbing operations are minimized, and that harvest prescriptions and guidelines are effective.</p>	<p>-/+</p>	<p>ODOF is not adequately engaging in post-treatment monitoring of prescribed fire prescriptions to ensure that they are properly implemented, that any possible adverse environmental impacts are identified and minimized, and that the prescriptions are effective in achieving the desired outcomes.</p> <p><b>See Minor CAR 2010.8</b></p>

8.2.d.2. A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	-/+	Road system monitoring procedures are not being consistently implemented in the field.  <b>See Minor CAR 2010.9</b>
8.2.d.3. The landowner or manager monitors relevant socio-economic issues (see Indicator 4.4.a), including the social impacts of harvesting, participation in local economic opportunities (see Indicator 4.1.g), the creation and/or maintenance of quality job opportunities (see Indicator 4.1.b), and local purchasing opportunities (see Indicator 4.1.e).	+/-	Socio-economic impact monitoring is addressed in Chapter 12 of the land management manual; there are opportunities for fortifying this aspect of state forest management
8.2.d.4. Stakeholder responses to management activities are monitored and recorded as necessary.	+	DOF personnel, at all levels, maintain active dialogue and communication with stakeholders  Public comments of a substantive nature are passed up to and considered by the Integration Committee  DOF maintains a database of public records requests and disputes.
8.2.d.5. Where sites of cultural significance exist, the opportunity to jointly monitor sites of cultural significance is offered to tribal representatives (see Principle 3).	+	DOF consults with tribal representatives, Hopewell NHP, and Newark Earthworks.  Begun in early 2010, DOF is attempting to form a advisory committee for the purpose of providing guidance on the protection of areas of native cultural significance.
8.2.e. The forest owner or manager monitors the costs and revenues of management in order to assess productivity and efficiency.	+	As with all state DNR agencies across the country, all of which are facing severe fiscal challenges, DOF pays very close attention to costs and revenues  The audit team takes positive note of this statement from DOF: "Management and fiscal section monitor costs and revenue in order to adjust to difficulties in the state budget. Program monitor their respective activities and report to management and decisions are made in the Integration Committee upon review of reports."
<b>C8.3. Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody."</b>	<b>C</b>	<b>The audit team has found marginally adequate overall conformity with this Criterion.</b>
8.3.a. When forest products are being sold as FSC-certified, the forest owner or manager has a system that prevents mixing of FSC-certified and non-certified forest products prior to the point of sale, with accompanying documentation to enable the tracing of the harvested material from each harvested product from its origin to the point of sale.	+/-	Chapter 12, Section B of the land management manual contains the CoC procedures for the DOF merchandising log yard as well as sale of sawn lumber from the Zaleski State Forest sawmill.  Procedures for harvesting, transporting, and selling logs in the log yard merchandizing program are

		<p>designed to ensure that there is no mixing of uncertified logs from outside sources.</p> <p>CoC procedures need to be extended to include stumpage sales.</p> <p><b>Minor CAR 2010.11 was issued.</b></p>
8.3.b The forest owner or manager maintains documentation to enable the tracing of the harvested material from each harvested product from its origin to the point of sale.	+/-	Per the above, procedures have been written but they need to do a better job of covering stumpage sales
<b>C8.4. The results of monitoring shall be incorporated into the implementation and revision of the management plan.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
8.4.a. The forest owner or manager monitors and documents the degree to which the objectives stated in the management plan are being fulfilled, as well as significant deviations from the plan.	+	<p>The strategic plan for the Ohio state forests as well as the state forest-specific management plans will be updated on a 5-year basis based; as outlined in Chapter 12 of the land management manual, these plan updates will incorporate the results of monitoring activities.</p> <p>Tracking and acting upon the results of monitoring is also incorporated into DOF's planning process and the Integration Committee management review process.</p> <p>Consideration of monitoring results is part of the scope of the Forest Advisory Council.</p>
8.4.b. Where monitoring indicates that management objectives and guidelines, including those necessary for conformance with this Standard, are not being met or if changing conditions indicate that a change in management strategy is necessary, the management plan, operational plans, and/or other plan implementation measures are revised to ensure the objectives and guidelines will be met. If monitoring shows that the management objectives and guidelines themselves are not sufficient to ensure conformance with this Standard, then the objectives and guidelines are modified.	+/-	<p>Chapter 1 of the land management manual touches on procedures for modifying management direction on the basis of new information or gained experience.</p> <p>However, there is an opportunity for DOF to develop a more formal adaptive management mechanism.</p>
<b>C8.5. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
8.5.a. While protecting landowner confidentiality, either full monitoring results or an up-to-date summary of the most recent monitoring information is maintained, covering the Indicators listed in Criterion 8.2, and is available to the public, free or at a nominal price, upon request.	+	<p>All documents including those related to results of monitoring activities are part of the public record and, as such, publicly available.</p> <p>All plans and planned activities are presented in open</p>

		houses  Growth and yield monitoring/measurement results, social impact monitoring results, and many other reports and data are available on the DOF website.
<p><b>P9 Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.</b></p>		
<p><b>High Conservation Value Forests are those that possess one or more of the following attributes:</b></p>		
<ul style="list-style-type: none"> <li><b>a) Forest areas containing globally, regionally or nationally significant: concentrations of biodiversity values (e.g., endemism, endangered species, refugia); and/or large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance</b></li> <li><b>b) Forest areas that are in or contain rare, threatened or endangered ecosystems</b></li> <li><b>c) Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control)</b></li> <li><b>d) Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).</b></li> </ul>		
<p><b>Examples of forest areas that <i>may have</i> high conservation value attributes include, but are not limited to:</b></p>		
<p>Central Hardwoods:</p>		
<ul style="list-style-type: none"> <li>• Old growth – (see Glossary) (a)</li> <li>• Old forests/mixed age stands that include trees &gt;160 years old (a)</li> <li>• Municipal watersheds –headwaters, reservoirs (c)</li> <li>• Rare, Threatened, and Endangered (RTE) ecosystems, as defined by GAP analysis, Natural Heritage Inventory, and/or the World Wildlife Fund's Forest Communities of Highest Conservation Concern, and/or Great Lakes Assessment (b)</li> <li>• Intact forest blocks in an agriculturally dominated landscape (refugia) (a)</li> <li>• Intact forests &gt;1000 ac (valuable to interior forest species) (a)</li> <li>• Protected caves (a, b, or d)</li> <li>• Savannas (a, b, c, or d)</li> <li>• Glades (a, b, or d)</li> <li>• Barrens (a, b, or d)</li> <li>• Prairie remnants (a, b, or d)</li> </ul>		
<p>North Woods/Lake States:</p>		
<ul style="list-style-type: none"> <li>• Old growth – (see Glossary) (a)</li> <li>• Old forests/mixed age stands that include trees &gt;120 years old (a)</li> <li>• Blocks of contiguous forest, &gt; 500 ac, which host RTEs (b)</li> <li>• Oak savannas (b)</li> <li>• Hemlock-dominated forests (b)</li> <li>• Pine stands of natural origin (b)</li> <li>• Contiguous blocks, &gt;500 ac, of late successional species, that are managed to create old growth (a)</li> <li>• Fens, particularly calcareous fens (c)</li> <li>• Other non-forest communities, e.g., barrens, prairies, distinctive geological land forms, vernal pools (b or c)</li> <li>• Other sites as defined by GAP analysis, Natural Heritage Inventory, and/or the World Wildlife Fund's Forest Communities of Highest Conservation Concern (b)</li> </ul>		
<p><i>Note: In the Lake States-Central Hardwoods region, old growth (see Glossary) is both rare and invariably an HCVF.</i></p>		
<p><i>In the Lake States-Central Hardwoods region, cutting timber is not permitted in old-growth stands or forests.</i></p>		

*Note: Old forests (see Glossary) may or may not be designated HCVFs. They are managed to maintain or recruit: (1) the existing abundance of old trees and (2) the landscape- and stand-level structures of old-growth forests, consistent with the composition and structures produced by natural processes.*

*Old forests that either have or are developing old-growth attributes, but which have been previously harvested, may be designated HCVFs and may be harvested under special plans that account for the ecological attributes that make it an HCVF.*

*Forest management maintains a mix of sub-climax and climax old-forest conditions in the landscape.*

<p><b>C9.1. Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.</b></p>	<p><b>C</b></p>	<p><b>The audit team has found adequate overall conformity with this Criterion.</b></p>
<p>9.1.a. The forest owner or manager identifies and maps the presence of High Conservation Value Forests (HCVF) within the FMU and, to the extent that data are available, adjacent to their FMU, in a manner consistent with the assessment process, definitions, data sources, and other guidance described in Appendix F.</p> <p>Given the relative rarity of old growth forests in the contiguous United States, these areas are normally designated as HCVF, and all old growth must be managed in conformance with Indicator 6.3.a.3 and requirements for legacy trees in Indicator 6.3.f.</p>	<p>+</p>	<p>DOF has had a land classification/zoning system in place for 20+ years</p> <p>In preparing for undergoing the FSC certification evaluation process, DOF realigned the zoning system and created a new Zone 1 which is for areas possessing high conservation values</p> <p>DOF conducted a HCVF assessment with an explicit effort to follow the FSC’s HCVF requirements, using the FSC-US HCVF Assessment Framework</p> <p>No Type 1 or 2 old growth was identified as part of the HCVF assessment</p> <p>DOF’s GIS system is readily capable of mapping all HCVF areas</p>
<p>9.1.b. In developing the assessment, the forest owner or manager consults with qualified specialists, independent experts, and local community members who may have knowledge of areas that meet the definition of HCVs.</p>	<p>+/-</p>	<p>DOF utilized the Forest Advisory Council as a consultative mechanism for soliciting HCVF-related input from a cross-section of stakeholders.</p> <p>DOF also engaged other Agencies and groups to secure input as part of the HCVF Assessment</p> <p>Additionally, a public meeting was held expressly for the purpose of sharing the results of the HCVF assessment</p> <p>Responses to the solicitations were relatively limited; DOF has an opportunity to improve the consultation process, over time</p>
<p>9.1.c. A summary of the assessment results and</p>	<p>-</p>	<p>A summary of the assessment of results for identifying</p>

management strategies (see Criterion 9.3) is included in the management plan summary that is made available to the public.		areas possessing high conservation values and the management strategies employed for maintaining or enhancing those values is not readily available to the public.  <b>See Minor CAR 2010.10</b>
<b>C9.2. The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
9.2.a. The forest owner or manager holds consultations with stakeholders and experts to confirm that proposed HCVF locations and their attributes have been accurately identified, and that appropriate options for the maintenance of their HCV attributes have been adopted.	+/-	Consultations were held mostly with DOW and DNAP while other groups offered limited comments  The audit team takes positive note of this statement from DOF: "A public meeting was advertised and held at the Athens office and attended by 23 individuals. DOF presented maps and management options both at the public meeting and again at the summer open houses. DOF recorded their comments and some elected to give written comments. A summary of their comments is included in the HCVF Assessment."
9.2.b. On public forests, a transparent and accessible public review of proposed HCV attributes and HCVF areas and management is carried out. Information from stakeholder consultations and other public review is integrated into HCVF descriptions, delineations and management.	+/-	See comment above. There is an opportunity to improve on the level of stakeholder input that helps to inform DOF's HCVF process
<b>C9.3. The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.</b>	<b>C</b>	<b>The audit team has found adequate overall conformity with this Criterion.</b>
9.3.a. The management plan and relevant operational plans describe the measures necessary to ensure the maintenance and/or enhancement of all high conservation values present in all identified HCVF areas, including the precautions required to avoid risks or impacts to such values (see Principle 7). These measures are implemented.	+/-	Found in Chapter 5 of the land management manual as well as in the forest-specific management plans  DOF's HCVF program would benefit from ongoing effort to fortify it with more analysis and consultation
9.3.b. All management activities in HCVFs must maintain or enhance the high conservation values and the extent of the HCVF.	+	At this point in time, the audit team is satisfied that DOF's planned management activities on areas zoned as HCVF will maintain the identified values; however, additional effort will be required in the future
9.3.c. If HCVF attributes cross ownership boundaries and where maintenance of the HCV attributes would be improved by coordinated management, then the forest owner or manager attempts to coordinate conservation efforts with adjacent landowners.	+	DOF has concluded, on the basis of the assessments that have been conducted do date, that there or no HCVF values on the state forests that cross over to adjacent properties  This finding should be revisited on a periodic basis
<b>C9.4. Annual monitoring shall be conducted to assess the</b>	<b>NC</b>	<b>The audit team has found inadequate overall</b>

effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.		conformity with this Criterion.  See Major CAR 2010.1
9.4.a. The forest owner or manager monitors, or participates in a program to annually monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of Principle 8.	-	DOF does not yet have in place a monitoring process that is focused on HCVF values and their maintenance when areas possessing such values are subject to site disturbing activities
9.4.b. When monitoring results indicate increasing risk to a specific HCV attribute, the forest owner/manager re-evaluates the measures taken to maintain or enhance that attribute, and adjusts the management measures in an effort to reverse the trend.	-	This adaptive management mechanism is not yet in place
<p><b>P10 Plantations shall be planned and managed in accordance with Principles and Criteria 1-9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.</b></p> <p><b>Due to the silvicultural regimes employed on the Ohio State Forests, the audit team has determined that the DOF is not practicing “plantation forest management” as defined by the FSC. As such, the entirety of Principle 10 is not applicable to the evaluation of the DOF’s management of the Ohio State Forests.</b></p>		
<b>APPENDICES</b>		
<p><b>APPENDIX C: REGIONAL LIMITS AND OTHER GUIDELINES ON OPENING SIZES</b></p> <p>This Appendix contains regional Indicators and guidance pertinent to maximum opening sizes and other guidelines for determining size openings and retention. These Indicators are requirements based on FSC-US regional delineations</p> <p><b>Indicator 6.3.g.1</b></p>		
<b>APPALACHIA REGION</b>		
<p><b>Indicator 6.3.g.1.a</b> When even-aged silviculture (e.g., seed tree, regular or irregular shelterwood), or deferment cutting is employed, live trees and native vegetation are retained and opening sizes are created within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime in each community type, unless retention at a lower level is necessary for restoration or rehabilitation purposes. Harvest openings with no retention are limited to 10 acres.</p> <p><i>Guidance: Even-age silviculture is used only where naturally occurring species are maintained or enhanced. Retention within harvest units can include riparian and streamside buffers and other special zones. In addition,</i></p>	+	See 6.3.g.1

<i>desirable overstory and understory species may be retained outside of buffers or special zones while allowing for regeneration of shade-intolerant and intermediate species consistent with overall management principals. Where stands have been degraded, less retention can be used to improve both merchantable and non-merchantable attributes.</i>					
<b>Indicator 6.3.g.1.b</b> When uneven age silvicultural techniques are used (e.g., individual tree selection or group selection), canopy openings are less than 2.5 acres. <b>Applicability note:</b> <i>Uneven age silvicultural techniques are used when they maintain or enhance the overall species richness and biologic diversity, regenerate-shade tolerant or intermediate-tolerant species, and/or provide small canopy openings to regenerate shade-intolerant and intermediate species. Uneven-age techniques are generally used to develop forests with at least three age classes. Uneven age silviculture is employed to prevent high-grading and/or diameter limit cutting.</i>		+	See 6.3.g.1		
<b>APPENDIX E: STREAMSIDE MANAGEMENT ZONE (SMZ) REGIONAL REQUIREMENTS</b> <b>Indicator 6.5.e</b>					
This Appendix addresses regionally explicit requirements for Indicator 6.5.e and includes SMZ widths and activity limits within those SMZs for the Appalachia, Ozark-Ouachita, Southeast, Mississippi Alluvial Valley, Southwest, Rocky Mountain, and Pacific Coast regions. The forest owner or manager will be evaluated based on the sub-indicators within their specific region, below.					
<b>APPALACHIA REGION</b> <i>The SMZ is designed to allow harvesting and provide flexibility for silvicultural management.</i>					
6.5.e.1.a All <b>perennial streams</b> have buffers (streamside management zones, SMZs) that include an inner SMZ and an outer SMZ. SMZ sizes are minimum widths that are likely to provide adequate riparian habitat and prevent siltation. If functional riparian habitat and minimal siltation are not achieved by SMZs of these dimensions, wider SMZs are needed.		+	Ohio best management practices, which ODNR treats as mandatory, conform to this requirement		
<b>Table 6.5.f (APP only) Widths of inner and outer Streamside Management Zones. Widths of outer SMZs are applicable where data do not support narrower widths*</b>					
<b>Stream Zone</b>	<b>SLOPE CATEGORY</b>				
<b>Type</b>	<b>1-10%</b>	<b>11-20%</b>	<b>21-30%</b>	<b>31-40%</b>	<b>41%+</b>
<b>Inner Zone (Perennial)</b>	25'	25'	25'	25'	25'

