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

Indiana Department of Natural Resources,

Division of Forestry, State Forest Properties

Indiana, USA

SCS-FM/COC-00099N

402 West Washington Street, Room W296 Indianapolis, Indiana, 46204 <u>http://www.in.gov/dnr/forestry/</u>

CERTIFIED 11/Jul/2012 EXPIRATION 20/Jul/2017



Foreword

SCS Global Services (SCS) is a certification body accredited by the Forest Stewardship Council to conduct forest management and chain of custody evaluations. 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 regular FSC / SCS oversight.

SCS deploys interdisciplinary teams of natural resource specialists and other experts in forested regions all over the world to conduct evaluations of forest management. SCS evaluation teams collect and analyze written materials, conduct interviews with FME staff and key stakeholders, and complete field and office audits of subject forest management units (FMUs) as part of certification evaluations. Upon completion of the fact-finding phase of all evaluations, SCS teams determine conformance to the FSC Principles and Criteria.

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 (<u>http://info.fsc.org/</u>) no less than 30 days after issue of the certificate. Section B contains more detailed results and information for the use of by the FME.

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SECTION A – PUBLIC SUMMARY

1. General Information

1.1 Certificate Registration Information

1.1.1.a Name and Contact Information

Organization name	Indiana DNR, Division of Forest	ry	
Contact person	Brenda Huter		
Address	Indiana Department of	Telephone	317-232-0142
	Natural Resources	Fax	317-233-3863
Division of Forestry	Division of Forestry	e-mail	bhuter@dnr.in.gov
	W-296 Indianapolis, IN 46204 USA	Website	www.in.gov/dnr/forestry www.inforestryx.com

1.1.1.b FSC Sales Information

X FSC Sales contact information same as above.				
FSC salesperson	FSC salesperson			
Address		Telephone		
		Fax		
		e-mail		
		Website		

1.1.2 Scope of Certificate

Certificate Type	X Single FMU	Multiple FMU
	Group	
SLIMF (if applicable)	Small SLIMF	Low intensity SLIMF
	certificate	certificate
	Group SLIMF certi	ficate
# Group Members (if applicable)	NA	
Number of FMUs in scope of certificate	NA	
Geographic location of non-SLIMF FMU(s)	Latitude: W 86 degrees	10 minutes
	Longitude: N 39 degree	es 46 minutes
Forest zone	Boreal	X Temperate
	Subtropical	Tropical
Total forest area in scope of certificate which is:		Units: ha or X ac
privately managed	0	

state managed		158,264		
community managed		0		
Number of FMUs in scope	e that are:			
less than 100 ha in area	0	100 -	1000 ha in area	0
1000 - 10 000 ha in	0	more	than 10 000 ha in area	1
area				
Total forest area in scope	of certificate which is inc	luded i	n FMUs that: Unit	s: 🗌 ha or 🗴 ac
are less than 100 ha in ar	ea		0	
are between 100 ha and 1000 ha in area 0				
meet the eligibility criteria as <i>low intensity</i> SLIMF FMUs 0				
Division of FMUs into mar	nageable units:			
The Division of Forestry (DoF) is a unit of the Department of Natural Resources (DNR), a state agency within the executive branch of the Indiana state government. DoF divides the FMU into State Forests (Properties). Each property is then divided into compartments, the next scale of land organization and tracts. Tracts are the primary land administration unit for management activity planning, monitoring and recordkeeping. Tracts may be composed of multiple forest stands for management, modeling and modeling purposes.				

1.2 FSC Data Request

1.2.1 Production Forests

Timber Forest Products	Units: ha or X ac
Total area of production forest (i.e. forest from which timber may be harvested)	156,500
Area of production forest classified as 'plantation'	0
Area of production forest regenerated primarily by replanting or by a combination of replanting and coppicing of the planted stems	30
Area of production forest regenerated primarily by natural regeneration, or by a combination of natural regeneration and coppicing of the naturally regenerated stems	157
Silvicultural system(s)	Acres under type of management in 2015
Even-aged management	58
Clearcut (clearcut size range)	58
Shelterwood	0
Other:	0
Uneven-aged management	3,420
Individual tree selection	
Group selection	99
Other:	3,321
Other (e.g. nursery, recreation area, windbreak, bamboo, silvo-pastoral system, agro-forestry system, etc.)	N/A
The sustainable rate of harvest (usually Annual Allowable Harvest or AAH where available) of commercial timber (m3 of round wood)	28 MBF

Non-timber Forest Products (N	Non-timber Forest Products (NTFPs)				
Area of forest protected from	commercial harvesting of timber and	0			
managed primarily for the pro-					
Other areas managed for NTFF	0				
Approximate annual commerc	ial production of non-timber forest products	0			
included in the scope of the ce	rtificate, by product type				
Explanation of the assumptions	and reference to the data source upon which	AAH and NTFP harvest rates			
estimates are based:					
The current growth estimate is	based on 3 methods: 1) 50 FIA plots on state	forests from which growth			
and 2) Incroment horings cells	em-wide inventory results compared to the in	impled using the Purrol			
Ashley system All 3 estimates	of net annual growth are about 28 million hf	and so the cutting budget is			
set at 60% of that growth rate		and so the cutting budget is			
A continuous forest inventory	where 1/5 of the land base is inventoried each	n year is in its 8 th cycle. After			
the 5th year was completed, D	OF started to re-measure the plots allowing for	or growth computation. The			
system design is based on 10 y	ears to develop reliable growth estimates.	-			
The current Target of 14 millio	n board feet, or 50% of current estimated net	annual growth, is			
determined based on desire for	r a conservative harvest level until growth info	ormation is more-fully			
updated. The allocation of this	harvest to the individual units is proportional.	. The general approach to			
timber harvest allocation by pr	operty is described on page 33 of the Environ	mental Assessment.			
Species in scope of joint FM/CC	OC certificate: (<i>Scientific / Latin Name</i> and Com	imon / Trade Name)			
Acar can	Maple, sugar, red, black silver, bevelder				
Acerspp	Chie vellevy				
Aesculus spp	Uisland bitta maat waa sharmad ah a sharda wad				
Carya spp	Hickory:bitternut,mockernut,snagbark, red,				
Catalna speciosa					
Caltis accidentalis	backborry				
	American beach				
	American beech				
Fraxinus spp.	Ash: white, green, pumpkin, black, blue				
Gleaitsia triacantnos	noney locust				
Gymnocladus dioica	Kentucky coffee-tree				
Juglans nigra	black walnut				
Juniperus virginiana	red cedar				
Liquidamber styraciflua	sweet gum				
Liriodendron tulipifera	yellow-poplar				
Nyssa sylvatica	black gum				
Pinus spp	Pine: white, red, Scotch, Virginia, shortleaf				
Plantanus occidentalis	sycamore				
Populus spp.	large-toothed aspen, quaking aspen,				
	cottonwood				
Prunus serotina	black cherry				
Quercus spp.	Oaks: white, red, black, scarlet, post, bur,				
	swamp chestnut, swamp white, chestnut,				

	chinkapin, shingle, black jack, cherry bark, pin,shumard
Robinia pseudoacacia	black locust
Sassafras alfidum	sassafras
Tilia Americana	basswood
Ulmus spp	elms

1.2.2 FSC Product Classification

Timber products					
Product Level 1	Product Level 2	Species			
W1 Rough Wood	W1.1 Roundwood	All			
W1 Rough Wood	W1.2 Fuelwood	All			
W3 Wood in chips or	W3.1 Wood chips	All			
particles					
Non-Timber Forest Product	Non-Timber Forest Products				
Product Level 1	Product Level 2	Product Level 3 and Species			

1.2.3 Conservation Areas

Total area of forest and non-forest land protected from commercial	2018 acres
harvesting of timber and managed primarily for conservation objectives	(Note: Areas reserved from
	commercial harvest may not
	equal HCVF areas below
	because some HCVF areas
	may require management in
	order to maintain HCV
	attributes.)
High Conservation Value Forest/ Areas	

High Conservation Values present and respective areas:		ation Values present and respective areas:	Units: 🗌 ha or 🔀 ac	
	Code	HCV Type	Description & Location	Area
	HCV1	Forests or areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).	Virginia Pine-Chestnut Oak, Clark SF, (19.4 A) Alum Cave Hollow, Clark SF, (164.2 A) Batwing Cave, Harrison-Crawford SF, (10.5 A) Deam's Bluff, Harrison-Crawford SF, (251.9 A) Scout Ridge, Morgan-Monroe SF, (15.1 A) Crooked Creek, Yellowwood SF, (34.3 A)	495.4

	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.	White Oak Clark SE (122.7.A)	1 972 5
		threatened or endangered ecosystems.	Post Oak , Clark ST, (153.7 A) Post Oak-Cedar, Harrison- Crawford SF, (275.5 A); Scout Mountain, Harrison- Crawford SF, (47.7 A) Leavenworth Barrens, Harrison- Crawford SF, (747.5 A) Blue River Gravel Wash Barrens, Harrison-Crawford SF, (77.6 A) Indian Bitter, Jackson-Washington SF, (36.7 A) Knobstone Glades, Jackson- Washington SF, (58.8 A) Henshaw Bend, Martin SF, (82.5 A) Tank Spring, Martin SF, (62.9 A) Low Gap, Morgan-Monroe SF, (320 A) Miller Ridge, Yellowwood SF, (30.6 A)	1,073.3
	HCV4	Forests or areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).		
	HCV5	Forests or areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).		
	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).		
Total	Area of	forest classified as 'High Conservation Value Fo	prest/ Area'	2,018

1.3 Areas Outside of the Scope of Certification (Partial Certification and Excision)

\square N/A – All forestland owned or managed by the applicant is included in the scope.			
Applicant owns and/or manages other FMUs not under evaluation.			
X Applicant wishes to excise portion	Applicant wishes to excise portions of the FMU(s) under evaluation from the scope of certification.		
Explanation for exclusion of FMUs	The Division of Forestry removed the developed campground areas		
and/or excision:	at Starve Hollow State Recreations	Area, Deam Lake State Recreation	
	Area, and Greene-Sullivan State Fo	prests. These areas have family	
	Heat treatments and insecticides	are used. Several of the most	
	effective bedbug insecticides are r	not allowed under FSC. All	
	applications occur within the cabin	ns.	
Control measures to prevent	The Division of Forestry developed maps delineating the excised		
mixing of certified and non-	areas. Probability of a timber sale in the excised areas is low for		
certified product (C8.3):	reasons including: high recreation use, low timber value due to risk		
	of imbedded material, and poor form species with low value in area.		
	Any removed trees would either b	e used for internal use (wood	
	heating) or in the case of a salvage	e sale the excised area would be	
	sold separately (uncertified) from	the remainder of the State Forest	
	property. Boundaries of sale area	would be marked.	
Description of FMUs excluded from or forested area excised from the scope of certification:			
Name of FMU or Stand	Location (city, state, country)	Size (🔲 ha or 🔀 ac)	
Stave Hollow State Recreation	Vallonia, IN, USA	11 acres	
Area, Jackson- Washington SF			
Deam Lake State Recreation	Borden, IN,USA	73 acres	
Area, Clark SF			
Greene-Sullivan SF	Dugger, IN,USA	30 acres	

1.4 Social Information

Number of forest workers (including contractors) working in forest within scope of certificate			
(differentiated by gender):			
120 of male workers:	<mark>26</mark> of fen	nale workers:	
Number of accidents in forest work since last audit	Serious:	<mark>)</mark>	Fatal: <mark>1</mark>

1.5 Pesticide and Other Chemical Use

FME does not use pesticides.				
Commercial name of pesticide / herbicide	Active ingredient	Quantity applied annually (kg or lbs)	Size of area treated annually (ha or ac)	Reason for use
Accord, Alecto, Aquaneat, Aquapro, Buccaneer, Cornerstone, Farmworks 41,	glyphosate	217.07 gallons	901.5 acres	Invasive species control; general weed control

Glyphos Extra, Imitator, Mad Dog Plus, Nufarm Credit Plus, Razor, Rodeo, Roundun				
Poast,	sethoxydim	15.2 gallons	65.8 acres	Invasive species control
Oust	Sulfometuron methyl	.03	23	General weed control
Arsenal, Habitat	lmazapyr	2.23	11	Invasive species control
Element 4, Garlon, Pathfinder II	triclopyr	2.3	527.6	Invasive species control
Cutrine Ultra	copper chelate	2.5	25	Algae control
Crossbow	2,4D	32.3	17	Invasive species control
Fusion	Fluazifop-p-butyl Fenoxaprop –p- ethyl	0.02	2	Invasive species control
Plateau	Imazapic	23.2	79.2	Invasive species control
Clethodim	Clethodim	0.4		Invasive control

1.6 Standards Used

1.6.1 Applicable FSC-Accredited Standards

Title	Version	Date of Finalization
FSC US Forest Management Standard	1-0	July, 2010
All standards employed are available on the websites of FSC International (<u>www.fsc.org</u>), the FSC-US (<u>www.fscus.org</u>) or the SCS Standards page (<u>www.scsglobalservices.com/certification-standards-and-program-</u>		
documents). Standards are also available, upon request, from SCS Global Services (<u>www.SCSglobalServices.com</u>).		

1.7 Conversion Table English Units to Metric Units

Length Conversion Factors		
To convert from	То	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	То	multiply by
Square foot (sq ft)	Square meter (m ²)	0.09290304
Acre (ac)	Hectare (ha)	0.4047
Volume Conversion Factors		

To convert from	То	multiply by
Cubic foot (cu ft)	Cubic meter (m ³)	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. Description of Forest Management

2.1 Management Context

2.1.1 Regulatory Context

Pertinent Regulations at the National Level	Endangered Species Act
	Clean Water Act (Section 404 wetland protection)
	Occupational Safety and Health Act
	National Historic Preservation Act
	Archaeological and Historic Preservation Act
	Americans with Disabilities Act
	U.S. ratified treaties, including CITES
	Lacey Act
	Forest Resources Conservation and Shortage Relief
	Act
	National Resource Protection Act
	National Environmental Protection Act
	National Wild and Scenic River Act
	Native American Grave Protection and Repatriation
	Act
	Rehabilitation Act
	Architectural Barriers Act
Pertinent Regulations at the State / Local Level	Indiana:
	IC 14-21-1 Indiana Flood Control Act
	IC 14-23-3 State Forestry Fund
	IC 14-23-4 State Forest Management
	IC 14-24-5 Forest Firefighting
	IC 14-29 Rivers Streams and Waterways
	IC 14-32 Soil and Water Conservation
	IC 25-36.5 Timber Buyers, Licensed Timber Buyers
	Law
	IC 32-30 Causes of Action Concerning Real Property
	Watershed and County ordinances
	Counties:
	Blue River Commission (Harrison County)
	Crawford County (road hauling)
	Greene County (road hauling)
	Franklin County (selective cutting only in Whitewater
	River Scenic District)
	Brown County (road permit)
	Martin County (road hauling)

Monroe County (logging permit and road bond)
Owen County (road hauling)
Perry County (road hauling)
*Note: Some of these may be above the normal spring
hauling restrictions found in nearly all counties. These
regulations are administered by county government
offices (e.g. plan commissions, highway departments).

Regulatory Context Description

Indiana's Division of Forestry (DoF), under the Department of Natural Resources (DNR) is governed primarily by four Indiana Codes: IC-23-4, IC 25-36.2, IC 14-32, and IC 32-30. The code **IC 14-23-4** empowers management of state-owned forests for the protection and conservation forest-related natural resources. The details may be found here,

http://iga.in.gov/legislative/laws/2016/ic/titles/014/articles/023/chapters/004/. The code, IC 25-36.5-1-2 establishes the registration and regulation of timber buyers as means to protect timber growers, http://iga.in.gov/legislative/laws/2016/ic/titles/025/articles/36.5/.

The code, **IC 14-32** establishes land and water resources as a basic asset requiring management on behalf of the people of Indiana to use land management practices that conserve and promote soil stability and fertility, water quality, watershed functions, plants, forest cover, wildlife, water bodies and other means that support health, safety, and general welfare of the people of Indiana. IC 14-32, http://iga.in.gov/legislative/laws/2016/ic/titles/014/articles/032/

The DoF is supervised by the Deputy Director of the Land Management Team who is under the supervision of the DNR Director. The full organizational overview may be found here, https://in.gov/dnr/3244.htm.

2.1.2 Environmental Context

Environmental safeguards:

The FME protects soil and water resources through a variety of practices designed to conserve or improve the quality of watersheds, stream and river buffer zones, avoid and/or mitigate erosion of hillsides. As described in Section 1.1.2 above, Division of FMUs into manageable units, DNR properties are subdivide into manageable units as follows: Properties, Compartments, Tracts, and then Forest Types.

Landscape level environment safeguards are described in the 2008-2027 Environmental Assessment (EA) document which reviews forest community types and development as well as size classes; associated natural disturbance regimes; rare, Threatened and Endangered (RTE) species and rare ecological communities (including plant communities); other habitats and species of management concern; water resources and associated riparian habitats and hydrologic functions; soil resources; and historic conditions; and a broad comparison of historic and current conditions. Additionally it details the monitoring and quality control systems continuous forest Inventory, Best management practices (BMPs), Forest Certification Audits, the Hardwood ecosystem experiment (HEE), and the Tract

management Guide process. The full document is available here, https://www.in.gov/dnr/forestry/files/fo-StateForests EA.pdf.

A summary of steps where safeguards are applied at the tract level are summarized graphically in Appendix I.G.3, <u>https://secure.in.gov/dnr/forestry/files/manual/fo-I-G-3.pdf</u>, of the Indiana DNR State Forest Procedures Manual. After a **detailed** forest Tract inventory is completed, the Tract Management Guide development process requires a review of Natural Heritage Database, Wildlife and Ecology reviews, as well as a review of the bat management guide,

<u>https://secure.in.gov/dnr/forestry/files/manual/fo-I-H-1.pdf</u>. Additionally, each Tract Management Guide undergoes a public review period prior to final approval. This extensive procedure allows both internal and external stakeholder consultation prior to any harvest activities.

Draft management guides are posted for public review and comment at

https://secure.in.gov/dnr/forestry/3635.htm.

Management strategy for the identification and protection of rare, threatened and endangered (RTE) species and their habitats:

The DoF has a program to protect threatened and endangered species. Training is periodically provided on endangered species identification and management, most notably for Indiana bat habitat. The Natural Heritage database and wildlife reviews serve to protect RTE species and are required elements of DNR's Ecological Review, https://secure.in.gov/dnr/forestry/files/fo-

<u>EcoResourceReview02112009.pdf</u>. During the development of Tract Management Guides searches are run against Natural Heritage Databases for overlap and adjacency of RTE species. When RTE occurrences are detected during database or wildlife staff review, forestry staff will determine appropriate steps to protect the species using available guides, consultation with DNR wildlife, biology, and ecology staff with relevant expertise. Foresters may also conduct or collaborate with these specialists for additional research. These steps may include a final consultation with the biologist or ecologist in writing a species- specific management plan to accommodate individual species requirements. Staff also consult with the Division of Nature Preserves within the DNR and the NatureServe website to search for management guidelines for RTE species. This process was thoroughly reviewed in the field with forestry and wildlife staff, and supplemented by interviews with Nature Preserve and Ecology staff and no exceptions to this procedure were discovered nor were errors in application discovered during the 2016 audit.

2.1.3 Socioeconomic Context

The 2015 population of Indiana was approximately 6.6 million as estimated by STATS Indiana, a statistical data utility for the State of Indiana, developed and maintained since 1985 by Indiana University's Kelley School of Business (<u>www.stats.indiana.edu/population/PopTotals/2015_stateest.asp</u>, 12/1/16). STATS Indiana also reports that Indiana is estimated to have had personal income growth and employment growth below the national rates for most of 2015. However, they estimate that personal income growth rate recovered in early 2016 and is now expected to outpace the U.S. rate through the end of the forecast period in 2019. Total employment in Indiana in 2015 was estimated at 2.9 million of which 14,750 were in the Agriculture, Forestry, Fishing, and Hunting sector and 126,583 were in governmental positions (STATs Indiana, 12/2/16).

A report, 'Indiana's Hardwood Industry: Its Economic Impact (Update of the 2010 Hoover/Settle report)" by Gonso and Seidl, 2016 gives a summary of forestry statistics regarding Indiana's forests and forest

products industry. They report that Indiana has about 4.87 million acres of productive forest land, which is just over 20% of the land area of the state. Approximately 3.95% of the timber stands on the 4.87 million acres were initiated by planting. Slightly more than 84% of these productive forest lands is owned by private citizens or corporations. All but 3.2% of the timber are hardwoods such that the forest products industry economic activity is driven primarily by hardwood forests and their management. According to the U.S. Forest Service Forest Inventory and Analysis (FIA) data, Indiana's net-growth-tototal-removals ratio is 2.6, meaning Indiana state-wide is growing 2.6 times more board feet than it is losing to mortality and removals.

Many of the American Indian tribes that were active in Indiana were either decimated through disease or warfare during the period of initial European settlement or forced to relocate to reservations in Oklahoma. According to the Census Quickfacts cited above, approximately 1.6% of Indiana's population is American Indian/ Alaskan Native. DOF has contacted recognized and unrecognized tribes active in Indiana and Oklahoma. All identified prehistoric archaeological sites are protected and DOF has extended the invitation to tribes to collaborate on the management of such sites.

2.1.4 Land use, Ownership, and Land Tenure

The state forests were initially created to restore eroded, worn-out land when small, subsistence farms were abandoned early in the century (From "Forest Management on Indiana State Forests", <u>www.in.gov/dnr/forestry/files/fo-Management on SF.pdf</u>). Early state forest management focused on reforesting eroded areas, creating wildlife habitat, demonstrating good forest land management, providing public recreation, and conserving forest resources.

Today, the state forests are managed for multiple uses and benefits (IDNR Strategic Plan 2015-2019). According to the Strategic Plan, the DoF funding comes from a variety of sources. A majority comes from sources dedicated to the Division of Forestry, primarily sales of nursery and forest products and user fees. Approximately 35.5% of funds come from the State's general fund. The historic forestry property tax was lost in 2008 as a primary revenue source supporting Division programs. The federal grants are used for private landowner assistance, fire and community and urban forestry programs; no federal funds are used for management of State Forest Properties. Revenue from state forest timber sales and recreation receipts go into the state forestry fund. Fifteen percent (15%) of the net receipts from timber sales go to the general funds of the counties in which the timber sales occurred. Fifty percent of the county receipts are available to local Volunteer Fire Departments that have cooperative fire agreements with DNR up to a maximum of \$1,000 per fire department, unless the county legislative body allows a greater distribution. The remaining funds are allocated at the discretion of the county. Indiana's state forests and recreation areas provide a variety of recreational opportunities for the public. Most recreational activities, such as hunting, fishing, primitive camping, backpacking, and edibles gathering, are dispersed and require minimal development. Modern facilities are necessary for swimming, boating, camping, and nature education on several state recreation areas, but are held to the least developed level possible. State Forests and Recreation Areas offer over 20 campgrounds with over 500 campsites, unique lodges and 140 lakes along with 500 miles of trails and over 150,000 acres of woodlands to enjoy and explore.

Other activities on the FMU include organized recreation, hunting/ gathering, and fundraisers that require permits or licenses. There are also rights-of-way established for roads, power lines, gas pipelines, and other installations that require permanent rights-of-way or long-term lease agreements. There are

some areas of the FMU over which third parties have the mineral rights. DOF also has mineral rights in some locations. Currently, there is no mining activity on the FMU.

2.2 Forest Management Plan

The Indiana DoF Forest Management Plan consists of a compendium of documents that present management goals, strategies, and objectives through a hierarchical system incorporating administrative and natural organizing features that enables an integrated approach to managing State Forests from the landscape level to the forest stand. The table below summarizes some of the most significant information related to how forests are managed under the DoF.

Explanation of the management structures:

The Indiana state forest system consists of 13 State Forests and 2 State Recreation Area properties containing 158,300 acres. The DoF is responsible for managing the state forests, and does so using a combination of property level managers and field staff, central office administrators/specialists, and contractors. Each property is managed as its own independent unit.