<b>Outer Zone (Perennial)</b>	55'	75'	105'	110'	140'
<b>Total For Perennial</b>	80'	100'	130'	135'	165'
<b>Zone For Intermittent</b>	40'	50'	60'	70'	80'
*All distances are in feet –slope distance and are measured from the high water mark.					
6.5.e.1.b (APP only) The inner SMZ for <i>non-high-quality waters</i> (see state or local listings describing the highest quality waters in the state or region) extends 25 feet from the high water mark. Single-tree selection or small group selection (2-5 trees) is allowed in the inner SMZ, provided that the integrity of the stream bank is maintained and canopy reduction does not exceed 10 percent (90 percent canopy maintenance). Trees are directionally felled away from streams. Note: The inner SMZ is designed as a virtual no-harvest zone, while allowing the removal of selected high-value trees.		+	BMPs meet or exceed		
6.5.e.1.c (APP only) Along perennial streams that are designated as <i>high-quality waters</i> (see state or local listings describing the highest quality waters in the state or region), no harvesting is allowed in the inner SMZ (25 feet from the high water mark), except for the removal of wind-thrown trees. Stream restoration is allowed if a written restoration plan provides a rational justification and if the plan follows local and regional restoration plans.		+	BMPs meet or exceed		
6.5.e.1.d (APP only) Outer SMZs, outside and in addition to inner SMZs, are established for all intermittent, and perennial streams, as well as other waters. When the necessary information is available, the width of a stream management zone is based on the landform, erodibility of the soil, stability of the slope, and stability of the stream channel as necessary to protect water quality and repair habitat. When such specific information is not available, the width of streamside management zone is calculated according to Table 6.5.f		+	Outer zones are established, in conformity with this requirement		
6.5.e.1.e (APP only) Harvesting in outer SMZs is limited to single-tree and group selection, while maintaining at least 50 percent of the overstory. Roads, skid trails, landings, and other similar silviculturally disturbed areas are constructed outside of the outer SMZ, except for designated stream crossings or when placement of disturbance-prone activities outside of the SMZ would result in more environmental disturbance than placing such activities within the SMZ. Exceptions may be made for stream restoration.		+	BMPs meet or exceed		
6.5.e.1.f (APP only) The entire SMZ of intermittent streams is managed as an outer buffer zone.		+	BMPs meet or exceed		
6.5.e.1.g (APP only) The activities of forest management do		+	No issues of possible non-conformity to this Indicator		

not result in observable siltation of intermittent streams. The activities of forest management do not result in observable siltation of intermittent streams.		were observed during the field audit
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**Appendix 4 – Tracking, Tracing and Identification of Certified Products (CONFIDENTIAL)**

<b>Tracking, tracing and identification of certified products</b>		
<b>1.1.</b> An evaluation of the risk of products from non-certified sources (including any areas specifically excluded from the scope of the certificate) being mixed with products from the forest area evaluated.		
<b>SCS Auditor Findings:</b> The audit team found adequate conformity to this requirement		
<b>1.2.</b> A description of the control (tracking and tracing) systems in place that address the risk identified in 1.1 above. The ODNR’s procedures focus primarily on maintaining chain of custody control for “merchandized” sales out of log yards, as it is under this sales scenario where there exists any risk of possible contamination of the certified supplies.		
<b>SCS Auditor Findings:</b> ODNR has provided a written description of its CoC procedures that constitutes minimally adequate conformity to this requirement		
<b>1.3. Forest gate (check all that apply):</b> <i>The forest gate is defined as the point where the change in ownership of the certified-forest product occurs.</i>		
<input checked="" type="checkbox"/> <b>Stump</b> <i>Stumpage sale or sales of standing timber; transfer of ownership of certified-forest product occurs upon harvest.</i>	<input checked="" type="checkbox"/> <b>Log landing</b> <i>Transfer of ownership of certified-product occurs at landing/yarding areas.</i>	<input checked="" type="checkbox"/> <b>On-site concentration yard</b> <i>Transfer of ownership of certified-product occurs at concentration yard under control of FME.</i>
<input type="checkbox"/> <b>Off-site Mill/Log Yard</b> <i>Transfer of ownership occurs when certified-product is unloaded at purchaser’s facility.</i>	<input type="checkbox"/> <b>Other:</b> <i>Please describe</i>	
<b>SCS Auditor Findings:</b> ODNR engages in three types of sales: on the stump, roadside and out of merchandizing log yards. Each scenario has been accurately presented in ODOF’s CoC documentation.		
<b>1.4.</b> A description of the documentation or marking system that allows products from the certified forest area to be reliably identified as such at the forest gate(s) identified in 1.3, including the FSC-claim and FSC certificate code on invoices.		
<b>SCS Auditor Findings:</b> The ODOF’s written CoC procedures adequately address this requirement for the merchandizing log yards, but not for stumpage sales. Minor CAR 2010.11 was raised.		
<b>1.5.</b> Does FME have any primary or secondary processing facilities (e.g., fully-integrated production)? <i>NOTE: This does not apply to log cutting or de-barking units, small portable sawmills or on-site processing of</i>	<input type="checkbox"/> Yes <i>Such sites shall be inspected for conformance to the applicable chain of custody standard(s)</i>	<input checked="" type="checkbox"/> No

<p><i>chips/biomass originating from the FMU under evaluation. They can be evaluated as part of the 'normal' forest evaluation procedures. If any such on-site processing is done by contractors, this must be covered in section 1.5 on outsourcing.</i></p>	<p><i>(e.g., FSC-STD-40-004). See 1.1.4 for large-scale FMEs above.</i></p>	
<p><b>SCS Auditor Findings:</b> As we do not consider the production of logs from standing trees to constitute “primary” processing, ODOF does not engage in any “processing” of wood products prior to their sale. ODOF does, however, sell sorted (“merchandized”) logs out of central log yards, which is a relatively recent initiative aimed at capturing higher price premiums</p>		

**Appendix 5 – List of FMUs selected for evaluation (CONFIDENTIAL)\***

<p><input checked="" type="checkbox"/> FME consists of a single FMU – <i>No further action required</i></p>
<p><input type="checkbox"/> FME consists of multiple FMUs – <i>See table below, which applies to multiple FMU and group evaluations, but is inapplicable if the scope of the evaluation is a single FMU.</i></p>

**Appendix 6 – Preliminary Evaluation Report**



**FSC Forest Management  
Pre-Assessment Report**

for:

**Ohio State Forests System**

**Managed by Ohio DNR-Division of Forestry**

**Auditors:**

**Dr. Robert J. Hrubes, Lead Auditor**

**Mike Ferrucci, Auditor**

**Date of Field Audit: January 13-14, 2010**

**Date of Report:**

**By:**

**SCIENTIFIC CERTIFICATION SYSTEMS**

**2200 Powell St. Suite 725**

**Emeryville, CA 94608, USA**

**SCS Contact: Dave Wager, Program Director**

[dwager@scscertified.com](mailto:dwager@scscertified.com)

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# 1. ORGANIZATION BACKGROUND INFORMATION

## 1.1. Name and Contact Information

<b>Organization Name:</b>	Ohio Department of Natural Resources (ODNR)-Division of Forestry		
<b>Contact for certification:</b>	Chad Sanders - Land Management Administrator		
<b>Address:</b>	ODNR-Division of Forestry 2045 Morse Road, Bldg H-1 Columbus, Ohio 43229-6693	<b>Tel:</b>	614-265-6701
		<b>Fax:</b>	614-447-9231
		<b>Email:</b>	Chad.Sanders@dnr.state.oh.us
		<b>Website</b> :	<a href="http://www.dnr.state.oh.us/DivisionofForestryHomepage/tabid/4803/Default.aspx">http://www.dnr.state.oh.us/DivisionofForestryHomepage/tabid/4803/Default.aspx</a>

## 1.2. Scope: Area under Evaluation

### PROPOSED SCOPE OF FOREST MANAGEMENT CERTIFICATE

Type of FM certificate:	Single FMU
Total number of FMUs	1 FMU, divided into 20 "state forest" units, totaling more than 185,000 acres
State Forest Units	Area
Mohican	4,525 acres
Maumee	3,200 acres
Fernwood	3,029 acres
Harrison	1,321 acres
Beaver Creek	1,122 acres

Yellow Creek	756 acres
Sunfish Creek	700 acres
Hocking	9903 acres
Blue Rock	4,579 acres
Perry	4,619 acres
Shade River	2,814 acres
Zaleski	28,255 acres
Gifford	320 acres
Tar Hollow	16,320 acres
Scioto Trail	9,390 acres
Richland Furnace	2,503 acres
Pike State Forest	11,960 acres
Brush Creek	13,514 acres
Shawnee	64,146 acres
Dean	2,794 acres
<b>Total Area</b>	<b>185,770 acres</b>
Product categories to be included in the scope:	
Types of product: Standing trees, delivered logs, and logs concentrated at log merchandizing yards	
Other:	

**Areas to be excluded from the scope of the certification evaluation**

The scope of this Forest Stewardship Council (FSC) pre-assessment included all lands under management of the Ohio Department of Natural Resources-Division of Forestry. These lands collectively constitute the Ohio State Forest System. No lands managed by the Division of Forestry were excluded. The scope of this pre-assessment excluded forest lands managed by other divisions with the Department of Natural Resources, lands with different management mandates than those that apply to the State Forests.

### **1.3. Forest Management Organization**

The Ohio Department of Natural Resources-Division of Forestry manages 20 state forests covering more than 185,000 acres in 21 counties, mostly in the Ohio’s un-glaciated south eastern region. The State Forests of Ohio are organized into 2 districts (north and south) with 11 administrative field offices located throughout the state.

Functional activities within the Division are divided into four major program areas: land management, fire, law/recreation, infrastructure/facilities. At present, the ODOF workforce exceeds 70 individuals involved in state forest management.

For this pre-assessment, potential/possible conformity was evaluated against the FSC Draft US National Standard.

### **1.4. Overview of the Forest and Management System**

#### **1.4.1 Location and Size**

Location of forests under evaluation	Throughout the State of Ohio
Latitude and longitude:	
Forest zone (select FSC classification)	Temperate hardwoods
Management tenure: (FSC)	Publicly owned
Number of FMO employees:	70+
Number of forest workers working in operation under evaluation.	50

<b>Forest Use</b>	
<b>Land Use</b>	<b>Area (acres)</b>
Production Forest	
Natural forest	160,000
Plantation	
Conservation/protected Areas	13,000
Special Management Areas	12,000
Water	100
Non-Forest areas	200
<b>Total Area:</b>	<b>185,300</b>

## 2. PRE-ASSESSMENT PROCESS

### 2.1. *Introduction*

Ohio DNR-Division of Forestry retained Scientific Certification Systems (SCS)<sup>8</sup> to conduct a pre-assessment in preparation for seeking Forest Stewardship Council (FSC) certification for the Ohio State Forests located throughout the state but with the largest concentration in Southeastern Ohio. The Division's forest management operations are carried out over an area of more than 185,000 acres in 20 management units contained within 21 Ohio Counties. Selection timber harvesting occurs in approximately 2,500 acres per year, with timber sales averaging 8 million board feet from 25 different sales per year. Prescribed fire activities take place on approximately 1,500 acres each year and regeneration harvesting is practiced on approximately 400 acres per year. The pre-assessment was conducted against the FSC Draft National Standard on the expectation that this standard will be fully accredited (endorsed) by the time that ODNR were to engage in a full certification evaluation.

The goals of a FSC pre-assessment are threefold. First, it is intended to provide Ohio DNR-Division of Forestry with a clear understanding of the requirements for FSC certification. Second, SCS will be able to develop a clear view of Ohio DNR-Division of Forestry's management systems and practices, including information needed to design the main assessment. Third, the pre-assessment is intended to identify areas where Ohio DNR-Division of Forestry's management currently does not appear to be in conformity with the FSC Draft National Standard.

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<sup>8</sup> This FSC pre-assessment was part of a dual FSC/SFI pre-assessment and readiness review. As has been the case with many other dual certification projects on state forestlands, SCS collaborated with NSF-ISR which is a SFI-accredited certification body. SCS subcontracted through NSF-ISR for the conduct of the FSC pre-assessment, as ODNR wished to handle both evaluations through a single contract. In the event that ODNR were to seek and achieve FSC certification, a certification contract would have to be executed directly with SCS.

Section 3 of this report provides a summary of the possible major gaps identified during the course of the pre-assessment and a summary of other issues that will need to be examined in detail in a full certification evaluation, in the event that Ohio DNR-Division of Forestry elects to undergo a full evaluation. In addition to the possible gaps and likely non-conformances identified here, there may be additional issues and non-conformances that were not identified during the pre-assessment. SCS has made a significant effort to conduct a thorough pre-assessment, but it is Ohio DNR-Division of Forestry's responsibility to review the standard and certification requirements closely to ensure that they are as prepared as possible to demonstrate conformance with the standard at the time of the main assessment.

## **2.2. Pre-assessment team and qualifications**

**Dr. Robert J. Hrubes, Ph.D.** – Lead Auditor, Scientific Certification Systems. Dr. Hrubes is a California registered professional forester (#2228) and forest economist with over 30 years of professional experience in both public and public forest management issues. He is the principal architect of the SCS Forest Conservation Program, accredited by the Forest Stewardship Council since 1995. He is presently Senior Vice-President of Scientific Certification Systems. Dr. Hrubes has served as lead auditor for a large number of SCS Forest Conservation Program certification evaluations of North American public forests, industrial forest ownerships and non-industrial forests, as well as operations in Scandinavia, Chile, Brazil, Papua New Guinea, Japan, Malaysia, Australia and New Zealand. Dr. Hrubes holds graduate degrees in forest economics, econometrics and resource systems management 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.

### **Mike Ferrucci, Master of Forestry – Auditor**

Michael Ferrucci is a founding partner and President of Interforest, LLC, and a partner in Ferrucci & Walicki, LLC, a land management company that has served private landowners in southern New England for 25 years. 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. Mr. Ferrucci's primary expertise is in management of watershed forests to provide timber, drinking water, and the protection of other values; in forest inventory and timber appraisal; hardwood forest silviculture and marketing; and the ecology and silviculture of natural forests of the eastern United States. He also lectures on private sector forestry, leadership, and forest resource management at the Yale School of Forestry and Environmental Studies. Mr. Ferrucci has participated in forest management assessments in 27 states, and has conducted joint FSC-SFI Certification Assessments on over 14 million acres of forestland in the United States. For this project, Mr. Ferrucci functioned as an employee of NSF.