Management Objectives:

As presented in the 2015-2019 Strategic Plan the overall management objectives are to provide multiple uses and multiple benefits. The state forests provide outdoor recreation ranging from camping and hiking to hunting and fishing. The state forests conserve and protect all the forest resources - water, wildlife, herbaceous plants, archaeological sites, historic features, geological features, soil, and forests. They serve as research and demonstrations of good forest stewardship for the public, and help train loggers and forest landowners in proper timber harvesting methods and other sound management practices.

Forest Composition and Rationale for Species Selection:

According to the most recent baseline resource estimates of state forest properties (IN DNR State Forest Properties Report of Continuous Forest Inventory Summary of years 2010-2014), there are over 155,000 total acres; 150,975 forested acres with the balance in non-forest (i.e. campgrounds) and water; 96% of the forested acres are hardwoods; 88% of the forested acres are sawlog-sized stands; forests contain 58.5 million live trees ; sugar maple trees and seedlings are more abundant than any other species; 336.8 million cubic feet of total live tree volume; 1.153 billion board feet (Doyle) of sawlog volume; white oaks followed by red oaks are the species groups with the most sawlog volume; over half of the sawlog volume is considered grade 1 or 2; growth exceeds harvest; multiflora rose, japanese honeysuckle, and stiltgrass are the most common invasive species

The State Forest lands are located primarily in the southern 1/3 of Indiana. An estimated 156,500 of these acres are considered production forestland (land considered stocked with trees or seedlings that is at minimum 1 acre in size and 120 feet in width), with the remaining ~6,200 acres being non-forest (open fields, campgrounds, right-of-ways, etc.), census water (bodies of water >5 acres and permanent rivers/streams), and non-census water (bodies of water <5 acres and small streams). Like most of Indiana's forests, state forests are predominantly hardwoods with 96% of the total forest area classified as hardwood forest types. The primary hardwoods (30,047 acres, 20%), Chestnut Oak (13,185 acres, 9%), and White Oak (12,949 acres, 9%) (Table 1). Eighty-eight percent of the area was considered sawlog-sized stands (large diameter or 11.0" d.b.h. and greater), with the remainder classified as poles (medium diameter or 5.0-10.9" d.b.h.) and seedling/saplings (small diameter or 1.0-4.9" d.b.h.)

General Description of Land Management System(s):

The Silvicultural Guidelines section of the Indiana DNR Procedures Manual describes the general description of land management approaches based on forest cover types. The Silviculture Guidelines section may be found online here, <u>http://www.in.gov/dnr/forestry/files/manual/fo-F.pdf</u>.

The DoF implements multiple silvicultural systems; the choice of silvicultural system is based on the management objectives for each state forest and objectives for individual forest tracts. The following silvicultural prescriptions are employed on DoF lands, as stated in the HCP (draft v. Oct 2006):

Hardwood and Pine Group Selection Openings < 10 acres each: Prescriptions for group selection openings remove a small number of trees to create space for regeneration, establishment, and development of intermediate and shade intolerant tree species. To limit impacts to visual aesthetics, these openings are usually not larger than 5 acres, but can be up to 10 acres. There is no set rotation for group selection openings. Some tracts may receive multiple group selection openings over time; others may receive none.

The need to conduct a group selection opening is based on the composition or condition of existing trees, goals for the tract, and the end result of creating the opening. Group selection is implemented on tracts that are damaged (defective or decaying), have poor vigor, or where regeneration success is less than desirable or not possible without allowing for more sunlight to reach the forest floor.

Hardwood Singletree Improvement: Hardwood singletree improvement harvests are a type of unevenaged harvesting done in conjunction with group selection openings. Singletree improvement harvests are implemented in areas within an uneven-aged stand that are between created openings. Individual trees are selected and removed throughout the stand approximately every 15 to 25 years. The treatments are conducted to modify or guide the development of the existing crop of trees, but not to replace it with a new one. These activities include selective removal of some vegetation to allow the expansion of remaining tree crowns and root systems. The decision to remove a singletree under this method is based on in-field evaluation of that individual stem for condition, vigor, species composition, and impact to neighboring existing trees.

Pine Clearcuts: All silvicultural pine clearcuts are even-aged stand regeneration actions. All the pines in the stand are cut and removed at the same time, and replaced with a new stand of small seedling/sapling hardwood trees on the entire area. Almost all existing pines on DoF lands are nonnative and the result of plantation plantings established on abandoned farmlands to stabilize and improve soils. Pine clearcuts are implemented to replace nonnative pines with native hardwoods. This method mimics hardwood regeneration that naturally occurs when openings are created.

Pine Thinning: Pine thinning is the removal of pines from pine stands or a partial cutting in even-aged aggregations of trees. Tree removal is done to improve future growth and vigor by regulating stand density. Thinning methods are of two different types: commercial thinning where some or all of the wood harvested is put to use, and thinning without utilization of wood harvested. The latter scenario is considered a pre-commercial thinning and can be equated to removal of undesirable trees. Most of the pine thinning on DoF properties is conducted as commercial thinning and is usually done only once during the life of the pine stand. A typical pine thinning prescription is 0.5 to 20 acres and approximately less than 50 percent of the trees present are removed from an even-aged stand. Without conducting pine thinning harvest production on pine stands would eventually be lost to suppression of trees. Trees that are not harvested from overcrowded pine stands would die from lack of light and nutrients and their fiber value would be lost.

Hardwood Shelterwood: Shelterwood harvests are a method of even-aged regeneration. These harvests remove almost all trees in an existing stand, except the largest and most vigorous hardwood trees. Typically retained hardwood trees are 16 to 28" dbh. Harvested areas are then regenerated with a new stand of young hardwood seedling trees. The resulting natural regeneration is a mixture of hardwood species; as increasing amounts of sunlight reach the forest floor this allows oaks and hickories to compete with more shade tolerant species, and thus oaks and hickories will make up a

large proportion of the regenerated stand. Harvesting the existing stand of trees is done in a series of cuttings to release the new seedling trees started under the old stand. The essential characteristic of the shelterwood method is that the new stand is established (naturally or artificially) before the last of the old hardwoods is removed. The final overstory removal in shelterwood harvests usually takes place within 10 years of the initial cutting.

Hardwood Clearcuts > 10 acres each: All silvicultural hardwood clearcuts are even-aged stand replacement actions on areas 10 acres or more in size. Usually clearcuts on DoF properties are between 10 and 25 acres. On rare occasion, larger areas may require a clearcut to manage the results of unforeseen events such as damage from wildfire, insects, storms, or disease. All trees in the stand are cut at the same time and replaced with a new stand of small hardwood trees on the entire area. Hardwood clearcuts on DoF lands are most often used in areas where an entire stand has been damaged by wildfire or storms or where, as a result of past activities, the stand composition is dominated by less desirable trees, exotics, or invasive plant species. The use of clearcut harvests provides the best opportunity for the establishment of new stands dominated by oaks and hickories as compared to uneven-aged harvests. Clearcuts also create openings for large continuous areas of early successional habitat.

Harvest Methods and Equipment used:

Harvesting equipment used includes conventional felling (chain saw) with on-site work and skidding by dozer, skidder and, occasionally, horses.

2.3 Monitoring System

Growth and Yield of all forest products harvested:

DOF has periodic system-wide inventory and Continuous Forest Inventory (CFI) system, <u>http://www.in.gov/dnr/forestry/3605.htm</u>, which together address species, volumes, stocking, regeneration, forest composition and structure, and timber quality. DOF has a strong program for monitoring timber theft and has recorded significant events, such as storm damage, in updates to management guides and during the HCV review process.

Forest dynamics and changes in composition of flora and fauna

Permits are not allowed for ginseng harvesting on State Forests. The Division of Nature Preserves is responsible for regulating the harvest and trade of ginseng in the State. Sales records are kept for each timber sale that allow for volume analysis at the district and whole-state forest system level. Current harvest data shows that harvest does not exceed growth.

Indiana DOF properties section wildlife completes annual monitoring snag and cavity trees, spring resident bird populations, summer breeding bird populations, forest amphibians, and deer impacts from browsing.

- Department of fisheries conducts annual creel census.
- The State of Indiana has a breeding bird atlas.
- Periodic surveys are completed for bats in caves.
- Periodic surveys are completed for the wood rat.
- Ruffed Grouse drumming surveys are completed.
- Nature Preserves completes annual surveys on preserves.
- DOF completes monitoring of BMP's (see "1996-2008 Forestry Best Management Practices Monitoring Results")

• T and E species that were previously undetected in other surveys are reported to the Natural Heritage Inventory Database.

Monitoring of HCVs occurs as part of site inspections and, if near an active harvest, as part of harvest monitoring. Should HCVs undergo active management, such as prescribed fire, DOF and/or Division of Nature Preserves monitors the response (e.g., regeneration).

When management guides are updated, the invasive species section must also be updated. Informal monitoring also occurs and since most field staff are licensed applicators, they may treat trouble spots quickly.

Environmental Impacts

Evidence of monitoring includes the following reports and records: Timber sale inspection reports; Annual BMP monitoring report results; Contract monitoring (TSI forms). More fundamental to meeting this monitoring, DOF inspects active timber sales and conducts post-harvest reviews to ensure that objectives and BMPs are being met. DOF monitors road construction and maintenance by tracking how many miles are completed each year per forest employee. Informal inspections occur during and after timber harvests.

Social Impacts

Strategic Plan and Environmental Assessments have stakeholder comments and responses recorded which are described in detail in Appendix 5 of this report. No tribes have expressed interest in monitoring sites of cultural significance. Many sites are pre-historic, making it difficult to tell which tribal groups were present.

Costs, Productivity, and Efficiency

Costs of each arranging each timber sale are included in each site plan for later analysis. The budget office maintains information on all expenditures and income. DOF's upper management analyses budgets for individual projects and the department as a whole to assess productivity and efficiency.

3. Certification Evaluation Process

3.1 Evaluation Schedule and Team

Date: Monday, Oct 31	
Compartment/Tract	Yellowwood State Forest, Jacqmain and Schulte
1: "Old Field Site", Active	Poplar, red maple, and ash site on a reforested old field site, 29 acres.
Site	Three patchcuts within 58 acre tract. Logger interview PPE, safety, spill
	equipment, conventional logging equipment in good condition. Logger
	unable to identify legally required fuel spill amounts. Foresters unable to
	identify required fuel spill amounts.
2: C6/ T1 Old field, Salvage	Sale area including tracts 1, 2, and 31. A 145 acre tract area of which 9
Harvest	acre site was inspected. An old field restoration site that had been
	planted with pine. Routine inventory discovered dead and dying pine and
	blow down. Harvest area part salvage and part pine harvest. Harvest
	completed in 2014. The next site treatment will be TSI to remove non-
	merchantable stems to open the site and encourage regeneration of oak.

3.1.1 Evaluation Itinerary and Activities

J. CO/TIL Old Held, Jaivage	A 72 acres tract area, old field, with patch cuts harvests, 2.5 – 14 acres to
and Regeneration Harvest	regeneration poplar. Harvested winter 2014-2015 completed March
	2015 to capture mortality of dead and dying poplar and to regenerate
	poplar. Analysis of landscape successional patterns identified lack of
	younger age classes and some pioneer tree species. Yellow poplar is
	strategic to regenerate for young forest conditions within the landscape.
4: Yellowwood HCVF	A proposal HCVF site currently under public review,
	http://www.in.gov/dnr/forestry/3635.htm. This HCVF designating
	attributes identified as presence of yellowwood (Cladastis lutea). Species
	at its northern extent and considered a disjunct species in this location.
	This is a collaborative project involving Division of Forestry, Division of
	Nature Preserves, and The Nature Conservancy. Management goals
	include trying to connect 7 patches of yellowwood within a 591 acres
	area. Treatments in this area include basal spraying of beech, felling and
	stump treatment of sugar maple. Spraying done by licensed staff.
4: C6/T1	This was an unplanned observation regarding a hunter trail closed to
	general ATV use but open by approved certificate to handicap hunters
	(from F&W?). Trail open to silent sports such as mountain biking and
	other non-motorized travel.
5: Prescribed Fire Site	This is part of the Hardwood Ecosystem Experiment (HEE). There is an
(HEE)/Mgt Unit U9-11 and	identified issue with oak and hickory regeneration within the landscape.
U9-09, S10-T8N-R2E	This experiment was set up to as part of a 100 year study with research
	projects and collaboration by multiple universities (overall Purdue
	University lead).
Date: Tuesday, Ney 1	
Compartment/Tract	Activities / notes
Compartment/Tract 8 -11 AM	Activities / notes Opening Meeting: introductions, audit scope, confidentiality and public
Compartment/Tract 8 -11 AM Morgan Monroe SF	Activities / notes Opening Meeting: introductions, audit scope, confidentiality and public summary, conformance evaluation methods and tools, CARs process,
Compartment/Tract 8 -11 AM Morgan Monroe SF Training Center	Activities / notes Opening Meeting: introductions, audit scope, confidentiality and public summary, conformance evaluation methods and tools, CARs process, relevant work safety, review audit plan, document review, stakeholder
Compartment/Tract 8 -11 AM Morgan Monroe SF Training Center	Activities / notes Opening Meeting: introductions, audit scope, confidentiality and public summary, conformance evaluation methods and tools, CARs process, relevant work safety, review audit plan, document review, stakeholder input; questions.
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	and black walnut; and to regenerate opening reliant species such as
	yellow poplar. Post-harvest TSI is prescribed.
3: Afforestation Project	This is a unique project because little planting is done. The piece of land
Grigsby Tree Planting	was acquired in 2014 to eliminate property line issues (fill a gap in the
C9 and C14	Morgan-Monroe ownership) and create habitat after planting (previously
	only winter grasses grew on the site). Acquisition made possible through
	cooperation with Then Nature Conservancy. Road side open areas to
	create forest using mowing, spraying, and planting, work conducted
	spring 2014, fall 2014, and spring 2016. Planted to butternut, white oak,
	swamp chestnut, swamp chestnut oak, red oak and black walnut.
	Originally had 11 invasive species but now are down to 3. Two years of
	Johnson grass control has been done here.
4: C5/ T08 Single Tree and	Oak-hickory type (Mixed Hardwoods), dry mesic upland, 140 acre single
Thinning Harvest	tree selection and thinning to maintain the current type and enhance the
	overall stand quality. Thinning to remove defective and less desired
	species and selection to regenerate favoring oaks, particularly advanced
	regeneration. Opening stand in harvested areas to encourage oak
	regeneration seedling bank.
5 Two HEE units harvested	This shelterwood removal is part of the HEE. Two 10 acre shelterwood
with C05/T04	units in the area were harvested along with Compartment 5 Tract 4 to
	come up with enough volume for a sale. These units are part of a three
	stage treatment. The first stage was midstory removal in 2009. This
	harvest was the second stage with the objective to preferentially retain
	oaks and hickories. The third stage, final overstory removal is scheduled
	to occur no later than 2028. The unit visited is not scheduled to receive
	a burn prescription.
6 Westeria elimination	Wisteria was introduce by an old homestead. The forester saw this as an
project	opportunity to eliminate an invasive species before it became
	unmanageable. The wisteria was so extensive that it was killing
	overstory mature trees. Treatment was 4.7% foliar and full strength cut
	stump. Although the effort was successful at starting the elimination,
	the area will likely require more treatments. Stiltgrass was also
	eradicated from the area.
Date: Wednesday, Nov 2	
Compartment/Tract	Owen-Putnam State Forest, All Auditors
1: C7/T17 Active sale,	Active logging site, 190 acres selection/thinnings to remove marked
Selection and Thinning	trees, 3 landings on site and inspected one landing. Logger interview
Harvest	PPE, safety, spill equipment, conventional logging equipment in good
	condition. Blue horse trail along one edge of sale area. Old well at edge
	of sale area. Old well inspected. Well was discovered by forester during
	marking. Reported to archaeologist and requested advisement for
	treatment of abandoned well. Well site flagged and trees surrounding
	left un-marked to minimize site disturbance within 50'. Well presence
	documented in tract files.
2: C7/T1 Thinning Harvest	Thinning for quality improvement, 40 acres. Thinning to reduce
	competition with crop trees and improve growth/quality in desired
	overstory species. Thinning from below favoring to keep desired

	commercial tree species. Criteria for removal includes damaged,
	diseased, and dving trees. Marked to cut leaving snags, cavity trees, and
	trees with desirable bat roosting characteristics. Pre- and post-timber
	stand improvement (TSI) to include vine control and selective girdling of
	undesirable understory species.
3: C7/T4 Thinning,	Landing of stilt grass (invasive) treatment landing and skid trails.
Sanitation patchcut,	Reviewed crop tree release harvest completed in 2013. Recent vine
Invasives Treatment	control in 107 acre tract. Examined patchcut that was a sanitation
	harvest of maple borer infestation in 5 acre patch of sugar maple.
	Management activity was TSI and vine control. Reviewed Forestry BMP
	Monitoring Worksheet from post-harvest examination conducted June
	2015. Examined seep.
4: C6/T7 HCVF. Proposed	Examined site proposed for HCVE of forested ravine with sandstone cliffs
HCVF	and mostly open sedge-dominated seeps springs (aka fen). The current
	areas under consideration for becoming HCVEs were identified as a
	result of an ongoing cooperative project with Division of Nature
	Preserves. Horse trail issue nearby. Damaged trail with water bars
	installed.
5: C9/T8 Marked Sale	Timber sale marked and not vet sold. 61 acres. Sale to remove mature.
,	poor quality pine planted for site recovery and to release from
	competition and overall quality improvement for desired hardwood crop
	trees.
Date: Thursday, November 3	
Compartment/ Tract	Greene-Sullivan State Forest, All Auditors
C2/T3 Salvage Harvest,	Cabin site: to be removed from certificate once new cabins are built.
Future Cabin Site, Future	Salvage, 20 acres.
Excised	
C5/T9 Variable Thinning	A 150 acre area with 93 acres managed by timber harvest. Area has over
Harvest	70% of the surface mined. Spoil pilings throughout. Mixed stand with
	hickory, cherry and pine. Pine openings totaling 4.5 acres. Pine was
	biomass harvested. There was some oak regeneration throughout,
	harvest was generally an improvement thinning but varied due to steep
	slope/dip areas that were operational barriers.
C3/T1 Single and Group	45 acres of mixed hardwood with single tree with some group selection.
Selection Harvest	Managed for maple and red oak. To overcome access issues for the
	interior portion of the tract the forester used a portable steel bridge to
	cross Black Creek for riparian management. Inspected area where the
	bridge was installed. Reviewed BMP check.
11:00 – 11:30 PM	Auditor deliberations
11:30 PM	Closing meeting: Presentation of the audit conclusions: review of prior
	year open findings; new findings; confidentiality and public summary;
1	
4: C6/T7 HCVF, Proposed HCVF 5: C9/T8 Marked Sale Date: Thursday, November 3 Compartment/ Tract C2/T3 Salvage Harvest, Future Cabin Site, Future Excised C5/T9 Variable Thinning Harvest C3/T1 Single and Group Selection Harvest 11:00 – 11:30 PM 11:30 PM	Management activity was TSI and vine control. Reviewed Forestry BMP Monitoring Worksheet from post-harvest examination conducted June 2015. Examined seep. Examined site proposed for HCVF of forested ravine with sandstone cliffs and mostly open sedge-dominated seeps springs (aka fen). The current areas under consideration for becoming HCVFs were identified as a result of an ongoing cooperative project with Division of Nature Preserves. Horse trail issue nearby. Damaged trail with water bars installed. Timber sale marked and not yet sold, 61 acres. Sale to remove mature, poor quality pine planted for site recovery and to release from competition and overall quality improvement for desired hardwood crop trees. Greene-Sullivan State Forest, All Auditors Cabin site: to be removed from certificate once new cabins are built. Salvage, 20 acres. A 150 acre area with 93 acres managed by timber harvest. Area has over 70% of the surface mined. Spoil pilings throughout. Mixed stand with hickory, cherry and pine. Pine openings totaling 4.5 acres. Pine was biomass harvested. There was some oak regeneration throughout, harvest was generally an improvement thinning but varied due to steep slope/dip areas that were operational barriers. 45 acres of mixed hardwood with single tree with some group selection. Managed for maple and red oak. To overcome access issues for the interior portion of the tract the forester used a portable steel bridge to cross Black Creek for riparian management. Inspected area where the bridge was installed. Reviewed BMP check. Auditor deliberations Closing meeting: <i>Presentation of the audit conclusions</i> : review of prior year open findings; new findings; confidentiality and public summary;

3.1.2 Total Time Spent on Evaluation

Α.	Number of days spent on-site assessing the applicant:	4
Β.	Number of auditors participating in on-site evaluation:	3
C.	Additional days spent on preparation, stakeholder consultation, and post-site follow-up:	8

D. Total number of person days used in evaluation:

20

3.1.3 Evaluation Team

Auditor Name:	Beth Jacqmain	Auditor Role:	Lead auditor, FSC; Team Auditor SFI	
Qualifications:	Beth Jacqmain is a Certification Forester with SCS Global Services. Jacqmain has MS			
	Forest Biology from Auburn University and a BS Forest Management from Michigan			
	State University. Jacqmain is Society of American Foresters (SAF) Certified Forester			
	(#1467) with 20+ years' experience in the forestry field including private corporate.			
	private consulting, and p	public land manageme	nt. Jacqmain is a qualified ANSI RAB	
	accredited ISO 14001 EN	AS Lead Auditor and is	a SCS qualified FSC Lead Auditor for	
	Forest Management/Ch	ain of Custody. Jacqm	ain has audited and led FSC	
	certification and precert	ification evaluations,	harvest and logging operations	
	evaluations, and has par	ticipated in joint SFI a	nd American Tree Farm	
	certifications. Jacqmain	is a 9 year member o	f the Forest Guild and 20 year adjunct-	
	Faculty with Itasca Com	munity College, Natur	al Resources Department. Jacqmain's	
	experience is in forest m	nanagement and ecolo	ogy; the use of silviculture towards	
	meeting strategic and ta	nctical goals; forest tim	ber quality improvement, conifer	
	thinning operations, pin	e restoration, and fire	ecology in conifer dominated systems.	
Auditor Name:	Norman Boatwright	Auditor Role:	Team Auditor, FSC; Lead Auditor, SFI	
Qualifications:	Norman Boatwright is th	ne president of Boatw	right Consulting Services, LLC located	
	in Florence, South Carol	ina. BCS handles typic	al forestry consulting, SFI, ATF and FSC	
	Audits, Phase I Environm	nental Site Assessmen	ts, Forest Soil Mapping, Wetland	
	Delineation, and other B	Biological Services. Noi	rman has over twenty-nine years'	
	experience in intensive f	forest management, e	ighteen years' experience in	
	environmental services and ten years' experience in forest certification auditing. He			
	has conducted Phase I Assessments on over three hundred and fifty projects			
	covering 3,000,000 acre	s, Endangered Species	Assessments on timberland across	
	the South, and managed	soil mapping project	s on over 1.3 million acres. From 1985-	
	1991, he was Division M	anager at Canal Fores	t Resources, Inc. and was responsible	
	for all forest manageme	nt activities on about	90,000 acres of timberland in eastern	
	South Carolina. Duties ir	ncluded budgeting and	implementing land and timber sales,	
	site preparation, plantin	g, best management p	practices, road construction, etc. From	
	1991-1999, he was manager of Canal Environmental Services which offered the			
	following services: Phase I Environmental Site Assessments, Wetland Delineation			
	and Permitting and Endangered Species Surveys. From 1999-2012 he was the			
	Environmental Services Manager, Milliken Forestry Company. Norman has extensive			
	experience auditing SFI, procurement and land management organizations and			
	American Tree Farm Group Certification Programs. He is also a Lead Auditor for			
	Chain of Custody Audits	under SFI, PEFC, and	FSC	
Auditor Name:	Ruthann Schulte	Auditor Role:	Team Auditor, FSC	
Qualifications:	Ruthann has a broad rar	nge of natural resource	e management experience. While with	
	Green Diamond Resourc	ce Company she coord	linated the company's Forest	
	Stewardship Council and Sustainable Forestry Initiative certifications as well as			
	working on community relations and government relations issues. Prior to that she			
	was Executive Director for The Buckeye, a non-profit organization dedicated to the			
	long-term stewardship o	of forest and ranch lan	ds. Ruthann participated on internal	
	audit teams for ISO 900	1 while serving as Adv	isor to a Board Member of the	

California Integrated Waste Management Board and also while Environmental
Stewardship Director at The Pacific Lumber Company (PALCO). At PALCO, Ruthann
additionally managed teams conducting watershed analysis and contributed to the
development of a multispecies Habitat Conservation Plan. While working for
forestry companies in California, Schulte coordinated crews and conducted wildlife
and fisheries surveys. Ruthann has a B.S. in Biology from Siena Heights College in
Adrian, MI and a M.S. in Biology from the University of Louisville in Louisville, KY.