## **2.3. Pre-Assessment Itinerary**

### **Day 1 Schedule (Group discussions at ODOF Central Office, Columbus)**

- 8-8:45 Introductions and Overview of Audit Protocol
- 8:45-11 Overview of Ohio State Forest System and management
- 11- 1 Inventory & Monitoring, Mgt. Planning (FSC Principles 7 & 8)
- Noon Working Lunch
- 1-2 FSC Principles 1, 2, 3, 4
- 2-3 FSC Principles 5, 6, and 9
- 3-4 SFI Requirements
- 4-4:30 Audit Planning Considerations
- 4:30 Adjourn; determine dinner location
- 5:30-7 Dinner with ODNR State Forester and Land Mgt. Administrator

### **Day 2 Schedule (Field reconnaissance in southern State Forests)**

- 7 am Depart from hotel (Columbus)
- 8 am-11 am State Tar Hollow State Forest
- 11-12 Travel to second State Forest
- 12-1 Lunch at Scioto Trail State Forest during overview
- 1-3:30 Field sites, Scioto Trail State Forest
- 3:30 Wrap up and transit to Columbus airport
- 5:00 Arrive airport

#### **Sites Visited on Day 2:**

##### **Tar Hollow State Forest**

Site 1: Coey Hollow Grouse Management Area – completed sanitation/pre-salvage harvest, merchandizing sale

Site 2: Interview Jason and Tom Perkins, Loggers

Site 3: Interview local firewood cutters

Site 4: Brush Ridge Fire Tower and interpretive signs

Site 5: Prescribed fire program, landscape scale

Site 6: Dullan Hollow – completed shelterwood harvest

Site 7: Boy Scout Camp – group camping area; access road through creek

### **Scioto Trail State Forest**

Site 8: Perkins Wood Products – starting logging clearcut portion in area with heavy mortality

Site 9: Perkins Wood Products – starting logging selection portion

Site 10: Merchandizing Log Yard

Site 11: Scioto Trail State Forest Headquarters and Pesticide Storage Area

Site 12: Old nursery site, completed pre-salvage in 2007

### **ODNR Personnel Interviewed During the Pre-Assessment**

David Lytle, Chief State Forester, ODOF

Nate Kirk, State Forests Administrator, ODOF

Chad Sanders - Land Management Administrator, ODOF

Bob Boyles, Southern District Forest Manager, ODOF

Gregg Maxfield, Northern District Forest Manager, ODOF

Andy Sabula, Forest Industries Forester, ODOF

Mike Bowden, Fire Program Coordinator, ODOF

Greg Guess, Southern District Land Management Coordinator, ODOF

Greg Smith, Information and Education, ODOF

Tom Shuman, Zaleski State Forest, ODOF

Dick Lusk, Law Enforcement/Recreation, ODOF

Bill Stanley, The Nature Conservancy

Jennifer Windus, Wildlife Program Administrator, Ohio Division of Wildlife

Dan Yaussy, US Forest Service, Northern Research Station

Brian Kelly, Forest Manager, ODOF

Dan Balsar, Forest Health Program, ODOF

## **2.4. Certification Standard Employed in this Pre-Assessment**

The pre-assessment was conducted against the FSC-US National Forest Management Standard Draft 8.1 submitted by FSC-US November 23, 2009 to FSC-IC for approval. (It is expected that this national standard will be formally accredited by FSC-IC by the second quarter of 2010.)

## **2.5. Stakeholder Notification and Consultation Process**

The purpose of the stakeholder consultation strategy for this pre-assessment was twofold:

- 1) To ensure that the public was aware of, and informed about, the pre-assessment process and its objectives; and
- 2) To assist the field pre-assessment team in identifying potential issues of concern.

This process was not just stakeholder notification, but wherever possible, used to obtain detailed and meaningful stakeholder interaction. The process of stakeholder interaction did not stop after the pre-assessment visit. SCS welcomed, at any time, comments on Ohio DNR-Division of Forestry operations and such comments often provide a basis for specific aspects related to a potential future assessment of Ohio DNR-Division of Forestry.

Prior to the field component of the pre-assessment, a public notification document was developed by SCS and broadly distributed by e-mail during the week of December 20, 2009. The e-mail notices alerted stakeholders to the pending pre-assessment. SCS distributed the notification to individuals and organizations in the Ohio area. Ohio DNR-Division of Forestry also provided a stakeholder list to SCS, and the notification was sent to these individuals and organizations on December 20, 2009. The Ohio DNR-Division of Forestry list, combined with an expanded list received by the pre-assessment team on January 20<sup>th</sup>, also provided a basis for the team to select people for interviews (in person, by telephone, or through e-mail). Additional stakeholders were also identified during the on-site pre-assessment. In the event that a full evaluation is conducted, these and other stakeholders will be contacted by the full evaluation audit team.

In response to the public notice announcing the pre-assessment, a relatively small but active number of stakeholders did respond in the form of emails and phone calls. The SCS Director of FM Certification, Dave Wager, took the lead in interacting with these stakeholders and providing the audit team with detailed summaries of input that was received.

### **3. PRE-ASSESSMENT RESULTS**

This Section provides the SCS audit team's findings. These findings are presented as a summary of possible gaps/deficiencies relative to the FSC Principles and Criteria as further elaborated by Indicators, the three hierarchically constituting the FSC US National Forest Management Standard, Draft 8.1.

Pre-assessments, by their very nature, are not definitive determinations of the degree of conformance to the certification standard. This is all the more true for a Phase I confidential pre-assessment (not applicable to this project as the pre-assessment entailed public notice and stakeholder consultation). Only a full certification evaluation, conducted under the auspices of the FSC and according to FSC protocols, will generate definitive determinations of conformance. Results of this pre-assessment constitute findings as to the likelihood that the candidate forest management operation would be found in conformance to FSC US National Forest Management Standard Draft 8.1 should a full assessment be conducted.

In instances where possible non-conformances or “gaps” are identified and discussed in this report, Ohio DNR-Division of Forestry may pursue a combination of the following courses of action, between now and the time of a full evaluation:

- In the event that Ohio DNR-Division of Forestry believes that an identified gap does not, in fact, exist despite the findings of the pre-assessment team, they may compile additional information and evidence to submit to the full evaluation team, on or before the full evaluation. The intent would be to demonstrate how Ohio DNR-Division of Forestry feels it is conforming to a particular Criterion or Indicator.
- Formulate and implement as far as possible, corrective actions aimed at closing the identified gaps prior to the full evaluation.

#### **3.1. Gap Analysis**

Based upon the information gathered, and preliminary judgments formed from document reviews, personal interviews and field inspections, it is the SCS audit team's overall finding that ODNR has made very solid progress since October 2007 (the date when the Governor directed the ODNR to seek forest management certification) in aligning the State Forest management systems with the FSC certification requirements. While there are likely still gaps that need to be addressed (prior to or subsequent to a full evaluation), it is our sense that achievement of FSC-endorsed forest management certification is certainly well within the realm of attainment. That is, it is our sense that it would not be obviously premature to engage in a full certification evaluation during the second half of 2010. We hasten to restate that this general sense of readiness is by no means an indication that attainment of certification is assured. The more that

the Division of Forestry continues to pursue the new initiatives that have been initiated since October 2007 prior to a full evaluation, the less likely that major non-conformities will be found during a full evaluation.

**Areas of Possible Non-Conformance:** Overall, the audit team found many aspects of the ODRN forest management program to be commendable. However, the team found that there are, at present, some key aspects of ODRN's forest management program that would likely be found to be in insufficient conformity to the applicable FSC forest stewardship standard should a full evaluation be conducted. Most of the non-conformities are likely to be classified as "minor" which means that their closure is not required as a precondition to the award of certification. In such cases, the Department will be given anywhere from a few months to a full year to complete the necessary actions that will close the non-conformities.

In the absence of further preparatory actions being taken by the Department of Forestry, it is likely however that some non-conformities will be classed as "major" and, as such, their closure will be required prior to award of certification.

The following table details the principal areas where the pre-assessment auditors have identified possible gaps in conformance (both major and minor) relative to the FSC US National Forest Management Standard Draft 8.1.

More detail and discussion is provided in Section 3.2, below.

Principle/Subject Area	Possible Gaps /Non-Conformities
<b>P1: FSC Commitment and Legal Compliance</b>	<ul style="list-style-type: none"> <li>• ODOF could improve its procedures for maintaining public transparency with respect to planning and operations documents</li> <li>• DNR needs to: a) determine what international treaties and conventions may apply to the management of the State Forests, if any, and b) conduct a self assessment to determine if there are any possible non-conformities</li> <li>• Illegal ATV use on the State Forests is characterized by ODOF managers as “widespread but not out of control.” Widespread illegal activity constitutes a non-conformity with Criterion 1.5</li> <li>• A publicly available written statement of commitment to manage the State Forests in compliance with the FSC certification standards has not yet been issued</li> </ul>
<b>P2: Tenure &amp; Use Rights &amp; Responsibilities</b>	<p>No potential non-conformities were identified relative to this Principle during the pre-assessment</p>
<b>P3 – Indigenous Peoples’ Rights</b>	<ul style="list-style-type: none"> <li>• Conscious consideration of possible indigenous resources and tenure rights does not appear to be part of the Division of Forestry’s management system</li> <li>• ODOF does not, in a culturally appropriate manner, consult with pertinent indigenous peoples</li> </ul>
<b>P4: Community Relations &amp; Workers’ Rights</b>	<ul style="list-style-type: none"> <li>• ODOF does not have in place adequate procedures for monitoring social impacts of its State Forest management operations</li> <li>• ODOF does not have in place adequate procedures and policies for truly consultative interaction with its stakeholders</li> <li>• The dispute between the Division and one Ohio county regarding the balance of stumpage and merchandising sales in their county is an issue pertinent to this Criterion and underscores the need for dispute resolution mechanisms</li> <li>• Available evidence suggests that the Division cannot presently demonstrate conformity with the requirement that there are “known and accessible means for stakeholders to voice grievances and have them resolved”</li> </ul>
<b>P5: Benefits from the Forest</b>	<ul style="list-style-type: none"> <li>• ODOF needs to better demonstrate knowledge of the effects of State Forest management operations on local economies</li> <li>• AAC calculation procedures are not in place. ODOF should give consideration to the bulleted items Indicator 5.6.a as it designs <i>and documents</i> an allowable harvest planning process</li> </ul>
<b>P6: Environmental Impact</b>	<ul style="list-style-type: none"> <li>• Assessments of environmental impacts need to be strengthened; the means and methods by which Division of Wildlife biologists are consulted and generally provide technical support to the management of the State Forests needs to be better articulated and documented</li> <li>• A gap assessment of the current system of reference areas within the eco-regions in which the State Forests are located needs to be completed per the approach described in Criterion 6.4</li> <li>• Written guidelines to control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and to protect water resources may need to be fortified</li> </ul>

	<ul style="list-style-type: none"> <li>In-stand structural retention guidelines for even-aged harvest units need to be brought in line with the Standard</li> <li>Biomass retention guidelines need to be developed for biomass and whole tree harvesting operations</li> </ul>
<b>P7: Management Plan</b>	<ul style="list-style-type: none"> <li>The State Forest Plans are still under development</li> <li>Stakeholder consultation and overall transparency of the planning process is not at a level required by the Standard</li> <li>The “integration process” is not adequately documented and transparent to the public</li> <li>Not all of the subject areas enumerated in Criterion 7.1 are adequately addressed in the compendium of management planning activities and documents.</li> <li>Policies and procedures for regularly updating management plans have yet to be promulgated</li> </ul>
<b>P8: Monitoring &amp; Assessment</b>	<ul style="list-style-type: none"> <li>There are numerous activities undertaken on the State Forests that are responsive to this Principle. However, the monitoring of socio-economic impacts of State Forest management activities does not presently comply with FSC requirements</li> <li>Chain of Custody procedures need to be developed and documented</li> <li>The feedback link between monitoring and plan revisions needs to be articulated and documented</li> </ul>
<b>P9: Maintenance of High Conservation Value Forest</b>	<p>A start has been made with the establishment of the zoning of the State Forests that includes a HCVF zone. But there remain substantial gaps relative to:</p> <ul style="list-style-type: none"> <li>Stakeholder and expert consultation on HCVF definition, presence within the State Forests, management prescriptions and monitoring of efficacy</li> <li>Developing management prescriptions intended to maintain and/or restore identified high conservation values</li> <li>Developing and implementing HCVF monitoring procedures</li> <li>Incorporating HCVF into management plans</li> <li>Considering conditions on neighboring properties</li> </ul>
<b>P10 – Plantations</b>	<p>This Principle is not applicable to the management of the Ohio State Forest System as ODOF practices meet the FSC’s definition of “natural forest management”</p>
<b>Chain of custody (CoC) Requirements</b>	<p>DNR will need to develop and document forest “stump to gate” chain of custody procedures that include the log merchandizing yard(s).</p>
<b>Group Certification Requirements</b>	<p>Not applicable.</p>

**3.2. FSC-US Forest Management Standard Draft 8.1 Conformance Table, Version 9.0, 5/9/05\***

Annotation Guide:

“C”	likely to be found in conformance with the Criterion or Sub-Criterion
“NC”	likely to be found in non-conformance with the Criterion or Sub-Criterion
“C/NC”	at the margin of conformance with the Criterion or Sub-Criterion
“NA”	not applicable

\*Pre-assessments are conducted at the Criterion level. Please see <http://www.fscus.org/documents/> for a full copy of the Pacific Coast standard and its associated regional indicators.

REQUIREMENT	C/NC	COMMENT/CAR
<b>P1 Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.</b>		
<b>C1.1 Forest management shall respect all national and local laws and administrative requirements.</b>	C	Public transparency (availability of planning and management documents through means other than FOIA requests) may need to be improved
1.1.a. <b>Forest</b> management plans and operations demonstrate compliance with all applicable federal, state, county, municipal, and tribal laws, and <b>administrative requirements</b> (e.g., regulations). Violations, outstanding complaints or investigations are provided to the <b>Certifying Body</b> (CB) during the annual audit.	+	Operations appear to be undertaken with good knowledge an in sound conformity with legal/regulatory requirements; however, a few stakeholders believe otherwise—if these stakeholder convictions are not addressed and hopefully ameliorated by the DNR, it is likely that assertions of DNR’s improprieties will be redirected to FSC in hopes of gaining traction
1.1.b. To facilitate legal compliance, the <b>forest owner or manager</b> ensures that employees and contractors, commensurate with their responsibilities, are duly informed about applicable laws and regulations.	+	On the basis of very limited exposure to DNR staff, our impression is that their working knowledge of applicable legal and regulatory requirements is solid
<b>C1.2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.</b>	C	No evidence of possible non-conformities emerged during the pre-assessment
1.2.a. The forest owner or manager provides written evidence that all applicable and legally prescribed fees, royalties, taxes and other charges are being paid in a timely manner. If payment is beyond the control of the	+	

landowner or manager, then there is evidence that every attempt at payment was made.		
<b>C1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.</b>	C/NC	We consider it unlikely that ODOF's operations are in violation with any applicable international agreements and conventions. On the other hand, it is our sense that DNR does not know what international treaties and conventions may be applicable, if any.
1.3.a. Forest management plans and operations comply with relevant provisions of all applicable binding international agreements	+/-	It is likely that Minor CAR would be issued in full evaluation, asking ODOF to: a) determine what international treaties and conventions may apply to the management of the State Forests, if any, and b) conduct a self assessment to determine if there are any possible non-conformities
<b>C1.4. Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and by the involved or affected parties.</b>	C	This criterion is primarily forward looking (applies after award of certification)
1.4.a. Situations in which compliance with laws or regulations conflicts with compliance with FSC Principles, Criteria or Indicators are documented and referred to the CB.	+/-	A Minor CAR is likely to be issued during a full evaluation, asking the DNR to generate a written statement or policy, endorsed by the State Forester, that any such conflicts will be brought to the attention of SCS.
<b>C1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.</b>	C	A full evaluation is likely to confirm adequate overall conformity with this Criterion  However, illegal ATV use is an issue that will be investigated further during a full evaluation
1.5.a. The forest owner or manager supports or implements measures intended to prevent illegal and unauthorized activities on the <b>Forest Management Unit</b> (FMU).	+	The Division has a law enforcement branch which, in itself, is a preventative measure to minimize illegal activities. The Division and Department also employ public education mechanisms to reduce illegal or unauthorized activities  It is our sense that illegal activities are not widespread, with the exception of the illegal ATV use (see next Indicator)
1.5.b. If illegal or unauthorized activities occur, the forest owner or manager implements actions designed to curtail such activities and correct the situation to the extent possible for meeting all land management objectives with consideration of available resources.	+/-	Actions are implemented to control illegal ATV use but illegal use is characterized as "widespread but not out of control." We consider this to be a contradictory statement and a possible indication of a non-conformity or, at a minimum, an OFI (opportunity for improvement)
<b>C1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.</b>	C/NC	This is also a primarily forward looking Criterion. So it is unlikely that a major non-conformity would be detected in a full evaluation. However, minor non-conformities are more likely.
1.6.a. The forest owner or manager demonstrates a long-term commitment	-	Likely minor non-conformity unless the ODOF issues a publicly available written statement of commitment to manage the State

to adhere to the FSC Principles and Criteria and FSC and FSC-US policies, including the FSC-US Land Sales Policy, and has a publicly available statement of commitment to manage the FMU in conformance with FSC standards and policies.		Forests in compliance with the FSC certification standards
1.6.b. If the certificate holder does not certify their entire holdings, then they document, in brief, the reasons for seeking partial certification referencing FSC-POL-20-002 (or subsequent policy revisions), the location of other managed forest units, the natural resources found on the holdings being excluded from certification, and the management activities planned for the holdings being excluded from certification.	+	All of the lands managed by the Division of Forestry are intended to be included in the scope of the certification evaluation.  Even if the lands managed by the other DNR divisions were considered part of the “forest estate,” our strong sense is that the management of these other lands would not constitute any non-conformity with FSC-POL-20-002
1.6.c. The forest owner or manager notifies the Certifying Body of significant changes in ownership and/or significant changes in management planning within 90 days of such change.	+	Conformity with this Indicator would be more readily assured if the DNR issued a policy that it will notify SCS of any changes in the land area under certification.
<b>P2 Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.</b>		
<b>C2.1. Clear evidence of long-term forest use rights to the land (e.g., land title, customary rights, or lease agreements) shall be demonstrated.</b>	<b>C</b>	Conformity with the core of this Criterion appears to be beyond any doubt
2.1.a. The forest owner or manager provides clear evidence of <i>long-term</i> rights to use and manage the FMU for the purposes described in the management plan.	+	
2.1.b. The forest owner or manager identifies and documents legally established use and access rights associated with the FMU that are held by other parties.	+/-	Evidence that DNR has cataloged all such established rights would help in establishing conformity to this Indicator during a full evaluation
2.1.c. Boundaries of land ownership and use rights are clearly identified on the ground and on maps prior to commencing management activities in the vicinity of the boundaries.	+	It is our understanding that DNR does in fact mark boundaries, as required in this Indicator
<b>C2.2. Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and</b>	<b>C</b>	No evidence to suggest that DNR, as a duly established state agency with public trust management responsibilities, is operating in a manner that conflicts with or ignores customary tenure or use rights