3.2 Evaluation of Management System

3.2.1 Methodology and Strategies Employed

SCS deploys interdisciplinary teams with expertise in forestry, social sciences, natural resource economics, and other relevant fields to assess an FME's conformance to FSC standards and policies. Evaluation methods include document and record review, implementing sampling strategies to visit a broad number of forest cover and harvest prescription types, observation of implementation of management plans and policies in the field, and stakeholder analysis. When there is more than one team member, team members may review parts of the standards based on their background and expertise. On the final day of an evaluation, team members convene to deliberate the findings of the assessment jointly. This involves an analysis of all relevant field observations, stakeholder comments, and reviewed documents and records. Where consensus between team members cannot be achieved due to lack of evidence, conflicting evidence or differences of interpretation of the standards, the team is instructed to report these in the certification decision section and/or in observations.

3.3 Stakeholder Consultation Process

In accordance with SCS protocols, consultation with key stakeholders is an integral component of the evaluation process. Stakeholder consultation takes place prior to, concurrent with, and following field evaluations. Distinct purposes of such consultation include:

- To solicit input from affected parties as to the strengths and weaknesses of the FME's management, relative to the standard, and the nature of the interaction between the company and the surrounding communities.
- To solicit input on whether the forest management operation has consulted with stakeholders regarding identifying any high conservation value forests (HCVFs).

Principal stakeholder groups are identified based upon results from the pre-evaluation (if one was conducted), lists of stakeholders from the FME under evaluation, 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 in this evaluation:

3.3.1 Stakeholder Groups Consulted During Evaluation for Certification

FME Management and staff	Pertinent Tribal members and/or representatives

Consulting foresters	Members of the FSC National Initiative
Contractors	Recreational user groups
Lease holders	FSC International
Adjacent property owners	Local and regionally-based environmental
	organizations and conservationists
Local, state, and federal regulatory agency	Forest industry groups and organizations
personnel	
Log Purchasers	

Stakeholder consultation activities are organized to give participants the opportunity to provide comments according to general categories of interest based on the three FSC chambers, as well as the SCS Interim Standard, if one was used. A public notice was sent to stakeholders at least 6 weeks prior to the audit notifying them of the audit and soliciting comments. 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.

3.3.2 Summary of Stakeholder Comments and Responses from the Team

The audit team received stakeholder comments prior to-, during- and following the on-site field portion of the audit. The majority of feedback was positive. However, an environmental, non-governmental, non-profit organization (ENGO) submitted extensive stakeholder comments. Those have been summarized by category, economic/environmental/social and are addressed below. When there were other points of view submitted on the same topic, those counter-points were included as well.

The role of FSC auditing is strictly to determine if the forest management entity, FME, is in conformance with the FSC US Forest Management Standard. The Standard is organized into 10 Principles (P), defined by Criteria (C) and further split into Indicators (I), collectively called PC&I. FSC audits determine conformance at all three levels. For those members of the public who are interested, the current FSC US FM Standard may be found here, <u>https://us.fsc.org/download-box.188.htm</u>.

Stakeholder Comments	SCS Response		
Economic Concerns			
Disagrees that the forest	No non-conformance is warranted. The FSC US Standard,		
management operation follows good	specifically Principle 5, Benefits of the Forest, "focuses on		
business practices.	various indicators of efficiency and financial viability, such as		
 Why is the Indiana DOF 	profit (or loss), financial reserves, trends in market share, price		
managing our state forests as	per unit output, and revenue earned. Much of this information		
though their primary value	will be highly confidential to the public; confidentiality is		
comes from producing wood as	respected."		
an agricultural crop? With just			
3% of forest acres in Indiana in	By all measures investigated during the 2016 audit, the Indiana		
state forests, and only 4-7% of	DoF was in conformance with the Indicators of Principle 5.		
logs milled in Indiana coming	There was no evidence that the DoF was in violation of making		
from state forests, the timber	or receiving payments for recreational use, wildlife permits, or		
industry in Indiana does not and	for services rendered nor for non-payments for timber		
should not depend on wood	products sold. Auditors examined budget records, including		

 from our very limited public land. Our tabulation of state forest timber sale prices over the past five years is showing that average board foot prices for state forest timber are consistently 30-50% lower than average board foot prices for timber sold from private woodlands in Indiana raising a basic question of whether state taxpayers are getting a good deal from the state forest logging program. It appears that the intent of the minimum bid procedures in the state 	costs and revenues, as well as receipts for multiple timber sales during the course of the audit (see sites listed in the audit itinerary, 3.1.1). Public sales sold at auction are bid upon in open, public venues allowing market competition to determine actual prices for timber sold. There was ample evidence in the form of bid notices, auction results, and other publicly available information regarding timber sales that DNR is following these public access and bidding procedures. Interviews with staff confirmed a consistent awareness of, and desire to, both improve the resource under their stewardship and gain fair price for the citizens of Indiana. State Forests are managed for a wide variety of benefits and some forest management activities are not, in fact, strictly for profit but to generate benefits such as wildlife habitat maintenance or enhancement, or for recreation benefits. Some
minimum bid procedures in the state forest operations manual is not being followed in some cases and/or that there is a broad level of discretion afforded in their implementation.	example, 2: C6/T1 Old field, Salvage Harvest site visited during this audit was to remove diseased pine trees. However, to regenerate the natural white oak the DoF used harvesting to emulate fire, the natural disturbance to which white oaks are adapted to open the site to sunlight at the ground floor, to remove woody competition and to otherwise give native white oak regeneration the ability to establish and survive on the site.
	The DNR follows Best Management Practices; remediates site impacts; conducts surveys for wildlife, Rare/Threatened/Endangered species; and conducts activities designed for protection of other resource values. In such approaches, the State lands are managed to meet silvicultural objectives in a systematic way. As such, the removal of less valuable trees may occur, which, given the condition of most stands when DoF took over management several decades ago, likely explains lower stumpage prices in the medium-term. However, private lands may or may not treat entire forest stands. Private lands reserve the right to sell only their most valuable trees for profit without full consideration of public benefits as is done by the DNR DoF. Interviews conducted during the audit revealed forestry staff that demonstrated a strong commitment to managing the forest resource for future generations. Furthermore, forest management practices observed in the field were consistent
	with long-term sustainable use of State Forests.
Wear and tear on country roads and	No non-conformance is warranted. SCS would need to know
traffic would appear to exceed the	drawn in order to verify it. The most relevant indicator to this
funds that counties receive from the	question is 4.5.c which relates to fair compensation or
15% of net revenues from state	reasonable mitigation.

forest timber sales within their			
borders.	"4.5.c Fair compensation or reasonable mitigation is prov		ble mitigation is provided
	to local people, communities or adjacent landowners for		
	substantiated damage or loss of income caused by the		
	landowner or manager."		
	Twelve year results reported by the Do Management and	of monies award F, <u>http://www.in</u> Economy.pdf. ar	ded to Counties were .gov/dnr/forestry/files/fo- nd are reported in the table
	copied below,		
	Turker	Colo Dourou	- to Counting
	l welve Ye County	ear - Sale Revenu TOTAL	e to Counties Annual Average
	Brown	\$377,870	\$34,352
	Clark	\$192,238	\$17,476
	Crawford	\$133,378	\$12,125
	Dubois	\$121,279	\$11,025
	Harrison	\$289,141	\$26,286
	Jackson	\$136,726	\$12,430
	Jennings	\$42,115	\$3,829
	Martin	\$270,378	\$24,580
	Monroe	\$515,778 ¢260,201	\$46,889
	Owen	\$155.948	\$14,177
	Perry	\$77,906	\$7,082
	Pike	\$54,566	\$4,961
	Putnam	\$20,700	\$1,882
	Scott	\$41,923	\$3,811
	Wabash	\$10,707	يوبريغ ¢118
	Washington	n \$174,078	\$15,825
	TOTAL	\$2,887,686	\$262,517
	Evidence was provi	ded during the a	udit for payment of this
	15% to Counties. T	here are no reco	rds of complaints or
	violations in regard	s to these payme	ents. However, given this
	stakeholder input.	during the 2017 a	audit SCS will specifically
	consult with a same	ling of Indiana (ounty's to ascertain what
	information may be	available to aud	litors to evaluate this topic
Social Concerns			
"There are not enough opportunities	No non-conforman	ce is warranted.	Public input opportunities
for people and groups directly	are available throug	gh websites, pho	nes, and in offices
affected by management operations	throughout the stat	e. The first exan	nple is at the primary DNR
to provide input into management	website, https://sec	cure.in.gov/dnr/2	2336.htm: which lists
planning."	"Contact US" at the	top of every we	b page inviting email input.
Disagrees that the forest			
management operation maintains			
good relationships with adjacent			
landowners and neighbors"			

The second secon
FORESTRY
Contact Us
State Forest Properties
Links to individual State Forest Properties, leads to individual State Forest informational pages, and each State forest lists detailed contact information for providing input, as shown below.
Clark State Forest Deam Lake State Recreation Area Ferdinand State Forest Greene-Sullivan State Forest Harrison-Crawford State Forest Jackson-Washington State Forest Knobstone Trail Martin State Forest Morgan-Monroe State Forest Owen-Putnam State Forest Pike State Forest Salamonie River State Forest Selmier State Forest Starve-Hollow SRA Yellowwood State Forest
Yellowwood State Forest 772 S. Yellowwood Rd. Nashville, IN 47448 (812) 988-7945 YellowwoodSF@dnr.IN.gov Property Page
Individual Tracts for under consideration for management are offered for public review here, http://www.in.gov/dnr/forestry/3635.htm .
Auditors interviewed staff whose specific responsibility includes responding to input provided to State Forests. Auditors confirmed by interviews and examination of documents that these emails and phones are responded to appropriately by staff.
In the state of Indiana, stakeholders are free to use the legal system to appeal planning decisions. However, DoF's notification to adjacent landowners of upcoming activities.

	open door policies, annual open houses, and State Forest Stewardship Committee meetings are avenues for resolving grievances prior to legal action.
	Management planning documents, including upcoming timber sales, are made available to the public online. The public can also access publications and data on the website or upon request.
	Anyone can put in a public information request at any time per DoF's policy. The requests are reviewed on case by case basis. Unless there is some legal reason (RTE species, archaeological site, etc.) or the document is a draft not ready for public comment, the information is typically released. There may be a cost to the requestor for copying or other document production. In general, if someone really wants a disclosable document, they will get it from DoF.
	There were comments in the media that expressed dissatisfaction with Indiana's 2015 Forestry Strategic Directions planning process that vests drafting and review in the elected Executive Branch and Governor-appointed NRC. Some interest groups would like more direct involvement in all phases of plan development and review. The FSC standard does not, however, prescribe the methods an organization uses for public input. As noted and confirmed during the audit, the 2015 Forestry Strategic Directions process involved three public meetings, and DoF commitment to address stakeholder input. The State Forest schedules for open houses each year is posted online, https://secure.in.gov/dnr/forestry/3644.htm.
Public input opportunities are provided but more often than not, in a perfunctory manner. The public's input is rarely incorporated into final decisions which appear to have been made before-hand internally by DOF Staff.	No non-conformance is warranted. Auditors visited fields site, for example the HCVF site in Yellowwood, where DNR provided evidence of incorporating input from The Nature Conservancy (TNC). TNC is a premier environmental organization that operates throughout the nation and is considered a highly credible, science-based conservation organization. In response to TNC input, DoF personnel described expanding activities and general area of management to enhance a regionally, genetically unique population of yellowwood. There were horse trails examined during the course of the audit that were either developed, enhanced, or restored according to BMPs, in part in response to public input. During the course of the audit DoF personnel conducted interactions with the public and demonstrated serious consideration for several examples of public input.
	After receiving this stakeholder comment, SCS FSC lead auditor consulted with Indiana TNC representative to confirm the

	aspects of claims made by DNR DoF personnel regarding their consideration of TNC input. TNC was able to confirm all aspects and added that they found DoF personnel to be highly responsive and responsible to constructive and collaborative outreach by TNC. Additionally, TNC reported other input given regarding treatment of Japanese stilt grass. TNC had concerns about treatment of this invasive species. TNC was unaware that not only did DoF listen to their input but had piloted changing methods based on their input (trying to spray for stilt grass prior to harvest).
Public nominations of HCVF's are not solicited or seriously considered. We have very few examples of input from citizens on Draft Resource Management Guides for timber harvest plans being followed, even when those citizens are neighbors to the sales. The public input process on important documents like the 2015-2019 Strategic Plan was very vague. We were not informed of	The SCS FSC audit team will investigate this input further during the 2017 audit. Current evidence leads FSC auditors to conclude that no non-conformance is warranted. During the course of the audit procedures for offering High Conservation Value (HCV) areas were reviewed and confirmed to be in conformance with the requirements of the standard. In 2016, the Division of Forestry added a section to each HCVF on how public comments were considered. The Division posts HCVF information on the Division of Forestry website. Protection of HCVFs is an element of the 2015-2019 Forestry Strategic Directions Plan, which included a public input process.
when the public comment period would start and end until after we had asked many times for this information and had sent a letter of objection to the DOF for the lack of information being provided. There were no working groups of stakeholders that gave input leading to the production of a draft plan. Instead the public was told about the	Another reason that DNR may not implement a particular nomination from a submission is that the places or values (called attributes) that have been nominated are not consistent with one or more of the six accepted HCV types. Guidance from FSC International and FSC-US is highly detailed in this regard and is based on natural heritage data from federal and state agencies, as well as data and input from external stakeholder groups such as NatureServe.
plan after it was produced and then offered a chance to comment in 3 meetings and a 30 day comment period. [additional related comments omitted for space].	HCV considerations are described in DoF policy as an on-going process. Public nominations of HCVF via the DoF process, specifically through the Nature Preserves, was examined. Interviews with Nature Preserves staff confirmed that data collection methods were in conformance with the standard.
	matters, SCS has noted the question of consideration for <i>public</i> <i>nominations</i> to be given additional review in 2017.
The large majority of comments received on that plan [2015-2019 Strategic Plan] on key issues such as the amount of logging and need for more set aside areas were dismissed by the DOF.	No non-conformance is warranted. The issue of 10% of forest set aside as late seral or reference forest, establishing <i>de facto</i> wilderness was considered during the 2016 audit. Extensive interviews with staff demonstrated serious consideration of logging and set-asides and their influence on landscape trajectories of forests. The document, <u>http://www.in.gov/dnr/forestry/files/fo-</u> <u>State_Forest_CFI_Report_2010_2014.pdf</u> provides results of

	continuous forest inventories which take detailed measurements of tree species, tree diameters, tree form
	percent of sound wood, site index, regeneration and invasive
	species count across the State Forests. The DoF was found in
	conformance with indicator 6.3.a.1 regarding late seral or older
	forests. (NOTE: late seral forests are late successional stands
	that do not meet the FSC-US definitions of old-growth).
	 There are areas designated for older forest condition include: Nature Preserves on State Forests being allowed to develop into late seral old-growth. Control units (no harvest) of Hardwood Ecosystem
	 • 'No harvest zone' around active Indiana bat hibernacula on
	state forests.
	Monroe/Yellowwood, Jackson-Washington, and Clark state forests.
	In direct contrast to this comment are concerns among
	conservationists and professional forestry, wildlife, and
	ecological staff that the lack of natural disturbance, primarily
	the disruption of native fire regimes, and trajectories of native
	our regeneration would be exact butter by set-aside areas.
We would agree that the DOF	The DNR provides a series of videos online here
We would agree that the DOF contributes to public education	The DNR provides a series of videos online here, https://www.youtube.com/user/idnrvideos. Several of these
We would agree that the DOF contributes to public education about forestry practices but its	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety
We would agree that the DOF contributes to public education about forestry practices but its information is always promoting	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated
We would agree that the DOF contributes to public education about forestry practices but its information is always promoting timbering and never objectively	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated during the 2016 audit high levels of awareness of forest
We would agree that the DOF contributes to public education about forestry practices but its information is always promoting timbering and never objectively examining its impacts. Its research	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated during the 2016 audit high levels of awareness of forest management impacts on the vast array of benefits derived
We would agree that the DOF contributes to public education about forestry practices but its information is always promoting timbering and never objectively examining its impacts. Its research under the HEE consistently appears	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated during the 2016 audit high levels of awareness of forest management impacts on the vast array of benefits derived from State Forests by all Indiana citizens.
We would agree that the DOF contributes to public education about forestry practices but its information is always promoting timbering and never objectively examining its impacts. Its research under the HEE consistently appears to be designed to confirm a view	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated during the 2016 audit high levels of awareness of forest management impacts on the vast array of benefits derived from State Forests by all Indiana citizens. DOF makes significant contributions to public education, such
We would agree that the DOF contributes to public education about forestry practices but its information is always promoting timbering and never objectively examining its impacts. Its research under the HEE consistently appears to be designed to confirm a view that it wants the public to accept	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated during the 2016 audit high levels of awareness of forest management impacts on the vast array of benefits derived from State Forests by all Indiana citizens. DOF makes significant contributions to public education, such as participation in local Project Learning Tree programs. Forest
We would agree that the DOF contributes to public education about forestry practices but its information is always promoting timbering and never objectively examining its impacts. Its research under the HEE consistently appears to be designed to confirm a view that it wants the public to accept regardless of data namely that	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated during the 2016 audit high levels of awareness of forest management impacts on the vast array of benefits derived from State Forests by all Indiana citizens. DOF makes significant contributions to public education, such as participation in local Project Learning Tree programs. Forest management impacts, specifically mitigation, avoidance, and remediation of impacts are addressed through becting
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We would agree that the DOF contributes to public education about forestry practices but its information is always promoting timbering and never objectively examining its impacts. Its research under the HEE consistently appears to be designed to confirm a view that it wants the public to accept regardless of data namely that wildlife will always benefit for the most part from the state forest timbering program. Members of	The DNR provides a series of videos online here, <u>https://www.youtube.com/user/idnrvideos</u> . Several of these videos examine forestry practices in relation to a wide variety of benefits including recreation and wildlife. DoF demonstrated during the 2016 audit high levels of awareness of forest management impacts on the vast array of benefits derived from State Forests by all Indiana citizens. DOF makes significant contributions to public education, such as participation in local Project Learning Tree programs. Forest management impacts, specifically mitigation, avoidance, and remediation of impacts are addressed through hosting numerous logger training sessions (e.g., Game of Logging or GOL)
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	resulted from these studies. The audit team concludes that it would be extremely difficult for the DoF to influence the independent academic researchers and institutions to such a large scale in forwarding any specific agenda.
	The DoF participates in a variety of programs, such as field days, the Forest Management for Private Woodland Owners course organized by Purdue University, Master Naturalist classes, Indiana Conservation Officer Camp, and presentations to various groups.
	During 2016 field site visits, the auditors observed interpretive displays and self-guided forestry trails that did not in any way promote timbering.
	The DoF maintains a website, <u>http://www.in.gov/dnr/forestry/3605.htm</u> , that provides a variety of forestry publications and presentations which will empower any member of the public to draw their own conclusions regarding the breadth of topics promoted by DoF.
	Although no academics or scientists interviewed during the course of this audit conveyed attitudes of dismissiveness by DoF, SCS has noted this question and will make further inquiries during the course of the 2017 audit.
Environmental Concerns	
"Disagrees that the forest management operation takes appropriate action to protect rare, threatened and endangered species and their habitats."	No non-conformance is warranted. Evidence examined during the audit confirmed that DoF's efforts in identifying, planning and monitoring rare threatened and endangered species are in conformance with requirements of the FSC Standard. Indicators 6.1.a, 6.3.a.2, 7.1.3, 8.2.c.1 and 8.2.c.2 and Criteria 6.2 (Safeguards for rare threatened and endangered species) and 9.4 (HCVF monitoring) were all in conformance.
	The DNR has a robust, systematic process for identifying potential RTE for management activities. A graphic summary of this process is provided here, <u>https://secure.in.gov/dnr/forestry/files/manual/fo-I-G-3.pdf.</u> A notable example of using appropriate action was provided in review of DNR management considerations and protections for the Indiana Bat. DoF has dedicated wildlife biology and other staff who work proactively with US Fish and Wildlife Service to ensure compliance with Endangered Species Act requirements for Indiana Bat. This includes conducting periodic surveys for bats in caves as well as providing training to staff on endangered species identification and management.
The current unprecedented level of	No non-conformance is warranted. The 2016 audit confirmed
commercial logging in our state	evidence of a wide array of public benefits realized from State

forests is trumping all public uses	Forests including recreational use by horses, hiking, cycling
and values of our state forests and	(new trails), camping, hunting, trapping, berry picking and
brings the basic purposes of our	numerous other activities as evidenced by receipts, permits,
state forests into question.	and other monitoring information sufficiently tracked by the
	DNR.
We are also concerned about the	No non-conformance is warranted. Principle 4 of the FSC
DOF's program to promote overseas	Standard addresses how forest management operations
markets for Indiana state forest	maintain or enhance the long-term social and economic well-
timber which was not envisioned in	being of forest workers and local communities. The DNR was in
the statute that created the state	full conformance with this Principle, associated Criterion, and
forests. Furthermore raw logs	Indicators. In particular, 4.1.e (the forest owner or manager
exported oversees from Indiana do	provides work opportunities to qualified local applicants and
not generate the jobs potential and	seeks opportunities for purchasing local goods and services of
tax revenues in local communities	equal price and quality); 4.1.g. (the forest owner or manager
that are generated by milling those	participates in local economic development and/or civic
logs to produce wood for the wood	activities, based on scale of operation and where such
product manufacturing industries in	opportunities are available); and, 4.4 (the evaluation of social
Indiana.	impacts) were all in conformance.
	Additional indicators under Criterion 5 are highly relevant in
	addressing this critique, including 5.2 and 5.4. Criterion 5.2
	requires, "Forest management and marketing operations
	should encourage the optimal use and local processing of the
	forest's diversity of products." Criterion 5.4, "Forest
	management should strive to strengthen and diversify the local
	economy, avoiding dependence on a single forest product."
	Evidence gathered during the 2016 audit addressed these
	indicators and included the following:
	• All timber harvesting activities are carried out by local
	logging contractors (Indiana and surrounding states), who
	sometimes purchases sales of standing timber and market
	the material themselves. The group COC certificates
	managed by the State also allow members to market FSC-
	certified products. Timber stand improvement (TSI), forest
	protection activities, and other management related
	activities are typically contracted to local service providers.
	• The DoF primarily sells the standing timber only. it is up to
	the purchaser to market the product. In effect, the DoF are
	not "marketing to foreign markets" but ensuring receipt of
	maximal value from every log harvested.
	 Although there are very limited pulp wood markets in
	Indiana there are generally good markets for most species
	of hardwood There are typically several hidders for each
	timber sale offering
	 A range of sale sizes are carried out in an attempt to allow
	successful competition by different sized operations. State

Forests sometimes divide a unit into separate pine and hardwood sales in order to ensure more loggers (who typically would not harvest pine) have an opportunity to bid.
Finally, DNR participates in several programs that demonstrate commitment towards ensuring Indiana citizens benefit from State Forest's forest products. Such programs include Buy Indiana, One Indiana and Indiana Veteran's Business Enterprises program. Additionally, the state promotes minority and women's business enterprise participation on state contracts (Minority and Women's and Veteran's Business program descriptions may be found here, <u>https://secure.in.gov/idoa/2352.htm</u>). Additionally, the State is required to purchase goods from Indiana's State Use Program. The State of Indiana's 'Buy Indiana' initiative, <u>https://secure.in.gov/idoa/2467.htm</u> , requires every state agency take part in trying to achieve the goal that 90 cents of every dollar is spent on goods and services provided by businesses located in Indiana.
Evidence discovered and considered during the course of this audit indicate that DNR staff make all reasonable efforts possible to ensure that Indiana state residents derive the greatest possible value from sustainable management of forest resources.