<p><b>informed consent to other agencies.</b></p> <p><i>Applicability Note: For the planning and management of publicly owned forests, the local community is defined as all residents and property owners of the relevant jurisdiction.</i></p>		
<p>2.2.a. The forest owner or manager allows the exercise of <b>tenure and use rights</b> allowable by law or regulation.</p>	+	Conformity is highly likely to be confirmed in a full evaluation
<p>2.2.b. In FMUs where tenure or use rights held by others exist, the forest owner or manager consults with groups that hold such rights so that management activities do not significantly impact the uses or benefits of such rights.</p>	+	Regardless established tenure or use rights, DNR engages in public dialogue about its management policies and practices. However, and as addressed elsewhere in this Standard, DNR may need to enhance its approach to consultation as distinct from public transparency and information sharing. As a public agency, consultation requires structured opportunities for stakeholders to offer input and have the sense that DNR is actively listening to and duly considering such input.
<p><b>C2.3. Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.</b></p>	C	<p>Available administrative appeals and the availability of the Ohio state court system probably constitute adequate conformity.</p> <p>It is our sense that there are no active disputes over tenure claims and use rights. If there are, they need to be made known to the full evaluation team.</p>
<p>2.3.a. If <b>disputes</b> arise regarding tenure claims or use rights then the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If these good-faith efforts fail, then federal, state, and/or local laws are employed to resolve such disputes.</p>	+	DNR appears to have a long standing commitment to open dialogue
<p>2.3.b. The forest owner or manager documents any significant disputes over tenure and use rights.</p>	+	Conformity would be enhanced if a register of such disputes over tenure or use rights were maintained
<p><b>P3 The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.</b></p>		
<p><b>C3.1. Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.</b></p>	NA	
<p>3.1.a. Tribal forest management planning and implementation are carried out by authorized tribal representatives</p>		

in accordance with tribal laws and customs and relevant federal laws.		
3.1.b. The manager of a tribal forest secures, in writing, informed consent regarding forest management activities from the tribe or individual forest owner prior to commencement of those activities.		
<b>C3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.</b>	C/NC	<p>Possible major non-conformity in the absence of a consultation mechanism and the offer of cooperation.</p> <p>On the other hand, are there indigenous “resources and tenure rights” that exist on the Ohio State Forests that are being threatened. This could possibly downgrade the non-conformity to minor.</p>
3.2.a. During management planning, the forest owner or manager consults with American Indian groups that have legal rights or other binding agreements to the FMU to avoid harming their resources or rights.	-	No evidence has been provided that DNR attempts, in a culturally manner, to consult with pertinent indigenous peoples
3.2.b. Demonstrable actions are taken so that forest management does not adversely affect tribal resources. When applicable, the management plan shall incorporate evidence of, and measures for, protecting tribal resources.	-	Conscious consideration of possible indigenous resources and tenure rights does not appear to be part of the Division of Forestry’s management system
<b>C3.3. Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.</b>	C/NC	<p>Possible major non-conformity in the absence of a consultation mechanism and the offer of cooperation.</p> <p>On the other hand, are there indigenous sites of cultural, ecological, economic or religious significance that exist on the Ohio State Forests that are being threatened. This could possibly downgrade the non-conformity to minor.</p>
3.3.a. The forest owner or manager invites consultation with tribal representatives in identifying sites of current or traditional cultural, archeological, ecological, economic or religious significance.	-	No evidence has been provided that ODOF attempts, in a culturally appropriate manner, to consult with pertinent indigenous peoples
3.3.b. In consultation with tribal representatives, the forest owner or manager develops measures to protect or enhance areas of special significance (see also Criterion 9.1).	-	See prior comment
<b>C3.4. Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or</b>	NA	

management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.		
3.4.a. The forest owner or manager identifies whether <i>traditional knowledge</i> in forest management is being used. When traditional knowledge is used, written protocols are jointly developed prior to such use and signed by local tribes or tribal members to protect and fairly compensate them for such use.		
3.4.b. The forest owner or manager respects the confidentiality of tribal traditional knowledge and assists in the protection of such knowledge.		
<b>P4 Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.</b>		
<b>C4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.</b>	<b>C</b>	The Division appears to be operating at a high level of conformity to this Criterion
4.1.a. Employee compensation and hiring practices meet or exceed the prevailing <i>local</i> norms within the forestry industry.	+	Anecdotal evidence gathered during the pre-assessment suggests adequate conformity with this Indicator, especially when the overall compensation package (salary plus benefits) is considered
4.1.b. Forest work is offered in ways that create high quality job opportunities for employees.	+	Same as above
4.1.c. Forest workers are provided with fair wages.	+	Same as above
4.1.d. Hiring practices and conditions of employment are non-discriminatory and follow applicable federal, state and local regulations.	+	Assured by state and federal law and Departmental policy
4.1.e. The forest owner or manager provides work opportunities to qualified local applicants and seeks opportunities for purchasing local goods and services of equal price and quality.	+	Most DNR employees are Ohio natives; most service and product vendors with which DNR does business are Ohio based
4.1.f. Commensurate with the size and scale of operation, the forest owner or manager provides and/or supports learning opportunities to improve public understanding of forests and forest management.	+	While our exposure to the Division's and the Department's public education programs was very limited during the pre-assessment, our sense is that there are no issues here with regard to possible non-conformities, but additional evidence should be made available to the full evaluation team that will enable a finding of conformity

4.1.g. The forest owner or manager participates in local economic development and/or civic activities, based on scale of operation and where such opportunities are available.	+	The Division's urban forestry program is responsive to this Indicator  There are also Departmental-level activities that likely contribute to the establishment of adequate conformity.
<b>C4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.</b>	C	Available evidence suggest adequate overall conformity with this Criterion such that a Major CAR is an unlikely outcome of a full evaluation
4.2.a. The forest owner or manager shall meet or exceed all applicable laws and/or regulations covering health and safety of employees (see Criterion 1.1).	+	Available evidence suggests conformity
4.2.b. The forest owner or manager and their employees and contractors demonstrate a safe work environment. Contracts or other written agreements include safety requirements.	+	The pre-assessment field tour revealed nothing to suggest issues with regard to this Indicator  But what safety requirements apply to contractors? This will be investigated as part of the full evaluation.
4.2.c. The forest owner or manager hires well-qualified service providers to safely implement the management plan.	?	Insufficient evidence gathered during the pre-assessment to support a preliminary judgment; this will be examined during a full evaluation
<b>C4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labor Organization (ILO).</b>	C	Most of the DNR workforce is unionized
4.3.a. Forest workers are free to associate with other workers for the purpose of advocating for their own employment interests.	+	Federal and state law as well as union contracts assure this
4.3.b. The forest owner or manager has effective and culturally sensitive mechanisms to resolve disputes between workers and management.	+/-	Likely conformity with regard to DNR employees. But what about contractors? This will be investigated during a full evaluation.
<b>C4.4. Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations.</b>	NC	Available evidence suggests that ODNR does not have in place adequate procedures for monitoring social impacts of its state forest management operations  Available evidence suggests that DNR does not have in place adequate procedures and policies for truly consultative interaction with its stakeholders, the citizens of Ohio. Consultation involves more than what we understand to be undertaken during annual open houses  In the absence of policy and procedural changes prior to a full evaluation, findings of major non-conformities are likely
4.4.a. The forest owner or manager understands the likely social impacts of management activities, and incorporates	-	See comments above  A summary of social impacts needs to be made available to SCS;

<p>this understanding into management planning and operations. Social impacts include effects on:</p> <ul style="list-style-type: none"> <li>• Archeological sites and sites of cultural, historical and community significance (on and off the FMU);</li> <li>• Public resources, including air, water and food (hunting, fishing, collecting);</li> <li>• Aesthetics;</li> <li>• Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health;</li> <li>• Community economic opportunities;</li> <li>• Other people who may be affected by management operations.</li> </ul> <p>A summary is available to the CB.</p>		<p>even better, such a summary should (as opposed to shall) be made publicly available</p>
<p>4.4.b. The forest owner or manager seeks and considers input in management planning from people who would likely be affected by management activities.</p>	<p>-</p>	<p>The means by which the Division seeks and considers public input needs to be enhanced in order to demonstrate conformity with this Indicator</p> <p>Likely non-conformity</p>
<p>4.4.c. People who are subject to direct adverse effects of management operations are apprised of relevant activities in advance of the action so that they may express concern.</p>	<p>-</p>	<p>Public notices look to be pretty good though some stakeholders feel otherwise (e.g., advance notice of prescribed fires)</p> <p>Likely non-conformity</p>
<p>4.4.d. For <b>public forests</b>, consultation shall include the following components:</p> <ol style="list-style-type: none"> <li>4. Clearly defined and accessible methods for public participation are provided in both long and short-term planning processes, including harvest plans and operational plans;</li> <li>5. Public notification is sufficient to allow interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management;</li> <li>6. An accessible and affordable appeals process to planning decisions is available.</li> </ol> <p>Planning decisions incorporate the results of public consultation. All draft</p>	<p>-</p>	<p>More is needed. Public <i>participation</i> involves more than sending out notices and presenting information at open houses</p> <p>More formal/structured public participation mechanisms are needed in order to demonstrate conformity with this Indicator</p> <p>Management decisions need to more demonstrably reflect the incorporation of results of public consultation</p> <p>Likely non-conformity</p>

and final planning documents, and their supporting data, are made readily available to the public.		
<b>C4.5. Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.</b>	C/NC	<p>While there are some high profile controversies associated with a relatively small number of stakeholders, it is our sense that DNR fundamentally endeavors to avoid loss or damage to legal customary rights, property, resources and livelihoods of local peoples.</p> <p>A dispute between the Division and an Ohio county regarding the balance between stumpage and merchandising sales in their county is an issue pertinent to this Criterion and underscores the need for dispute resolution mechanisms. The absence of a mutually acceptable resolution detracts from the Division’s conformity to this Criterion.</p> <p>Possible minor non-conformity with regard to the lack of a Divisional-level informal dispute resolution mechanism. Merely pointing to the availability of civil litigation is not adequate conformity to this Criterion.</p>
4.5.a. The forest owner or manager does not engage in negligent activities that cause damage to other people.	+/-	The Notice of Violation with regard to prescribed fire needs to be thoroughly examined as part of the full evaluation
4.5.b. The forest owner or manager provides a known and accessible means for interested stakeholders to voice grievances and have them resolved. If significant disputes arise related to resolving grievances and/or providing fair compensation, the forest owner or manager follows appropriate dispute resolution procedures. At a minimum, the forest owner or manager maintains open communications, responds to grievances in a timely manner, demonstrates ongoing good faith efforts to resolve the grievances, and maintains records of the dispute resolution process.	+/-	<p>It is our impression that Division managers and other personnel maintain open dialogue.</p> <p>But this Indicator requires “known and accessible means for stakeholders to voice grievances and have them resolved.” The available evidence suggests that the Division cannot presently demonstrate conformity with this requirement.</p> <p>Possible minor non-conformity</p>
4.5.c. Fair compensation or reasonable mitigation is provided to local people, communities or adjacent landowners for substantiated damage or loss of income caused by the landowner or manager.	+	<p>The existence and availability of the state court system looks to be sufficient demonstration of conformity with this Indicator</p> <p>Are there Divisional level mechanisms by which compensation, if warranted, can be determined and issued?</p>
<b>P5 Forest management operations shall encourage the efficient use of the forest’s multiple products and services to ensure economic viability and a wide range of environmental and social benefits.</b>		
<b>C5.1. Forest management should strive toward economic viability, while taking into account the full environmental,</b>	C	It is our sense that adequate overall conformity to this Criterion is likely to be confirmed in a full evaluation.

<b>social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.</b>		
5.1.a. The forest owner or manager is financially able to implement core management activities, including all those required to meet this Standard, and investment and reinvestment in forest management.	+/-	Years of budget and concomitant staff reductions obviously clash with this Indicator. Despite the cuts, the total budget and number of employees exceeds those associated with privately owned forest estates of similar size
5.1.b. Responses to short-term financial factors are limited to levels that are consistent with fulfillment of this Standard.	+	Timber harvest levels are clearly not driven by short-term financial factors. Harvest levels do not exceed planned levels
<b>C5.2. Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.</b>	<b>C</b>	On the basis of the information gathered during the pre-assessment we conclude that adequate overall conformity to this Criterion is likely to be confirmed in a full evaluation.
5.2.a. Where forest products are harvested or sold, opportunities for forest product sales and services are given to local harvesters, value-added processing and manufacturing facilities, guiding services, and other operations that are able to offer services at competitive rates and levels of service.	+	All logging contractors bidding on State Forest timber sales are Ohio based and generally located within the same or neighboring counties where the state forests are located  Most logs from the state forests are processed by Ohio mills
5.2.b. The forest owner or manager takes measures to optimize the use of harvested forest products and explores product diversification where appropriate and consistent with management objectives.	+	The log merchandizing initiative is very responsive to this Indicator
5.2.c. On public lands where forest products are harvested and sold, some sales of forest products or contracts are scaled or structured to allow small business to bid competitively.	+	Most all sales are awarded to small logging contractors
<b>C5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.</b>	<b>C</b>	As we were not able to examine active timber harvests during the pre-assessment, our ability to identify possible gaps relative to this Criterion was very limited. However, it is our sense from an examination of post harvest stands that the Division is well positioned to demonstrate conformity to this Criterion in a full evaluation.
5.3.a. Management practices are employed to minimize the loss and/or waste of harvested forest products.	+	
5.3.b. Harvest practices are managed to protect residual trees and other forest resources, including: <ul style="list-style-type: none"> <li>• soil compaction, <b>rutting</b> and erosion are minimized;</li> </ul>	+	More formal soil compaction and rutting guidelines would enhance conformity to this Indicator