4. Results of The Evaluation

Table 4.1 below, contains the evaluation team's findings as to the strengths and weaknesses of the subject forest management operation relative to the FSC Principles of forest stewardship. Weaknesses are noted as Corrective Action Requests (CARs) related to each principle.

4.1 Notable Strengths and Weaknesses of the FME Relative to the FSG	C P&C.
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Principle / Subject Area	Strengths Relative to the Standard	Weaknesses Relative to the Standard
P1: FSC Commitment	None noted	None noted
and Legal Compliance		
P2: Tenure & Use Rights	None noted	None noted
& Responsibilities		
P3: Indigenous Peoples'	DNR has demonstrated strong commitment	None noted
Rights	to consultation with tribal representatives.	
	See closing of Observation 2015.1	
P4: Community	None noted	None noted
Relations & Workers'		
Rights		
P5: Benefits from the	DNR participates in several programs that	
Forest	demonstrate commitment to promotion of	
	Indiana Forest Products. Buy Indiana, One	
	Indiana and Indiana Veteran's Business	
	Enterprises program, are some examples.	
	Additionally, the state promotes minority and	
	women's business enterprise participation on	
	state contracts.	
	Additionally, the State is required to purchase	
	goods from Indiana's State Use Program.	
P6: Environmental	DNR provides detailed inventory information	None noted.
Impact	for snags as part of Tract Management	
	Guides, a key forest management plan	
	document. Although used for assessing	
	potential bat habitat, interviewed staff were	
	notably aware of measurements and uses of	
	this information.	
P7: Management Plan	The DNR Forest Management Plan and	
	associated planning policies, procedures, and	
	manuals are involved and represent a	
	complex process but appropriate given the	
	broad geographic range and ecological	
	conditions of State Forests. DNR uses a	
	system of nested plans such that guidance is	
	provided from the landscape to the stand.	
	The procedures and plans are notably	
	available to the public through online	
	webpages and undergo several internal	
	decision checkpoints, using specific	
	procedures and forms as detailed in Appendix	
	5, to form a quality system into planning.	
P8: Monitoring &	Uses an integrated system that incorporates	
Assessment	RIE, wildlife, and Nature Preserves.	

P9: High Conservation Value Forests	None noted	None noted
P10: Plantations	Not applicable	Not applicable

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 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 nonconformance must be evaluated to determine whether it constitutes a major or minor nonconformance 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 nonconformance. The team therefore must use their collective judgment to assess each criterion and determine if the FME is in conformance. If the FME is determined to be in nonconformance at the criterion level, then at least one of the applicable indicators must be in major nonconformance.

Corrective action requests (CARs) are issued for every instance of a nonconformance. Major nonconformances trigger Major CARs and minor nonconformances trigger Minor CARs.

4.2.1 Interpretations of Major CARs, Minor CARs and Observations

Major CARs: Major nonconformances, either alone or in combination with nonconformances 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 nonconformances is typically shorter than for Minor CARs. Certification is contingent on the certified FME's response to the CAR within the stipulated time frame.

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

Observations: These are subject areas where the audit team concludes that there is conformance, but either future nonconformance 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 nonconformance.
4.2.2 Major Nonconformances

X	No Major CARs were issued to the FME during the evaluation. Any Minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
	Major CARs were issued to the FME during the evaluation, which have all been closed to the satisfaction of the audit team and meet the requirements of the standards. Any Minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
	Major CARs were issued to the FME during the evaluation and the FME has not yet satisfactorily closed all Major CARs.

4.2.3 Existing Corrective Action Requests and Observations

	Finding Number: 2015.1	
Select one: 🗌 Majo	or CAR Minor CAR X Observation	
FMU CAR/OBS issued	to (when more than one FMU):	
Deadline	Pre-condition to certification 3 months from Issuance of Final Report Next audit (surveillance or re-evaluation)	
FSC Indicator:	3.3.a	
Non-Conformity (or Bo	ackground/Justification in the case of Observations):	
This indicator requires	s that the forest owner or manager invites consultation with tribal representatives in	
identifying sites of cur	rent or traditional cultural, archeological, ecological, economic or religious	
significance. In May of 2007, DOF sent letters to federally recognized and unrecognized tribes with		
ancestral connections to the State of Indiana. The letter had a cultural emphasis. No responses were		
received regarding the identification of sites of current or traditional cultural, archeological, ecological,		
economic or religious significance. Interviews with DoF staff indicate that no recent communications		
strategies with tribes have been attempted, although DoF and DNR's Division of Historic Preservation and		
Archeology are planning to reconvene a tribal outreach council that the previous administration had		
allowed to become inactive.		
Corrective Action Request (or Observation):		
DoF conformance with indicator 3.3.a would be strengthened through renewed tribal outreach.		

FME response	The Indiana Department of Natural Resources holds a position on the Indiana Native
(including any	American Indian Affairs Commission. Established under Indiana Code 4-23, the
evidence submitted)	Commission meets quarterly to discuss, study, and make recommendations to the
	appropriate federal, state, and local governmental agencies in areas of concern of
	the State's Native and non-Native people and communities. Currently the
	Commission includes seventeen individuals (8 representing various Native
	Tribes/Nations, / representing State agencies, the Present Pro Tempore appointee,
	and the speaker of the House appointee). The objective of the commission is to
	opportunities to the community and to enhance social cultural community and
	economic development in Indiana
	The Director of the Department of Natural Resources is one of the members of the
	Commission. The Division of Forestry will work through the Commission to seek
	guidance in regards to consultation with tribal representatives when circumstances
	are brought to the Division's attention concerning known sites of current or
	traditional cultural, archaeological, ecological, economic, or religious significance.
	The Commission also thus serves as a means for Native American tribes or individuals
	procedures and/or land holdings
SCS review	SCS staff reviewed and confirmed The Indiana Native American Indian Affairs
	Commission (INAIAC) was established by Section 3 of Chapter 32 under Indiana
	Code 4-23. (A copy of this statute may be found here,
	http://in.gov/inaiac/files/INAIAC_IC_4-23-32.pdf.)
	Additional information regarding links to uncoming quante recourses, nows
	releases public meetings, information about the Commissioners may be found on
	the INAIAC website http://in gov/inaiac/2345 htm. Minutes for 2016 meetings
	were reviewed and confirmed that the Director of the Indiana DNR attended these
	meetings. Direct consultation with relevant Native American organization confirm
	the organization have found adequate opportunities to express concerns or
	interests to the DNR.
Status of CAR:	X Closed
	Upgraded to Major
	Other decision (refer to description above)

		Finding Number: 2015.2
Select one: 🗌 Majo	r CAR 🗌 Minor CAR 🛛 🗴 (Dbservation
FMU CAR/OBS issued to (when more than one FMU):		
Deadline	 Pre-condition to certification 3 months from Issuance of Final Resource of Resource of Final Resource of Resource of Final Resourc	eport uation)
FSC Indicator:	4.1.c	

Non-Conformity (or Background/ Justification in the case of Observations):

Interviews indicate that in comparison with the other 18 members of the <u>Northeastern Area Association of</u> <u>State Foresters</u>, Indiana DoF rates in the lower third in terms of wages. The lack of competitive pay for foresters (especially at the entry level) is causing an unsustainable situation where new employees are leaving nearly as fast as they are hired and trained. A DoF administrator said that 21 vacant forester positions were filled in the past five years and 21 young foresters left state employment during the same timeframe. Five of the newly vacated positions are currently unfilled as part of a budget-balancing policy. A few of the new hires have stayed, other positions being re-filled as many as three times, which may increase training and hiring costs. DoF is characterized, however, by senior staff and many relatively new hires with few foresters in the middle. That could be problematic as senior staff retire.

Corrective Action Request (or Observation):

Conformance with indicator 4.1.c could be strengthened if DNR were to improve pay and benefits sufficient to retain new hires.

FME response	The State pay plan for Forester 2 and Forester 3 positions were reviewed by the	
(including any	Indiana State Personnel Department in 2016. The finding supported and resulting	
evidence submitted)	in an increase of the pay range for these positions. The pay range was increased approximately 15%. Pay of existing employees was increased to the new base pay level or 3%, whichever was greater. The pay increases went into effect in September 2016.	
	Property manager and upper staff compensation was not part of the State	
	Personnel Department review.	
SCS review	SCS auditor examined relevant documents and confirmed these changes that	
	improved pay and benefits in support of continued conformance to this indicator.	
Status of CAR:	X Closed Upgraded to Major	
	Other decision (refer to description above)	

		Finding Number: 2015.3 (carryover of OBS 2014.1)
Select one: 🗌 Majo	r CAR 🛛 Minor CAR	X Observation
FMU CAR/OBS issued t	:o (when more than one FMU):	
Deadline	Pre-condition to certification 3 months from Issuance of Next audit (surveillance or n X Other deadline (specify):	n Final Report re-evaluation)
FSC Indicator:	6.5.c	

Non-Conformity (or Background/Justification in the case of Observations): Indicator 6.5.c requires that "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." The DoF rutting guidelines designed to protect soil resources allow for continued hauling and skidding as long as the ruts can be smoothed so that they do not exceed 18" in depth. This guideline alone may not be effective at preventing root damage, changes in hydrology, and compaction that often occur when ruts are being made. Smoothing of ruts does not alleviate the root damage, compaction, and changes to hydrology associated with rutting.

DNR initiated a process in 2015 to strengthen soil compaction and rutting guidelines, which are still in draft form. Some State Forest staff have been trained regarding new expectations, but others including timber producers have not. The Observation shall be carried over to track continuing progress.

Corrective Action Request (or Observation): DOF should consider implementing revised rutting guidance that			
better protects soil ar	nd water resources.		
FME response	The Division of Forestry implemented new procedures to increase protection of soil		
(including any	and water resources. While the basic guidelines remain in place, the new		
evidence submitted)	procedures provide guidance to staff on when activities in progress exceed		
	allowable limits and action must be taken. This action can include correction of		
	issues, leaving the site until soil conditions stabilize, or finding alternate methods of		
	operating. Resource specialists work one on one with loggers in implementation of		
	new rutting guidelines (Indiana Forestry BMP Rutting Guidelines – Final 2016.docx).		
SCS review	SCS reviewed the document cited and confirmed the response offered by DoF.		
	Interviews with staff across the four State Forests inspected during the 2016 audit		
	confirmed all staff are aware of the new rutting guidelines. Interviews also		
	confirmed knowledge of content by staff foresters and implementation in the field		
	since introduction.		
	Interviews with contract harvest operators occurred in three of the State Forests		
	during the 2016 audit and these interviews confirmed that contract operators are		
	aware of, know the changes in requirements, and are implementing the new		
	guidelines. DoF has implemented revised rutting guidance and training that		
	effectively better protects soil and water resources. Thus documents, interviews		
	with forestry staff and contractors, and field inspections confirm closure of this CAR		
	is warranted.		
Status of CAR:	X Closed		
	Upgraded to Major		
	Other decision (refer to description above)		