<ul style="list-style-type: none"> <li>residual trees are not significantly damaged to the extent that health, growth, or values are noticeably affected;</li> <li>damage to NTFPs is minimized during management activities; and</li> <li>techniques and equipment that minimize impacts to vegetation, soil, and water are used whenever feasible.</li> </ul>		
<p><b>C5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.</b></p>	C	
<p>5.4.a. The forest owner or manager demonstrates knowledge of their operation's effect on the local economy as it relates to existing and potential markets for a wide variety of timber and non-timber forest products and services, and strives to diversify the economic use of the forest accordingly.</p>	+/-	
<p><b>C5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.</b></p>	C/NC	<p>Adequate overall conformity to this Criterion would be strengthened by expanding the range public trust resources that are explicitly considered in the course of managing the State Forests</p>
<p>5.5.a. In developing and implementing activities on the FMU, the forest owner or manager identifies, defines and implements appropriate measures for maintaining and/or enhancing forest services and resources that serve public values, including municipal watersheds, fisheries, carbon storage and sequestration, recreation and tourism.</p>	+/-	<p>ODOF's efforts to demonstrate conformity to this Indicator would benefit for more structured programs or measures being taken <i>on the State Forests</i> that are explicitly tied to public trust values such as fisheries, maintenance of high quality water on forest areas within municipal watersheds, and carbon sequestration.</p> <p>The extent of recreational opportunities on the State Forests looks to be appropriate for the size of the estate and the fact that the Department manages other properties exclusively for public outdoor recreation</p>
<p><b>C5.6. The rate of harvest of forest products shall not exceed levels that can be permanently sustained.</b></p>	C/NC	<p>Harvest levels are clearly sustainable (roughly one-third of periodic increment) but the Division has not undertaken an allowable harvest planning/calculation process; likely minor non-conformity</p>
<p>5.6.a. In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the</p>	-	<p>AAC calculation procedures are not in place. ODOF should give consideration to the bulleted items in this Indicator as it designs <i>and documents</i> an allowable harvest planning process</p> <p>Likely minor non-conformity, rather than a major non-conformity because actual harvest levels are demonstrably well</p>

<p>planning unit. The sustained yield harvest level calculation is documented in the Management Plan.</p> <p>The sustained yield harvest level calculation for each planning unit is based on:</p> <ul style="list-style-type: none"> <li>• documented growth rates for particular sites, and/or acreage of forest types, age-classes and species distributions;</li> <li>• mortality and decay and other factors that affect net growth;</li> <li>• areas reserved from harvest or subject to harvest restrictions to meet other management goals;</li> <li>• silvicultural practices that will be employed on the FMU;</li> <li>• management objectives and desired future conditions.</li> </ul> <p>The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.</p>		<p>below maximum sustainable potentials</p>
<p>5.6.b. Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.</p>	<p>+</p>	<p>No problems, here; harvest levels are at roughly one-third of periodic increment</p>
<p>5.6.c. Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that have been depleted or rendered to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.</p>	<p>+</p>	<p>Our limited examination of forest stands during the pre-assessment leads us to conclude that ODOF is likely able to demonstrate conformity to this Indicator during a full evaluation</p>
<p>5.6.d. For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary use rights may be impacted by such harvests. In other</p>	<p>NA?</p>	<p>It is our understanding that ODOF does not manage for the commercial production of non-timber forest products. Non-commercial activities such as firewood gathering is allowed under a permit system</p>

<p>situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.</p>		
<p><b>P6 Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.</b></p>		
<p><b>C6.1. Assessments of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources -- and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.</b></p>	<p>C/NC</p>	<p>It is likely that a full evaluation will reveal a need for ODOF to fortify its environmental impact assessment approaches. However, we consider it likely that it will be a minor rather than a major non-conformity as there are impact methods in place, albeit of a form and substance that probably does not adequately comply with this Criterion</p>
<p>6.1.a. Using the results of <i>credible scientific analysis, best available information</i> (including relevant databases), and local knowledge and experience, an assessment of conditions on the FMU is completed and includes:</p> <ol style="list-style-type: none"> <li>1) Forest community types and development, size class and/or successional stages, and associated <i>natural disturbance regimes</i>;</li> <li>2) <i>Rare, Threatened and Endangered (RTE) species</i> and <i>rare ecological communities</i> (including plant communities);</li> <li>3) Other habitats and species of management concern;</li> <li>4) Water resources and associated riparian habitats and hydrologic functions;</li> <li>5) <i>Soil resources</i>; and</li> <li>6) <i>Historic conditions</i> on the FMU related to forest community types and development, size class and/or successional stages, and a broad comparison of historic and current conditions.</li> </ol>	<p>+/-</p>	<p>The means and methods by which Division of Wildlife biologists are consulted and generally provide technical support to the management of the State Forests needs to be better articulated and documented</p>

<p>6.1.b. Prior to commencing site-disturbing activities, the forest owner or manager assesses and documents the potential short and long-term impacts of planned management activities on elements 1-5 listed in Criterion 6.1.a.</p> <p>The assessment must incorporate the <b>best available information</b>, drawing from scientific literature and experts. The impact assessment will at minimum include identifying resources that may be impacted by management (e.g., streams, habitats of management concern, soil nutrients). Additional detail (i.e., detailed description or quantification of impacts) will vary depending on the uniqueness of the resource, potential risks, and steps that will be taken to avoid and minimize risks.</p>	+/-	<p>The compartment review process does constitute a form of pre-disturbance impact assessment ; however, it is marginally adequate relative to the depth and scope of the impact assessment expected in this</p>
<p>6.1.c. Using the findings of the impact assessment (Indicator 6.1.b), management approaches and field prescriptions are developed and implemented that: 1) avoid or minimize negative short-term and long-term impacts; and, 2) maintain and/or enhance the long-term ecological viability of the forest.</p>	+/-	<p>Conformity will be improved if the link between impact assessments and management prescriptions is clarified and fortified</p>
<p>6.1.d. On public lands, assessments developed in Indicator 6.1.a and management approaches developed in Indicator 6.1.c are made available to the public in draft form for review and comment prior to finalization. Final assessments are also made available.</p>	-	<p>At present, it does not appear that ODOF's management systems adequately comply with this Indicator.</p> <p>A minor non-conformity is a likely outcome of a full evaluation.</p>
<p><b>C 6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping, and collecting shall be controlled.</b></p>	C	<p>Available evidence gathered during the pre-assessment does not suggest that ODOF is failing to provide basic coverage of listed species management. This will be investigated in more depth during a full evaluation</p>
<p>6.2.a. If there is a likely presence of RTE species as identified in Indicator 6.1.a then either a field survey to verify the</p>	+	

<p>species' presence or absence is conducted prior to site-disturbing management activities, or management occurs with the assumption that potential RTE species are present.</p> <p>Surveys shall be conducted by biologists with the appropriate expertise in the species of interest and with appropriate qualifications to conduct the surveys. If a species is determined to be present, its location should be reported to the manager of the appropriate database.</p>		
<p>6.2.b. When RTE species are present or assumed to be present, modifications in management are made in order to maintain, restore or enhance the extent, quality and viability of the species and their habitats.</p> <p><b>Conservation zones</b> and/or <b>protected areas</b> are established for RTE species, including those S3 species that are considered rare, where they are necessary to maintain or improve the short and long-term viability of the species. Conservation measures shall be based on relevant science, guidelines and/or consultation with relevant, independent experts as necessary to achieve the conservation goal of the Indicator.</p>	+	<p>Departmental personnel appear to be appropriately cognizant of RTE management issues including which species are likely present on the State Forests</p>
<p>6.2.c. For medium and large public forests (e.g. state forests), forest management plans and operations are designed to meet species' recovery goals, as well as landscape level biodiversity conservation goals.</p>	?/+	<p>The Indiana Bat management strategy is evidence of conformity to this Indicator. Are all other endangered species found on the State Forests receiving comparable management attention?</p>
<p>6.2.d. Within the capacity of the forest owner or manager, hunting, fishing, trapping, collecting and other activities are controlled to avoid the risk of impacts to vulnerable species and communities (See Criterion 1.5).</p>	+	<p>No issues came to the attention of the pre-assessment lead auditor</p>
<p>6.2.e. If a state and/or Federally listed as threatened, endangered, of special concern, or sensitive species is determined to be present, its location is</p>	+	<p>Compliance looks to be solid</p>

reported to the manager of the species' database.		
<b>C6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem.</b>	<b>C</b>	It is our sense that ODOF will be able to demonstrate adequate overall conformity to this Criterion during a full certification evaluation.
<b>C6.3.a. Landscape-scale indicators</b>		
6.3.a.1. The forest owner or manager maintains, enhances, and/or restores under-represented <b>successional</b> stages in the FMU that would naturally occur on the types of sites found on the FMU.  Where old growth of different community types that would naturally occur on the forest are under-represented in the landscape relative to natural conditions, a portion of the forest is managed to enhance and/or restore old growth characteristics.	+	ODOF, in collaboration with partner entities such as the Division of Wildlife, the USDA Forest Service and The Nature Conservancy, is actively trying to create more early successional habitat  The Wilderness Area in Shawnee State Forest as well as the HCVF zone as well as the other Class I zone categories will, over time, develop late successional structure
6.3.a.2. When a <b>rare ecological community</b> is present, modifications are made in both the management plan and its implementation in order to maintain, restore or enhance the viability of the community.  Based on the vulnerability of the existing community, <b>conservation zones</b> and/or <b>protected areas</b> shall be established where warranted.	+/-	The Natural Areas sub-zone within the Class I zone appears to be responsive to this Indicator. More formalized procedures for identifying rare communities and establishing conservation zones and protected areas help to better demonstrate conformity.
6.3.a.3. When they are present, management maintains the area, structure, composition, and processes of all <b>Type 1</b> and <b>Type 2 old growth</b> . Type 1 and 2 old growth are also protected and buffered as necessary with conservation zones, unless an alternative plan is developed that provides greater overall protection of old growth values.  Type 1 Old Growth is protected from harvesting and road construction. Type 1 old growth is also protected from other	+	No evidence of potential non-conformity to this Indicator was revealed during the pre-assessment

<p>timber management activities, except as needed to maintain the ecological values associated with the stand, including old growth attributes (e.g., remove exotic species, conduct controlled burning, and thinning from below in dry forest types when and where restoration is appropriate).</p> <p>Type 2 Old Growth is protected from harvesting to the extent necessary to maintain the area, structures, and functions of the stand. Timber harvest in Type 2 old growth must maintain old growth structures, functions, and components including individual trees that function as refugia (see Indicator 6.3.g).</p> <p>On public lands, old growth is protected from harvesting, as well as from other timber management activities, except if needed to maintain the values associated with the stand (e.g., remove exotic species, conduct controlled burning, and thinning from below in forest types when and where restoration is appropriate).</p> <p>On American Indian lands, timber harvest may be permitted in Type 1 and Type 2 old growth in recognition of their sovereignty and unique ownership. Timber harvest is permitted in situations where:</p> <ol style="list-style-type: none"> <li>8. Old growth forests comprise a significant portion of the tribal ownership.</li> <li>9. A history of forest stewardship by the tribe exists.</li> <li>10. High Conservation Value Forest attributes are maintained.</li> <li>11. Old-growth structures are maintained.</li> <li>12. Conservation zones representative of old growth stands are established.</li> <li>13. Landscape level considerations are addressed.</li> <li>14. Rare species are protected.</li> </ol>	+	
6.3.b. To the extent feasible within the	+	This will be examined in more detail during a full evaluation, but

<p>size of the ownership, particularly on larger ownerships (generally tens of thousands or more acres), management maintains, enhances, or restores habitat conditions suitable for well-distributed populations of animal species that are characteristic of forest ecosystems within the landscape.</p>		<p>the preliminary sense is that ODOF management is consistent with this Indicator</p>
<p>6.3.c. Management maintains, enhances and/or restores the plant and wildlife habitat of <b>Riparian Management Zones (RMZs)</b> to provide:</p> <ul style="list-style-type: none"> <li>f) habitat for aquatic species that breed in surrounding uplands;</li> <li>g) habitat for predominantly terrestrial species that breed in adjacent <b>aquatic habitats</b>;</li> <li>h) habitat for species that use riparian areas for feeding, cover, and travel;</li> <li>i) habitat for plant species associated with riparian areas;</li> </ul> <p>and, stream shading and inputs of wood and leaf litter into the adjacent aquatic ecosystem.</p>	<p>+/-</p>	<p>More formal and robust in-stand retention policies would be helpful</p>
<p><b>Stand-scale Indicators</b> 6.3.d. Management practices maintain or enhance plant species composition, distribution and frequency of occurrence similar to those that would naturally occur on the site.</p>	<p>+</p>	<p>The only issue that arose during the pre-assessment that potentially detracts from conformity to this Indicator is the strongly held opinion of a limited number of stakeholders that ODOF ought not to be managing for oak habitat using prescribed fire, or any other tool, as that community type was very rare in this region, pre-European disturbance. ODOF and DOW’s counterarguments need to be made available to the full evaluation team</p>
<p>6.3.e. When planting is required, a local source of known provenance is used when available and when the local source is equivalent in terms of quality, price and productivity. The use of non-local sources shall be justified, such as in situations where other management objectives (e.g. disease resistance or adapting to climate change) are best served by non-local sources. <b>Native species</b> suited to the site are normally selected for regeneration.</p>	<p>+</p>	
<p>6.3.f. Management maintains, enhances, or restores habitat components and associated stand structures, in abundance and distribution that could be expected from naturally occurring</p>	<p>+</p>	<p>During a full evaluation, ODOF should be prepared to justify that the even-aged management harvest units “could be expected from naturally occurring processes.”</p> <p>More robust in-stand retention policies and practices would</p>

<p>processes. These components include:</p> <p>a) large live trees, live trees with decay or declining health, <b>snags</b>, and well-distributed coarse down and dead woody material. <b>Legacy trees</b> where present are not harvested; and</p> <p>b) vertical and horizontal complexity.</p> <p>Trees selected for <b>retention</b> are generally representative of the dominant species found on the site.</p>		<p>help to better demonstrate conformity to this Indicator.</p> <p>Possible minor CAR or OFI.</p>
<p>6.3.g.1. In the Southeast, Appalachia, Ozark-Ouachita, Mississippi Alluvial Valley, and Pacific Coast Regions, when <b>even-aged systems</b> are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit as described in Appendix C for the applicable region.</p> <p>In the Lake States Northeast, Rocky Mountain and Southwest Regions, when even-aged silvicultural systems are employed, and during salvage harvests, 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 the purposes of restoration or rehabilitation. See Appendix C for additional regional requirements and guidance.</p>	<p>+</p>	<p>See prior comments; possible minor CAR or OFI</p> <p>The new retention policies that afford no in-stand structural retention in openings up to 10 acres do not comply with the intent of this Indicator</p>
<p>6.3.g.2. Under very limited situations, the landowner or manager has the option to develop a qualified plan to allow minor departure from the opening size limits described in Indicator 6.3.g.1. A qualified plan:</p> <ol style="list-style-type: none"> <li>1. Is developed by qualified experts in ecological and/or related fields (wildlife biology, hydrology, landscape ecology, forestry/silviculture).</li> <li>2. Is based on the totality of the <b>best available information</b> including peer-reviewed science regarding natural disturbance regimes for the FMU.</li> </ol>	<p>+/-</p>	<p>We are not aware of evidence to support conformity to this Indicator</p>

<p>3. Is spatially and temporally explicit and includes maps of proposed openings or areas.</p> <p>4. Demonstrates that the variations will result in equal or greater benefit to wildlife, water quality, and other values compared to the normal opening size limits, including for sensitive and rare species.</p> <p>5. Is reviewed by independent experts in wildlife biology, hydrology, and landscape ecology, to confirm the preceding findings.</p>		
<p>6.3.h. The forest owner or manager assesses the risk of, prioritizes, and, as warranted, develops and implements a strategy to prevent or control <i>invasive species</i>, including:</p> <ul style="list-style-type: none"> <li>5. a method to determine the extent of invasive species and the degree of threat to native species and ecosystems;</li> <li>6. implementation of management practices that minimize the risk of invasive establishment, growth, and spread;</li> <li>7. eradication or control of established invasive populations when feasible: and,</li> <li>8. monitoring of control measures and management practices to assess their effectiveness in preventing or controlling invasive species.</li> </ul>	+	<p>ODOF in collaboration with other Divisions is actively taking measures to control the spread of invasive exotics</p> <p>The use of chemical herbicides in the context of controlling invasive exotics is fundamentally more compatible with FSC “values” than is chemical use as a standardized silvicultural tool</p>
<p>6.3.i. In applicable situations, the forest owner or manager identifies and applies site-specific fuels management practices, based on: (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, (4) public safety, and (5) applicable laws and regulations.</p>	+	
<p><b>*C6.4. Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps,</b></p>	<b>NC</b>	<p>ODOF has not yet undertaken the landscape-level gap analysis of ecological reference areas, as required in this Criterion. In the absence of completing or at least substantially initiating the analytical steps required in this Criterion by the time of a full</p>

<p><b>appropriate to the scale and intensity of operations and the uniqueness of the affected resources.</b></p>		<p>evaluation, it is likely that a major CAR would be issued.</p>
<p>6.4.a. The forest owner or manager documents the ecosystems that would naturally exist on the FMU, and assesses the adequacy of their representation and protection in the <i>landscape</i> (see Criterion 7.1). The assessment for medium and large forests include some or all of the following: a) <b>GAP analyses</b>; b) collaboration with state natural heritage programs and other public agencies; c) regional, landscape, and watershed planning efforts; d) collaboration with universities and/or local conservation groups.</p> <p>For an area that is not located on the FMU to qualify as a Representative Sample Area (RSA), it should be under permanent protection in its natural state.</p> <p>.</p>	<p>-</p>	<p>The required GAP analysis needs to be undertaken</p> <p>Any other DNR-managed lands, outside of the State Forest System, that qualify as ecological reference areas can be counted in the GAP analysis</p> <p>The Natural Area zone designation is responsive to this Criterion; the basis for enrolling areas into that zone needs to be along the lines of what is required in this Criterion</p>
<p>6.4.b. Where existing areas within the landscape, but external to the FMU, are not of adequate protection, size, and configuration to serve as representative samples of existing ecosystems, forest owners or managers, whose properties are conducive to the establishment of such areas, designate ecologically viable RSAs to serve these purposes.</p> <p>Large FMUs are generally expected to establish RSAs of purpose 2 and 3 within the FMU.</p>	<p>-</p>	<p>The ODOF estate meets the FSC definition of a “large FMU” so pay attention to this Indicator</p>
<p>6.4.c. Management activities within RSAs are limited to low impact activities compatible with the protected RSA objectives, except under the following circumstances:</p> <p>a) harvesting activities only where they are necessary to restore or create conditions to meet the objectives of the protected RSA, or to mitigate conditions that interfere with achieving the RSA objectives;</p>	<p>+</p>	<p>ODOF’s description, found in Chapter 2 of its Manual, of allowed/planned uses within Zone 1 lands looks to be compatible with this Indicator</p>

<p>or</p> <p>b) road-building only where it is documented that it will contribute to minimizing the overall environmental impacts within the FMU and will not jeopardize the purpose for which the RSA was designated.</p>		
<p>6.4.d. The RSA assessment (Indicator 6.4.a) shall be periodically reviewed and if necessary updated (at a minimum every 10 years) in order to determine if the need for RSAs has changed; the designation of RSAs (Indicator 6.4.b) is revised accordingly.</p>	-	This is a matter of establishing a policy that does not yet exist
<p>6.4.e. Managers of large, contiguous public forests establish and maintain a network of representative protected areas sufficient in size to maintain species dependent on interior core habitats.</p>	+/-	This Indicator applies. The Wilderness Area in Shawnee State Forest is compatible with the expectation
<p><b>C6.5. Written guidelines shall be prepared and implemented to control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and to protect water resources.</b></p>	C/NC	
<p>6.5.a. The forest owner or manager has written guidelines outlining conformance with the Indicators of this Criterion.</p>	+/-	ODOF's has written guidelines but it is likely that a full evaluation team will conclude that these guidelines constitute inadequate conformity to this Criterion. One or more minor non-conformities are possible.
<p>6.5.b. Forest operations meet or exceed Best Management Practices (BMPs) that address components of the Criterion where the operation takes place.</p>	+	There are Ohio BMPs. By policy, ODOF endeavors to comply with the voluntary BMPs as if they were mandatory. Or sense is that there is good compliance with the BMPs but of course this will be examined in more detail during a full evaluation.
<p>6.5.c. Management activities including site preparation, harvest prescriptions, techniques, timing, and equipment are selected and used to protect soil and water resources and to avoid erosion, landslides, and significant soil disturbance. Logging and other activities that significantly increase the risk of landslides are excluded in areas where risk of landslides is high. The following actions are addressed:</p> <ul style="list-style-type: none"> <li>• Slash is concentrated only as</li> </ul>	+	Available evidence suggests that a full evaluation would reveal adequate conformity to this Indicator

<p>much as necessary to achieve the goals of site preparation and the reduction of fuels to moderate or low levels of fire hazard.</p> <ul style="list-style-type: none"> <li>• Disturbance of topsoil is limited to the minimum necessary to achieve successful regeneration of species native to the site.</li> <li>• Rutting and compaction is minimized.</li> <li>• Soil erosion is not accelerated.</li> <li>• Burning is only done when consistent with natural disturbance regimes.</li> <li>• Natural ground cover disturbance is minimized to the extent necessary to achieve regeneration objectives.</li> <li>• Whole tree harvesting on any site over multiple rotations is only done when research indicates soil productivity will not be harmed.</li> <li>• Low impact equipment and technologies is used where appropriate.</li> </ul>		
<p>6.5.d. The transportation system, including design and placement of permanent and temporary haul roads, skid trails, recreational trails, water crossings and landings, is designed, constructed, maintained, and/or reconstructed to reduce short and long-term environmental impacts, habitat fragmentation, soil and water disturbance and cumulative adverse effects, while allowing for customary uses and use rights. This includes:</p> <ul style="list-style-type: none"> <li>• access to all roads and trails (temporary and permanent), including recreational trails, and off-road travel, is controlled, as possible, to minimize ecological impacts;</li> <li>• road density is minimized;</li> <li>• erosion is minimized;</li> <li>• sediment discharge to streams is minimized;</li> <li>• there is free upstream and downstream passage for aquatic organisms;</li> <li>• impacts of transportation</li> </ul>	+/-	The current state of the Ohio State Forest road system may be marginal relative to this Indicator

<p>systems on wildlife habitat and migration corridors are minimized;</p> <ul style="list-style-type: none"> <li>• area converted to roads, landings and skid trails is minimized;</li> <li>• habitat fragmentation is minimized;</li> <li>• unneeded roads are closed and rehabilitated.</li> </ul>		
<p>6.5.e.1. In consultation with appropriate expertise, the forest owner or manager implements written <b>Streamside Management Zone (SMZ) buffer</b> management guidelines that are adequate for preventing environmental impact, and include protecting and restoring water quality, hydrologic conditions in rivers and stream corridors, wetlands, vernal pools, seeps and springs, lake and pond shorelines, and other hydrologically sensitive areas. The guidelines include vegetative buffer widths and protection measures that are acceptable within those buffers.</p> <p>In the Appalachia, Ozark-Ouachita, Southeast, Mississippi Alluvial Valley, Southwest, Rocky Mountain, and Pacific Coast regions, there are requirements for minimum SMZ widths and explicit limitations on the activities that can occur within those SMZs. These are outlined as requirements in Appendix E.</p>	+/-	The road in the creek accessing the Boy Scout camping site (visited during the pre-assessment) is in conflict with this Indicator—possible Minor CAR or OFI
<p>6.5.e.2. Minor variations from the stated minimum SMZ widths and layout for specific stream segments, wetlands and other water bodies are permitted in limited circumstances, provided the forest owner or manager demonstrates that the alternative configuration maintains the overall extent of the buffers and provides equivalent or greater environmental protection than FSC-US regional requirements for those stream segments, water quality, and aquatic species, based on site-specific conditions and the best available information. The forest owner or manager develops a written set of</p>		

supporting information including a description of the riparian habitats and species addressed in the alternative configuration. The CB must verify that the variations meet these requirements, based on the input of an independent expert in aquatic ecology or closely related field.		
6.5.f. Stream and wetland crossings are avoided when possible. Unavoidable crossings are located and constructed to minimize impacts on water quality, hydrology, and fragmentation of <b>aquatic habitat</b> . Crossings do not impede the movement of aquatic species. Temporary crossings are restored to original hydrological conditions when operations are finished.	+/-	Generally, ODOF endeavors to minimize road/watercourse intersections; a notable exception is the road to the Boy Scout camp area—possible CAR or OFI
6.5.g. Recreation use on the FMU is managed to avoid negative impacts to soils, water, plants, wildlife and wildlife habitats.	+/-	Illegal ATV use is an issue Management of the network of established motorized recreational vehicle roadways is an issue Likely CAR or OFI
6.5.h. Grazing by domesticated animals is controlled to protect in-stream habitats and water quality, the species composition and viability of the riparian vegetation, and the banks of the stream channel from erosion.	+	No grazing allotments on the State Forests so a non-issue
<b>C6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.</b>	C	Chemical use is relatively limited on the State Forests.  Prior to a full evaluation, ODOF must provide SCS will a comprehensive list of all pesticides used on the State Forests, include the trade name and chemical constituents  The recent increase in chemical use has been part of a ecological restoration initiative; this context of use is much more acceptable on FSC-certified forests  Overall, it is our expectation that adequate conformity to this Criterion can be confirmed during a full evaluation
6.6.a. No products on the FSC list of Prohibited Pesticides are used (see FSC-GUI-30-001 v2).	+	We were told during the pre-assessment that no “prohibited” chemicals are in use; these needs to be confirmed by ODOF providing a complete list of all chemicals in use

<p>6.6.b. All toxicants used to control pests and competing vegetation, including rodenticides, insecticides, herbicides, and fungicides are used only when and where non-chemical management practices are: a) not available; b) prohibitively expensive, taking into account overall environmental and social costs, risks and benefits; c) the only effective means for controlling invasive and exotic species; or d) result in less environmental damage than non-chemical alternatives (e.g., top soil disturbance, loss of soil litter and down wood debris). If chemicals are used, the forest owner or manager uses the least environmentally damaging formulation and application method practical. Written strategies are developed and implemented that justify the use of chemical pesticides. Whenever feasible, an eventual phase-out of chemical use is included in the strategy. The written strategy shall include an analysis of options for, and the effects of, various chemical and non-chemical pest control strategies, with the goal of reducing or eliminating chemical use.</p>	<p>+</p>	<p>Chemical use is limited and used in the framework of IPM</p>
<p>6.6.c. Chemicals and application methods are selected to minimize risk to non-target species and sites. When considering the choice between aerial and ground application, the forest owner or manager shall evaluate the comparative risk to non-target species and sites, the comparative risk of worker exposure, and the overall amount and type of chemicals required.</p>	<p>+/-</p>	<p>Better documentation of the process by which chemicals and application methods are determined would be helpful in confirming conformity to this Indicator</p>
<p>6.6.d. Whenever chemicals are used, a written prescription is prepared that describes the site-specific hazards and environmental risks, and the precautions that workers will employ to avoid or minimize those hazards and risks, and includes a map of the treatment area. Chemicals are applied only by workers who have received proper training in application methods and safety. They</p>	<p>?</p>	<p>Are written prescriptions prepared? If not, this would be a minor non-conformity.</p>

are made aware of the risks, wear proper safety equipment, and are trained to minimize environmental impacts on non-target species and sites.		
6.6.e. If chemicals are used, the effects are monitored and the results are used for adaptive management. Records are kept of pest occurrences, control measures, and incidences of worker exposure to chemicals.	?	What, if any, post-application monitoring is undertaken?
<b>C6.7. Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.</b>	C/NC	ODOF's general expectations regarding contractor performance are compatible with this Criterion. However, more explicit contact requirements would help to demonstrate conformity. Without changes being made prior to a full evaluation, a minor non-conformity is likely.
6.7.a. The forest owner or manager, and employees and contractors, have the equipment and training necessary to respond to hazardous spills	+/-	Spill kits are not required in contractor vehicles which is incompatible with this Indicator
6.7.b. In the event of a hazardous material spill, the forest owner or manager immediately contains the material and engages qualified personnel to perform the appropriate removal and remediation, as required by applicable law and regulations.	+/-	Spill kits are not required in contractor vehicles which is incompatible with this Indicator  Is there a contract term that obligates a contractor to immediately respond in the event of a spill?
6.7.c. Hazardous materials and fuels are stored in leak-proof containers in designated storage areas, that are outside of riparian management zones and away from other ecological sensitive features, until they are used or transported to an approved off-site location for disposal. There is no evidence of persistent fluid leaks from equipment or of recent groundwater or surface water contamination.	+/-	What are ODOF's policies with regard to storage of fluids for their own fleet of vehicles and equipment?
<b>C6.8. Use of biological control agents shall be documented, minimized, monitored, and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.</b>	C	No GMO's are in use on the State Forests  Biological control agent use is limited to R&D; no operational use
6.8.a. Use of <i>biological control agents</i> are used only as part of a pest management strategy for the control of invasive plants, <i>pathogens</i> , insects, or other animals when other pest control	+	No operational deployment  Lots of screening before their use  IPM is employed on the State Forests

methods are ineffective, or are expected to be ineffective. Such use is contingent upon peer-reviewed scientific evidence that the agents in question are non-invasive and are safe for native species.		
6.8.b. If biological control agents are used, they are applied by trained workers using proper equipment. Their use shall be documented, monitored and strictly controlled in accordance with state and national laws and internationally accepted scientific protocols. A written plan will be developed and implemented justifying such use, describing the risks, specifying the precautions workers will employ to avoid or minimize such risks, and describing how potential impacts will be monitored.	+	
6.8.c. Genetically Modified Organisms (GMOs) are not used for any purpose.	+	No GMO's. A written policy that GMO's will not be deployed on the State Forests would enhance conformity to this Indicator
<b>C6.9. The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.</b>	<b>C</b>	Conformity to this Criterion is likely to be confirmed during a full evaluation
6.9.a. The use of <i>exotic species</i> is contingent on the availability of credible scientific data indicating that any such species is non-invasive and its application does not pose a risk to native biodiversity. If exotic species are used, their provenance and the location of their use are documented, and their ecological effects are actively monitored.	+	We were informed that ODOF does not use exotic species
6.9.b. The forest owner or manager shall take timely action to curtail or significantly reduce any adverse impacts resulting from their use of exotic species.	NA	
<b>C6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:</b> <b>a) Entails a very limited portion of the forest management unit; and b) Does not occur on High Conservation Value Forest areas; and c) Will enable clear, substantial, additional, secure, long-</b>	<b>C</b>	Conversion for forest to non-forest land uses appears to be extremely limited on the State Forests  As with most State Forest systems, ODOF is likely in very solid conformity with this Criterion

<p><b>term conservation benefits across the forest management unit.</b></p>		
<p>6.10.a. Forest <b>conversion to plantations</b> or non-forest land uses shall not occur, except in circumstances where conversion:</p> <ul style="list-style-type: none"> <li>a) entails a very limited portion of the forest management unit; and</li> <li>b) does not occur on high conservation value forest areas; and</li> <li>c) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit.</li> </ul> <p>All three circumstances are required to be met in order for forest conversion to occur.</p>	<p>+</p>	<p>No net increase in what ODOF terms “plantations”</p>
<p>6.10.b. Justification for land-use and stand-type conversions is fully described in the long-term management plan, and meets the biodiversity conservation requirements of Criterion 6.3 (see also Criterion 7.1.I)</p>	<p>+/-</p>	<p>Very little loss of forest cover but, as there is not yet a long-term management plan, compliance with this Indicator is marginal</p>
<p>6.10.c. Areas converted to <b>non-forest use</b> for facilities associated with subsurface mineral and gas rights transferred by prior owners, or other conversion outside the control of the certificate holder, are identified on maps. The forest owner or manager consults with the CB to determine if removal of these areas from the scope of the certificate is warranted. To the extent allowed by these transferred rights, the forest owner or manager exercises control over the location of surface disturbances in a manner that minimizes adverse environmental and social impacts.</p> <p>If the certificate holder at one point held these rights, and then sold them, then subsequent conversion of forest to non-forest use would be subject to Indicator 6.10.a</p>	<p>?</p>	<p>How much mineral and gas development is taking place within the State Forests? This will need to be investigated as part a full evaluation</p>
<p><b>P7 A management plan -- appropriate to the scale and intensity of the operations -- shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.</b></p>		

<p><b>C7.1. The management plan and supporting documents shall provide:</b></p> <p><b>a) Management objectives. b) description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands.</b></p> <p><b>c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories. d) Rationale for rate of annual harvest and species selection. e) Provisions for monitoring of forest growth and dynamics. f) Environmental safeguards based on environmental assessments. g) Plans for the identification and protection of rare, threatened and endangered species.</b></p> <p><b>h) Maps describing the forest resource base including protected areas, planned management activities and land ownership.</b></p> <p><b>i) Description and justification of harvesting techniques and equipment to be used.</b></p>	<p>NC</p>	<p>A “management plan” in the FSC context can be and is commonly not a single bound document but, rather, a compendium of planning documents and supporting technical/topical documents that collectively provide the direction and guidance for the management of the subject FMU.</p> <p>ODOF has made some solid progress in fortifying the management planning system on the State Forests. There is a recently completed Strategic Plan and Forest-level management plans are in development. These provide necessary augmentation to the compartment review process that constitutes small-scale operational/tactical planning. As well there is an integration initiative underway.</p> <p>But, at present, the status of the State Forest planning system probably does not constitute adequate conformity to this Criterion. Were nothing else accomplished prior to a full evaluation, it is possible that a major non-conformity/Major CAR would be issued. But if further progress is made in developing and finalizing the Forest-level plans prior to a full evaluation and if this further development included additional stakeholder consultation and if there was expansion of the plan contents to address all of the subject areas enumerated in this Criterion, then it is our sense that a minor non-conformity/Minor CAR may result, instead.</p>
<p>7.1.a. The management plan identifies the ownership and legal status of the FMU and its resources, including rights held by the owner and rights held by others.</p>	<p>+</p>	<p>Are use or tenure rights held by others addressed somewhere?</p>
<p>7.1.b. The management plan describes the history of land use and past management, current forest types and associated development, size class and/or successional stages, and natural disturbance regimes that affect the FMU (see Indicator 6.1.a).</p>	<p>+</p>	
<p>7.1.c. The management plan describes:</p> <p>a) current conditions of the timber and non-timber forest resources being managed; b) desired future conditions; c) historical ecological conditions; and d) applicable management objectives and activities to move the FMU toward desired future conditions.</p>	<p>+</p>	<p>Is the concept of “desired future condition” incorporated into any of the planning processes?</p>
<p>7.1.d. The management plan includes a</p>	<p>+</p>	

description of the landscape within which the FMU is located and describes how landscape-scale habitat elements described in Criterion 6.3 will be addressed.		
<p>7.1.e. The management plan includes a description of the following resources and outlines activities to conserve and/or protect:</p> <ul style="list-style-type: none"> <li>• rare, threatened, or endangered species and natural communities (see Criterion 6.2);</li> <li>• plant species and community diversity and wildlife habitats (see Criterion 6.3);</li> <li>• water resources (see Criterion 6.5);</li> <li>• soil resources (see Criterion 6.3);</li> <li>• Representative Sample Areas (see Criterion 6.4);</li> <li>• High Conservation Value Forests (see Principle 9);</li> <li>• Other special management areas.</li> </ul>	+	Our sense is that these topics are addressed, in one type of plan or another, but ODOF should do a gap assessment to make sure
7.1.f. If invasive species are present, the management plan describes invasive species conditions, applicable management objectives, and how they will be controlled (see Indicator 6.3.j).	?	Addressed anywhere, such as in a document that could be considered as an adjunct to the statewide strategic plan?
7.1.g. The management plan describes insects and diseases, current or anticipated outbreaks on forest conditions and management goals, and how insects and diseases will be managed (see Criteria 6.6 and 6.8).	?	Same as prior comment.
7.1.h. If chemicals are used, the plan describes what is being used, applications, and how the management system conforms with Criterion 6.6.	?	
7.1.i. If biological controls are used, the management plan describes what is being used, applications, and how the management system conforms with Criterion 6.8.	NA	It is our understanding that biological control agents are not in use. If they are, then they need to be addressed in a planning document.
<p>7.1.j. The management plan incorporates the results of the evaluation of social impacts, including:</p> <ul style="list-style-type: none"> <li>• traditional cultural resources and rights of use (see Criterion 2.1);</li> <li>• potential conflicts with</li> </ul>	-	This is a subject area that requires greater attention as part of the process of fortifying the planning system for the State Forests. Likely minor non-conformity.

<p>customary uses and use rights (see Criteria 2.2, 2.3, 3.2);</p> <ul style="list-style-type: none"> <li>• management of ceremonial, archeological, and historic sites (see Criteria 3.3 and 4.5);</li> <li>• management of aesthetic values (see Indicator 4.4.a);</li> <li>• public access to and use of the forest, and other recreation issues;</li> <li>• local and regional socioeconomic conditions and economic opportunities, including creation and/or maintenance of quality jobs (see Indicators 4.1.b and 4.4.a), local purchasing opportunities (see Indicator 4.1.e), and participation in local development opportunities (see Indicator 4.1.g).</li> </ul>		
7.1.k. The management plan describes the general purpose, condition and maintenance needs of the transportation network (see Indicator 6.5.e).	+	Could be fortified
7.1.l. The management plan describes the silvicultural and other management systems used and how they will sustain, over the long term, forest ecosystems present on the FMU.	?	Is there a written presentation that links silvicultural prescriptions with sustaining ecosystem health?
7.1.m. The management plan describes how species selection and harvest rate calculations were developed to meet the requirements of Criterion 5.6.	-	As discussed in C5.6, the treatment of annual or periodic allowable harvest is presently not adequate.
7.1.n. The management plan includes a description of monitoring procedures necessary to address the requirements of Criterion 8.2.	?	Do the draft forest management plans explicitly include a section on forest monitoring and other types of monitoring such as plan implementation monitoring and effectiveness monitoring?
7.1.o. The management plan includes maps describing the resource base, the characteristics of general management zones, special management areas, and protected areas at a level of detail to achieve management objectives and protect sensitive sites.	+	
7.1.p. The management plan describes and justifies the types and sizes of harvesting machinery and techniques employed on the FMU to minimize or limit impacts to the resource.	-	Our sense is that this topic is not presently addressed.
7.1.q. Plans for harvesting and other significant site-disturbing management activities required to carry out the	+	The descriptions of environmental safeguards could be beefed up.

management plan are prepared prior to implementation. Plans clearly describe the activity, the relationship to objectives, outcomes, any necessary environmental safeguards, health and safety measures, and include maps of adequate detail.		
7.1.r. The management plan describes the stakeholder consultation process.	?	Our impression is that, aside from documenting it, there needs to be enhanced effort at engaging in stakeholder consultation as part of the planning process, at all scales.
<b>C7.2. The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.</b>	C/NC	There needs to be evidence available to a full evaluation team that ODOF has established a protocol for plan updates that conforms to this Criterion. On the other hand, the plans are new (still in development) and, thus, not in need of updates. Minor rather than major non-conformity, accordingly.
7.2.a. The management plan shall be reviewed on an ongoing basis and updated whenever necessary, at a minimum of every 10 years, to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.	+/-	See above.
<b>C7.3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plans.</b>	NC?	
7.3.a. Workers are qualified to properly implement the management plan; All forest workers are provided with sufficient guidance and supervision to adequately implement their respective components of the plan.	?	Has ODOF developed procedures for training staff and contractors on their respective roles in implementing the State Forest plans?
<b>C7.4. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1.</b>	C	We assume that a public summary requirement, which is the subject of this Criterion, is rendered moot by the fact that all documents associated with the management of the State Forests are publicly available. But plans need to be readily available rather than just, for instance, obtainable through "FOIA" requests.
7.4.a. While respecting landowner confidentiality, the management plan or a management plan summary that outlines the elements of the plan described in Criterion 7.1 is available to the public either at no charge or a nominal fee.	+	See above
7.4.b. Managers of public forests make	-	Have draft plans been made publicly available. Our sense is that

<p>draft management plans, revisions and supporting documentation easily accessible for public review and comment prior to their implementation. Managers address public comments and modify the plans to ensure compliance with this Standard.</p>		<p>ODOF may have some issues with respect to making draft plans available for review and public comment.</p> <p>It is laudable that ODOF is moving expeditiously to develop these new types of plans but there remains a need to provide opportunities for public review and comment during the process. Does ODOF need to fortify that aspect (transparency and consultation) of their planning processes?</p>
<p><b>P8 Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -- to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.</b></p> <p><i>Applicability Note: On small and medium-sized forests (see Glossary), an informal, qualitative assessment may be appropriate. Formal, quantitative monitoring is required on large forests and/or intensively managed forests.</i></p>		
<p><b>C8.1. The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations, as well as, the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.</b></p>	<p>C</p>	<p>Overall, it is our sense that ODOF engages in a wide array of monitoring activities that collectively constitute good overall conformity to this Criterion. However, there are possibly some subject matter gaps that could trigger minor non-conformities during a full evaluation.</p>
<p>8.1.a. Consistent with the scale and intensity of management, the forest owner or manager develops and consistently implements a regular, comprehensive, and replicable written monitoring protocol.</p>	<p>+/-</p>	<p>In terms of clearly demonstrating conformity, it would be helpful if there was a unified presentation of monitoring activities on the State Forests that is part of each Forest plan or the strategic plan or as a stand-alone document that can be referenced in these plans.</p>
<p><b>8.2. Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators: a) yield of all forest products harvested, b) growth rates, regeneration, and condition of the forest, c) composition and observed changes in the flora and fauna, d) environmental and social impacts of harvesting and other operations, and e) cost, productivity, and efficiency of forest management.</b></p>	<p>C</p>	<p>It is our sense that ODOF will be able to demonstrate adequate conformity to this Criterion such that issuance of Major CARs is unlikely. Minor CARs may be likely, particularly with respect to social impact monitoring</p>
<p><b>8.2.a. Yield of all forest products harvested.</b></p>		
<p>8.2.a.1. For all commercially harvested products, an inventory system is maintained. The inventory system includes at a minimum: a) species, b) volumes, c) stocking, d) regeneration, and e) stand and forest composition and</p>	<p>+</p>	

structure; and f) timber quality.		
8.2.a.2. Significant, unanticipated removal or loss or increased vulnerability of forest resources is monitored and recorded. Recorded information shall include date and location of occurrence, description of disturbance, extent and severity of loss, and may be both quantitative and qualitative	+	
8.2.b The forest owner or manager maintains records of harvested timber and NTFPs (volume and product and/or grade). Records must adequately ensure that the requirements under Criterion 5.6 are met.	+	Only non-commercial non-timber forest product utilization is allowed, and at low levels.
8.2.c. The forest owner or manager periodically obtains data needed to monitor presence on the FMU of: <ul style="list-style-type: none"> <li>6) Rare, threatened and endangered species and/or their <b>habitats</b>;</li> <li>7) Common and rare plant communities and/or habitat;</li> <li>8) Location, presence and abundance of invasive species;</li> <li>9) Condition of protected areas, set-asides and buffer zones;</li> <li>10) High Conservation Value Forests (see Criterion 9.4).</li> </ul>	+/-	Have procedures been developed for monitoring conditions in high conservation value forest areas? Same for protected areas, set-asides and buffer zones.  Monitoring of invasive species abundance looks solid.
<b>8.2.d. Environmental and social impacts of harvesting and other operations</b>		
8.2.d.1. Monitoring is conducted to ensure that site specific plans and operations are properly implemented, environmental impacts of site disturbing operations are minimized, and that harvest prescriptions and guidelines are effective.	+/-	Conformity would be enhanced if there was a more formal treatment of these monitoring activities, including documentation and presentation of monitoring results.
8.2.d.2. A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	+/-	Could be more formalized; perhaps needs to be more formalized (possible minor CAR)
8.2.d.3. The landowner or manager monitors relevant socio-economic issues (see Indicator 4.4.a), including the social impacts of harvesting, participation in local economic opportunities (see Indicator 4.1.g), the creation and/or	-	This is presently a gap that needs to be addressed in order to avoid a non-conformity, probably minor but possibly major.

maintenance of quality job opportunities (see Indicator 4.1.b), and local purchasing opportunities (see Indicator 4.1.e).		
8.2.d.4. Stakeholder responses to management activities are monitored and recorded as necessary.	+/-	A unified description of how stakeholder responses are received, acted upon and how the general process of stakeholder input is monitored would help to avoid a non-conformity during a full evaluation
8.2.d.5. Where sites of cultural significance exist, the opportunity to jointly monitor sites of cultural significance is offered to tribal representatives (see Principle 3).	-	As discussed in P3, this is presently a non-conformity
8.2.e. The forest owner or manager monitors the costs and revenues of management in order to assess productivity and efficiency.	+	
<b>C8.3. Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody."</b>	<b>NC</b>	A "stump to gate" chain of custody system, as simple as it may be, still needs to be developed and documented. The biggest point of risk that requires control is the log sale yards.
8.3.a. When forest products are being sold as FSC-certified, the forest owner or manager has a system that prevents mixing of FSC-certified and non-certified forest products prior to the point of sale, with accompanying documentation to enable the tracing of the harvested material from each harvested product from its origin to the point of sale.	-	See above
<b>C8.4. The results of monitoring shall be incorporated into the implementation and revision of the management plan.</b>	<b>NC?</b>	Is there an adaptive feedback loop expressly incorporated into the strategic plan and the Forest plans?
8.4.a. The forest owner or manager monitors and documents the degree to which the objectives stated in the management plan are being fulfilled, as well as significant deviations from the plan.	?/-	Has ODOF developed a plan implementation and a plan effectiveness monitoring protocol/approach? It is needed in order to demonstrate adequate conformity to this Indicator.
8.4.b. Where monitoring indicates that management objectives and guidelines, including those necessary for conformance with this Standard, are not being met or if changing conditions indicate that a change in management strategy is necessary, the management plan, operational plans, and/or other	?/-	See prior comment

<p>plan implementation measures are revised to ensure the objectives and guidelines will be met. If monitoring shows that the management objectives and guidelines themselves are not sufficient to ensure conformance with this Standard, then the objectives and guidelines are modified.</p>		
<p><b>C8.5. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.</b></p>	<p><b>NC</b></p>	<p>There does not appear to be adequate conformity to this Criterion at the moment. Possible major non-conformity.</p>
<p>8.5.a. While protecting landowner confidentiality, either full monitoring results or an up-to-date summary of the most recent monitoring information is maintained, covering the Indicators listed in Criterion 8.2, and is available to the public, free or at a nominal price, upon request.</p>	<p>-</p>	<p>At present, it is our judgment that ODOF does not comply with this Indicator. We are not aware of a compiled, comprehensive presentation of periodic monitoring results, or a condensed summary thereof.</p>
<p><b>P9 Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.</b></p> <p><b>High Conservation Value Forests are those that possess one or more of the following attributes:</b></p> <ul style="list-style-type: none"> <li><b>e) Forest areas containing globally, regionally or nationally significant: concentrations of biodiversity values (e.g., endemism, endangered species, refugia); and/or large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance</b></li> <li><b>f) Forest areas that are in or contain rare, threatened or endangered ecosystems</b></li> <li><b>g) Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control)</b></li> <li><b>h) Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health) and/or critical to local communities’ traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).</b></li> </ul> <p><b>Examples of forest areas that <i>may have</i> high conservation value attributes include, but are not limited to:</b></p> <p>Central Hardwoods:</p> <ul style="list-style-type: none"> <li>• Old growth – (see Glossary) (a)</li> <li>• Old forests/mixed age stands that include trees &gt;160 years old (a)</li> <li>• Municipal watersheds –headwaters, reservoirs (c)</li> <li>• Rare, Threatened, and Endangered (RTE) ecosystems, as defined by GAP analysis, Natural Heritage Inventory, and/or the World Wildlife Fund’s Forest Communities of Highest Conservation Concern, and/or Great Lakes Assessment (b)</li> <li>• Intact forest blocks in an agriculturally dominated landscape (refugia) (a)</li> <li>• Intact forests &gt;1000 ac (valuable to interior forest species) (a)</li> <li>• Protected caves (a, b, or d)</li> <li>• Savannas (a, b, c, or d)</li> <li>• Glades (a, b, or d)</li> </ul>		

- Barrens (a, b, or d)
- Prairie remnants (a, b, or d)

North Woods/Lake States:

- Old growth – (see Glossary) (a)
- Old forests/mixed age stands that include trees >120 years old (a)
- Blocks of contiguous forest, > 500 ac, which host RTEs (b)
- Oak savannas (b)
- Hemlock-dominated forests (b)
- Pine stands of natural origin (b)
- Contiguous blocks, >500 ac, of late successional species, that are managed to create old growth (a)
- Fens, particularly calcareous fens (c)
- Other non-forest communities, e.g., barrens, prairies, distinctive geological land forms, vernal pools (b or c)
- Other sites as defined by GAP analysis, Natural Heritage Inventory, and/or the World Wildlife Fund’s Forest Communities of Highest Conservation Concern (b)

*Note: In the Lake States-Central Hardwoods region, old growth (see Glossary) is both rare and invariably an HCVF.*

*In the Lake States-Central Hardwoods region, cutting timber is not permitted in old-growth stands or forests.*

*Note: Old forests (see Glossary) may or may not be designated HCVFs. They are managed to maintain or recruit: (1) the existing abundance of old trees and (2) the landscape- and stand-level structures of old-growth forests, consistent with the composition and structures produced by natural processes.*

*Old forests that either have or are developing old-growth attributes, but which have been previously harvested, may be designated HCVFs and may be harvested under special plans that account for the ecological attributes that make it an HCVF.*

*Forest management maintains a mix of sub-climax and climax old-forest conditions in the landscape.*

<p><b>C9.1. Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.</b></p>	<p>C/NC</p>	
<p>9.1.a. The forest owner or manager identifies and maps the presence of High Conservation Value Forests (HCVF) within the FMU and, to the extent that data are available, adjacent to their FMU, in a manner consistent with the assessment process, definitions, data sources, and other guidance described in Appendix F.</p> <p>Given the relative rarity of old growth forests in the contiguous United States, these areas are normally designated as HCVF, and all old growth must be managed in conformance with Indicator 6.3.a.3 and requirements for legacy trees</p>	<p>+/-</p>	<p>A HCVF zone has been developed but the protocols by which the tracts in that zone were identified is not adequately documented</p>

in Indicator 6.3.g.		
9.1.b. In developing the assessment, the forest owner or manager consults with qualified specialists, independent experts, and local community members who may have knowledge of areas that meet the definition of HCVs.	-	It is our sense that there has been inadequate stakeholder and specialist consultation, to date, in the development and population of the HCVF zone layer.
9.1.c. A summary of the assessment results and management strategies (see Criterion 9.3) is included in the management plan summary that is made available to the public.	?/-	Do the Forest plans include a section on HCVF's?
<b>C9.2. The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.</b>	<b>NC</b>	The wording of this indicator is confusing as it should not be referring to the "certification process," as is made obvious in the Indicators for this Criterion.  It is our sense that ODOF cannot presently demonstrate adequate conformity to this Criterion—possible major non-conformity
9.2.a. The forest owner or manager holds consultations with stakeholders and experts to confirm that proposed HCVF locations and their attributes have been accurately identified, and that appropriate options for the maintenance of their HCV attributes have been adopted.	-	It is not apparent what stakeholder consultation, if any, has been undertaken as part of ODOF's HCVF initiative, to date.
9.2.b. On public forests, a transparent and accessible public review of proposed HCV attributes and HCVF areas and management is carried out. Information from stakeholder consultations and other public review is integrated into HCVF descriptions, delineations and management.	-	This Indicator only serves to further highlight the need for a consultative component of the Division's HCVF initiative.  Chapter 2 of the Manual briefly describes how stakeholder consultation will take place: Areas recommended to be zoned as Class 1 are disseminated to our stakeholders, and the public at-large for review. During this review, stakeholders may also propose new areas as well as propose the management options for the Class 1 zone. (Clarification: a process is already in place by code to update and review the Shawnee wilderness plan – Zone Class 1C – and therefore meets the intent of this assessment process.)  This is good, but has it actually been implemented? Our understanding is that it hasn't, yet.
<b>C9.3. The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.</b>	<b>NC</b>	
9.3.a. The management plan and relevant operational plans describe the	-	Manual Chapter 2 addresses HCVF and provides some defining attributes as well as a process for identifying areas that possess

<p>measures necessary to ensure the maintenance and/or enhancement of all high conservation values present in all identified HCVF areas, including the precautions required to avoid risks or impacts to such values (see Principle 7). These measures are implemented.</p>		<p>the defined attributes. But there is no discussion or guidance on what sort of management actions/measures are consistent with maintaining or enhancing the defined conservation attributes.</p> <p>Likely major non-conformity if nothing is developed prior to a full evaluation</p>
<p>9.3.b. All management activities in HCVFs must maintain or enhance the high conservation values and the extent of the HCVF.</p>	-	<p>See prior comment</p>
<p>9.3.c. If HCVF attributes cross ownership boundaries and where maintenance of the HCV attributes would be improved by coordinated management, then the forest owner or manager attempts to coordinate conservation efforts with adjacent landowners.</p>	-	<p>ODOF personnel have acknowledged during the pre-assessment that there is little consideration of forest conditions and landowners actions on neighboring properties. This limited frame of reference runs counter to this Indicator.</p> <p>Possible major non-conformity.</p>
<p><b>C9.4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.</b></p>	C/NC	<p>Presently, we do not believe that ODOF has a monitoring component directly focused on HCVF management. But we see it as a relatively easy gap to address, prior to a full evaluation.</p>
<p>9.4.a. The forest owner or manager monitors, or participates in a program to annually monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of Principle 8.</p>	-	<p>A system needs to be designed and documented.</p>
<p>9.4.b. When monitoring results indicate increasing risk to a specific HCV attribute, the forest owner/manager re-evaluates the measures taken to maintain or enhance that attribute, and adjusts the management measures in an effort to reverse the trend.</p>	-	<p>See prior comment</p>
<p><b>P10 Plantations shall be planned and managed in accordance with Principles and Criteria 1 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.</b></p> <p>The FSC-US Plantations Working Group is currently reviewing P10; a draft will be made available for review shortly.</p> <p><b>Regardless of the state of P10 in the development of a U.S. national standard, we conclude that the ODOF's forest management/silvicultural regimes clearly do not meet the FSC's international definition of "plantation forest management." Accordingly, the entirety of Principle 10 is not applicable to the evaluation of the Ohio</b></p>		

## **State Forest system.**

ODOF manages legacy stands of conifer trees (mostly white pine and red pine) that were planted beginning in the 1930's in the CCC era. There are several thousand acres of these stands and they are mostly, at this juncture, aesthetic features on the landscape. ODOF has a policy to address these stands as they mature and are replaced by predominately natural hardwood regeneration.

## **APPENDIX I: Attendance list (confidential)**

### **List of ODNR Staff and Others Consulted during the Pre-Assessment**

See the list in Section 2.3 of this report.

### **List of State and Federal Government Representatives Consulted**

See the list in Section 2.3 of this report.

### **List of Community Members Consulted**

Community members that made contact with SCS were not asked if their names could be included in the pre-assessment report. Accordingly, we are not including those names, here.

### **List of Conservation Group Representatives Consulted**

See the list in Section 2.3 of this report.

### **List of Others Consulted**

No other individuals were consulted

## **Appendix 7 – Peer Review and SCS Evaluation Team Response to Peer Review**

The following two peer reviews were conducted. The audit team responded to the comments by making editorial changes throughout the report and conveying a final copy to the peer reviewers.

December 27, 2010

To: Brendan Grady, Program Manager - SCS Forest Management  
From: Jessica Leahy, Ph.D., Peer Reviewer

### **RE: Peer Review of Ohio DNR-DOF Report**

This is a peer review of the SCS/FSC Forest Management and Stump-to-Forest Gate Chain-of-Custody Certification Evaluation Report of the Ohio Department of Natural Resources – Division of Forestry. The evaluation team assessed conformance to the FSC Principles and Standards, and recommended awarding the FSC-endorsed certification as “well managed.” Based on the written report, there appears to be appropriate evidence and support for this determination. I found the clarity and adequacy of the report to be excellent. With a few points for consideration described in section 3, the findings are appropriate given the information provided.

#### **1. Clarity of the report in describing the evaluation that was conducted, the criteria that were employed, and the data that were collected.**

The report is well written with most of the pertinent sections (general information, certification assessment, etc.) presented with an appropriate level of detail. However, the presentation of stakeholder engagement and the field audit activities could use additional details. Specific detailed questions and comments are:

- The number of acres within the scope of the certificate is slightly confusing. On Page 6 and in the pre-assessment report, it is listed as 185,770 while it is presented as 230,000 acres on page 5 and 7. Why do these difference exist?
- It would be helpful to include a list of sites visited so that readers can assess the geographic range, types of silvicultural systems, etc. that were examined. While the report shows which state forests were visited on specific dates, it is not specific about the number and type of sites.
- Some certification evaluation reports also include a list of employees and forest workers that were interviewed. This would also be helpful for assessing whether or not the audit team consulted with a variety of employees and forest workers.
- The distribution size of the public announcement would be useful information to provide. If this was e-mailed to a Ohio DNR-DOF stakeholder e-mail list, it would be relevant to provide the number of stakeholders on that e-mail list. The report could

also specify whether the distribution size remained constant between the pre-assessment and the full evaluation.

- Also, it would be worth noting whether additional stakeholders were specifically sought out for consultation. This would include stakeholders that were not on the original stakeholder list provided by Ohio DNR-DOF. If additional stakeholders were identified and targeted, the number and areas of interest would be good to detail.

## **2. Adequacy of the report in clearly conveying the basis upon which conformance decisions were reached.**

The report is appropriate to the scale of the FMU. This includes the extent of the field audit and range of stakeholder consultation activities. Section 4 – Results of the Evaluation - is quite comprehensive and exceed my expectations for clearly conveying the basis upon which conformance decisions were reached. Any detailed questions or comments related to the basis of conformance decisions are described below:

- The report would be stronger if the evaluation team bios were of roughly even length. This would increase the credibility of all team members, not just the lead auditors. More details allow readers to assess the knowledge, skills, and expertise of the evaluation team. A listing of professional society membership, past audit experience, and responsibilities during the audit would be helpful.
- Rather than only noting, “A corrective action request was issued relative to this topic,” or “A finding was issued relative to this topic,” the report would be stronger if the stakeholder comments were tied to the CARs and OBS by listing the specific CAR or OBS number next to the appropriate comment.
- In general, there is inconsistency in how the SCS comments to stakeholder concerns are worded. It is unclear whether a “finding” is a CAR or OBS. SCS responses to some comments are unclear (e.g., “DOF is placing a high priority on fuels management”). It might be beneficial to standardize the SCS comments (Duly Noted, Investigated during Field Audit, No CARs/OBS, CAR 2010.X issued, etc).

## **3. Appropriateness of the evaluation team’s findings in light of the information presented and the condition of the ownership’s resource base.**

Overall, the evaluation team’s findings in support of certification were appropriate given the evaluation team’s qualifications, stakeholder consultation, field audit, and other analyses. My biggest concern involves Minor CAR 2010.1 which is detailed below. A few other minor issues are also noted. The detailed questions/comments are:

- The non-conformity concerns stakeholder satisfaction about the public involvement processes. There is an opportunity to write the non-conformity and CAR more closely to the standard. The standard itself does not require satisfaction. Furthermore, the use of the words “tactical and strategic” in the CAR is not clear. There was only one concern related to this CAR listed in the stakeholder consultation section which concerned transparency. Additional details, either in the stakeholder consultation section or other areas of the report, would be helpful for supporting this CAR.

- Minor CAR 2010.6 could be written in a way that is less prescriptive. Although augmenting the property-specific management plans is one solution, the standard does not specify this and Ohio DNR-DOF could address this CAR in a variety of ways that does not include the prescriptive portion of this CAR.
- In OBS 2010.1, not enough information is provided about why Strickland/Brush Creek requires extra oversight.

FSC FM/COC Assessment, Ohio DNR-Division of Forestry

Conducted by Scientific Certification Systems

Date of Field Audit: 14 September 2010

Date of Draft Report: 4 December 2010

Peer Review

Conducted by David E. Capen, Ph.D., CWB

Date of Review: 20 December 2010

The purpose of this review was to determine the adequacy of the evaluation report in conveying the basis upon which decisions were made about conformance of Ohio DNR-Division of Forestry (ODOF) with the appropriate standards of the Forest Sustainability Council for Forest Management and Stump-to-Forest-Gate chain of custody (FM/COC). A major emphasis of the review was to assess decisions made about conformance to the standards, as described in the report, and to determine if such conditions were presented clearly and justified by evidence cited in the report. The peer review also offers comments on the clarity of the report in describing how the evaluation was conducted, what criteria were employed, and what evidence was examined. Numerous minor comments on the clarity of the report were embedded in the electronic copy of the draft report and intended for consideration only by authors of the report, although none of the comments was intended to be confidential.

**Scope, Audit protocols, Standard.** The scope of the audit is clearly identified in the report, and involves a single FMU comprising 21 state forests and one reservation managed by a third party, totaling 202,927 acres. The management, regulatory, environmental, and socioeconomic context of the FMU is clearly laid out in introductory sections of the assessment report. The four-member audit team was appropriately constituted of local experts and highly experienced auditors. Two auditors, including the lead auditor, have considerable experience with FM/COC assessments of other state agencies. Accordingly, the audit process was quite thorough, involving a two-day preliminary evaluation

conducted in January 2010; notification of stakeholders and request for input before the assessment; unbiased selection of field sites; a public meeting; and extensive interviews with personnel of ODOF. The standard used was Version 1.0, FSC National Standard for the U.S., and this is stated in Section 1.3 of the report.

**Conformance and Non-conformance.** Section 4.0, Table 4.1.1 presents strengths and weaknesses of the forest management enterprise as they relate to the ten principles of the standard, and all comments were easily understood by this reader. A second table, 4.1.2, lists corrective action requests (CARs) and observations (OBSs) related to each principle, giving an introduction to areas of conformance and non-conformance. Sections 4.2.2 and 4.2.3 present details of 11 CARs, introducing each with a clear statement identifying the non-conformance and then following with the language of the request, a reference to the specific clause in the standard, and a deadline for conformance. One of the CARs was a pre-condition for certification, but had been addressed adequately before the report was completed. Other CARs were listed as minor, and thus did not present a barrier for certification. Accordingly, the audit team recommended certification as a Well-managed Forest.

In addition to the ten findings of non-conformance, the assessment report, in section 4.2.4, presents a list of 11 OBSs, weaknesses against the standard not serious or consistent enough to be identified as non-conformances. Other than OBS 2010.1, which should be rewritten to be more informative to independent readers, this list is quite appropriate for an initial assessment.

Much of my attention was focused on Appendix 3, the extensive table of conformance. I evaluated comments in the table to determine if they conveyed sufficient evidence of conformance or non-conformance with each indicator, criterion, and principle. Overall, the table is quite complete and conveys adequately the evidence that supported the conclusion to recommend certification for ODOF. I noted only six points that merit mention:

- Indicator 6.3.g.1—One of the comments in the table reads, “Legacy issue is noted—20 square feet BA/acre.” This makes me wonder if the concept of legacy tree is adequately understood and addressed in policy. Legacy trees are individual elements of a stand, and are either present or not. To set a desired basal area suggests a lack of understanding, or perhaps poor wording of the comment in the table.
- Indicator 6.9.a—One of the comments in the table reads, “Use of a local, native erosion control seed mix would assure better conformity to the requirements that use of non-native species occurs only where justified and risk assessments have been completed.” Upon reading the comment more than once, I think I understand the intent, but it could be written more clearly.

- Indicators 7.1.g, 7.1.h, and 7.1.j—Comments in the appropriate cells of the conformance table merely reference Chapter 10 of the Land Management Manual. More detail is needed to reflect conformance.
- Indicator 7.1.m.—The comment reads, “A presentation of growth & yield, harvest levels, and inventory is found in each forest plan and in the land management manual.” The Land Management Manual is not available on the DOF web site, but management plans for individual state forests are; I reviewed two of these, selected randomly, and could find no information—or almost no information-- on growth and yield.
- Criterion 8.3—A notation of “MC” is used in the conformance table. I assume this means marginal conformance. If so, should there be one or more additional OBSs to indicate the area(s) or weakness?
- Indicator 9.1.g—One of the comments indicates that “DOF’s GIS system is readily capable of mapping all HCVF areas.” Evidence for conformance should be that the HCVF areas have been mapped, not that the capability exists.

**Miscellaneous.** I found no lists of attendees at meetings conducted during the audit or present during field inspections. Also, I found no listing of field sites visited. Both are expected to be included in an assessment report.

Notwithstanding the omissions mentioned above, I found the evaluation report to be complete and thorough. Information in the report adequately conveys the rationale for recommending certification.

A handwritten signature in black ink that reads "David E. Cooper". The signature is written in a cursive, flowing style.

**Appendix 8 – Additional Evaluation Techniques Employed\***

No additional evaluation techniques were employed during this audit.