	Finding Number: 2015.4
Select one: 🗌 Majo	or CAR Minor CAR X Observation
FMU CAR/OBS issued	to (when more than one FMU):
Deadline	Pre-condition to certification
	A months from Issuance of Final Report
	Next audit (surveillance or re-evaluation)
	LX Other deadline (specify):
FSC Indicator:	6.5.d
Justification:	in 2015 domesticated as adds, swallows main have readed (up and addin magnet warms
Although sites visited	In 2015 demonstrated good to excellent main haul roads (upgraded in recent years
to nandle more wet-w	verially these open for equestrian use (e.g., Turkey Bidge Fire Trail 201, Fey Hollow
Fire Trail/Horse Trail/	
Observation:	
Continued conformity	with this indicator could be strengthened through improvement in the maintenance
of recreational trails v	which are placed on forest access roads or fire trails, consistent with Indiana BMP
Guide page 15: "Insur	e that all erosion control and water management measures (e.g. water bars,
drainage dips, culvert	s and ditches) are working."
FME response	• The Division of Forestry incorporated a review of recreation trails into its 5 year
(including any	strategic plan which was adopted in April 2016.
evidence submitted)	• The Division of Forestry has assumed management of DNR segments of the 58
	mile Knobstone Hiking Trail in January 2016 and hired a 2 person trail
	maintenance crew to improve trails management and conditions. This trail was
	formerly managed by the DNR Division of Outdoor recreation and is primarily
	on State Forest lands (Clark State Forest, Jackson-Washington State Forest).
	A joint trail improvement project was initiated at Clark State Forest in
	September 2016 in partnership with equestrian NGOs to improve and stabilize
	Sections of the Dry Fork trail system. This is a multi-year project to improve
	trail stability and stream crossings.
SCS review	The information above was reviewed and confirmed. Horse trails inspected during
	the course of the audit were in conformance with the standard requirements. One
	norse trail, (Site 4: C6/17) sustained damage but had water bars installed to divert
	conformance. There were some concerns about future borse rider damage at this
	site but the Property Manager will continue to monitor and make repairs as
	needed
	Interviews with staff and inspections in the field demonstrated that DNR is ensuring
	that water control and management measures are being implemented in the field
	and functioning in accordance with Indiana BMPs.
Status of CAR:	X Closed
	└─┘ Other decision (refer to description above)

	Finding Number: 2015.6	
Select one: 🗌 Majo	or CAR Minor CAR X Observation	
FMU CAR/OBS issued	to (when more than one FMU):	
Deadline	 Pre-condition to certification 3 months from Issuance of Final Report Next audit (surveillance or re-evaluation) Other deadline (specify): June 30, 2106 	
FSC Indicator:	6.6.a	
Non-Conformity (or Background/Justification in the case of Observations): DNR reported use of copper sulfate for lake algae control. That product was added to the HHP list in 2015.		
Corrective Action Request (or Observation): For products added to the HHP list in 2015, either discontinue use of prohibited HHP chemicals or obtain		
FME response (including any evidence submitted)	The use of copper sulfate has been discontinued on the state forest system. Emails were sent with supporting documents.	
SCS review	Discontinued use on the state forest system was confirmed by document review and interviews with appropriate personnel. The DoF is in conformance with the requirements of this indicator.	
Status of CAR:	X Closed Upgraded to Major Other decision (refer to description above)	

		Finding Number: 2015.7
Select one: 🗌 Majo	or CAR Minor CAR X Observation	
FMU CAR/OBS issued to (when more than one FMU):		
Deadline	 Pre-condition to certification 3 months from Issuance of Final Report Next audit (surveillance or re-evaluation) Other deadline (specify): none 	
FSC Indicator:	7.2.a	

Non-Conformity (or Background/ Justification in the case of Observations):

Indicator 7.2.a. requires that 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." DoF is operating on year 7 of a 5 year Strategic Plan (2008-2013).

In early 2015, the Division of Forestry received authorization from the Executive Branch to proceed with updating the Forestry Strategic Plan. The Indiana process entailed DoF drafting the plan, review of the draft plan by the DNR Executive Office with approval to seek public input, and DoF conducting public meetings and inviting online input, which closed Oct 31. Pending actions include DoF response to stakeholder comments, adjustments to the plan and final review by the Executive Branch. Fee proposals in the plan will also be taken to the Indiana Natural Resources Commission (NRC) for approval.

Corrective Action Request (or Observation):

Continue work to complete and implement the proposed Division of Forestry Strategic Direction 2015-2019, including response to stakeholder input and final review by the DNR Executive office.

FME response	Final approval for the IDNR Division of Forestry Strategic Direction 2015-2019 has	
(including any	been obtained and the Division has been working under this plan since early	
evidence submitted)	2016. The Plan can be found on the Division's website:	
	http://www.in.gov/dnr/forestry/files/fo-	
	State Forest Strategic Plan 2015 2019.pdf. Public comments on the Plan were	
	taken until October 31, 2015, after which time the comments were taken into	
	consideration, adjustments were made to the Plan, and the comments were	
	summarized and posted on the Division's website	
	(http://www.in.gov/dnr/forestry/files/fo-Public_Input_Procedure.pdf), along with	
	the Division's response to the comments. The summary document on the website	
	gives details as to dates when the plan was announced, times and locations of	
	public meetings, and specifics as to how comments were summarized, in addition	
	to the summary of the comments and the Division's responses.	
SCS review	The Division of Forestry Strategic Direction 2015-2019, including response to	
	stakeholder input and final review by the DNR Executive office has been completed	
	and the response information provided was confirmed.	
Status of CAR:	X Closed	
	Upgraded to Major	
	Other decision (refer to description above)	

4.2.4 New Corrective Action	Requests and Observations
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	Finding Number: 2016.1
Select one: 🗌 Majo	or CAR Minor CAR X Observation
FMU CAR/OBS issued	to (when more than one FMU):
Deadline	 Pre-condition to certification 3 months from Issuance of Final Report Next audit (surveillance or re-evaluation) Other deadline (specify): none
FSC Indicator:	4.4.a (see also 4.2.b and 4.5.a)
Justification: The Compartment 4, 7 consulted with, and for potential historical fea and upcoming safety would know the well I flagging would be une closures, however his	Tract 4 field site contained an old abandoned well flagged for safety. Forester had ollowed procedures as advised, by the state archaeologist to protect the well as a ature (homestead), notified the harvester operating in the adjacent stand of the well precautions. Procedure was to flag the well and immediate surrounding so the logger location. However, there was nearby recreational trail which for the users the explained. Current Indiana state laws may only address modern wells and well torical wells should also be evaluated if needed to be rendered safe.
Observation: The FME should take whether they are mod	actions to protect users from potential hazards, including wells that are not closed dern or historical.
FME response (including any evidence submitted)	
SCS review	
Status of CAR:	Closed Upgraded to Major Other decision (refer to description above)
	Finding Number: 2016.2

Select one: 🗌 Majo	or CAR Minor CAR X Observation		
FMU CAR/OBS issued	to (when more than one FMU):		
Deadline	 Pre-condition to certification 3 months from Issuance of Final Report Next audit (surveillance or re-evaluation) Other deadline (specify): none 		
FSC Indicator:	8.1		
Justification:			
A tract inspection, Compartment 3/Tract 1, during timber sale was completed, but the inspection form was not placed into tract file in accordance with DoF procedures. Although the DNR has a well-developed timber sale inspection/monitoring process that is generally used consistently by all personnel, in the field DNR should ensure that records are retained in accordance with its procedures.			

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Observation:			
The forest owner or manager should develop and consistently implement a regular, comprehensive, and			
replicable written mo	nitoring protocol, consistent with the scale and intensity of management.		
FME response			
(including any			
evidence submitted)			
SCS review			
Status of CAR:	Closed Upgraded to Major Other decision (refer to description above)		

5. Certification Decision

Certification Recommendation				
FME be awarded FSC certification as a "Well-				
Managed Forest"	Yes X No			
The SCS evaluation team makes the above recomm	endation for certification base	d on the full and		
proper execution of the SCS Forest Conservation Pr	ogram evaluation protocols. If	certification is		
recommended, the FME has satisfactorily demonstr	ated the following without exe	ception:		
FME has addressed any Major CAR(s) assigned durin	ng the evaluation.	Yes X No		
FME has demonstrated that their system of manage	ement is capable of ensuring	Yes X No		
that all of the requirements of the applicable stand	ards (see Section 1.6 of this			
report) are met over the forest area covered by the	scope of the evaluation.			
FME has demonstrated that the described system c	f management is being	Yes X No		
implemented consistently over the forest area cove	red by the scope of the			
Commente:				
The results of the 2016 recertification audit unambi	guously warrant the continua	ace of Indiana DNR's		
FSC-FM certification for its management of the Indiana state forests. DNR personnel interviewed				
during the audit consistently demonstrated a high level of commitment to forest stewardship of the				
state lands under their management despite funding challenges and difficulties.				
The following commendations substantively support the positive outcome of this year's recertification				
audit:				
1. DNR personnel interviewed during the field audits demonstrated silviculture and forest management				
planning clearly designed for long-term sustainability and value of forest benefits for future				
generations.				
2. UNK personnel interviewed during field audits demonstrated thorough and consistent knowledge of				
KIE procedures, reinforced by specific related trainings on the subject matter.				
3. The Tract Management Guide and forest inventory process provide exemplary information regarding				
The denth and breadth of knowledge and access to relevant DoF program personnel provided by the				
Certification Coordinator and the State Forester	were exemplary.			

SECTION B - APPENDICES (CONFIDENTIAL)

Appendix 1 – Current and Projected Annual Harvest for Main Commercial Species

Current and recent trends in overall "Timber Sale Volumes Sold in the Past Ten Years" is shown in Appendix 5, Indicator 5.6.b.

DoF current harvest target is 14 mmbf, which is approximately 50% of growth. The current growth estimate is based on 3 methods: 1) 50 FIA plots on state forests from which growth can be calculated, 2) 2005 system-wide inventory is compared to the inventories done in the 1980s and 3) Increment borings were collected during the 2005 System Wide Inventory (SWI) and growth was estimated using the Burrel-Ashley system. All 3 estimates of net annual growth are about 28 million bf;

The overall harvest goal (projected) for the system (14 mmbf) is allocated proportionally to the properties based on standing volume percentages, with adjustments for special situations such as variations driven in large part by forest health issues. Allowable cut is based on previous growth/yield data as described above and is allocated to each forest based on the 2005 System Wide Inventory figures with the intent being to not over harvest any particular forest. These figures are then adjusted based on special circumstances such as the need for salvage cuts (e.g., salvage after tornado on Clark State Forest).

Appendix 2 – List of FMUs Selected for Evaluation

X FME consists of a single FMU

FME consists of multiple FMUs or is a Group

Appendix 3 – List of Stakeholders Consulted

List of FME Staff Consulted

Name	Contact Information	Consultation method
Jim Allen	DoF Forestry staff contact	Opening/Closing meetings, Field Interviews
AJ Ariens	information is available by	Opening/Closing meetings, Field Interviews
Laurie Burgess	directory search here,	Opening/Closing meetings, Field Interviews
Robert Duncan	https://in.gov/core/find_pers on.html.	Opening/Closing meetings, Field Interviews
Dan Ernst		Opening/Closing meetings, Field Interviews
Bill Gallogly		Opening/Closing meetings, Field Interviews
Scott Haulton]	Opening/Closing meetings, Field Interviews
Brenda Huter		Opening/Closing meetings, Field Interviews
John Friedrich		Opening/Closing meetings, Field Interviews
Phil Jones		Opening/Closing meetings, Field Interviews
Duane McCoy		Opening/Closing meetings, Field Interviews
Derrick Potts		Opening/Closing meetings, Field Interviews
David Ramey		Opening/Closing meetings, Field Interviews
Jonathan Roales		Opening/Closing meetings, Field Interviews
John "Jack" Seifert]	Opening/Closing meetings, Field Interviews

Sean Sheldon	Opening/Closing meetings, Field Interviews
Steve Siscoe	Opening/Closing meetings, Field Interviews
Michael Spalding	Opening/Closing meetings, Field Interviews
Ruthie Speas	Opening/Closing meetings

List of other Stakeholders Consulted

Name	Organization	Contact Information	Consultation method	Requests Cert. Notf.
Stant, Jeff	Executive Director,	Jeff Stant	Email, survey,	Y
	Indiana Forest	<jeff@indianafores< td=""><td>phone interview</td><td></td></jeff@indianafores<>	phone interview	
	Alliance	talliance.org>		
Schnapp, Rae	Indiana Forest	Rae Schnapp	Email, phone	Y
	Alliance	<rae@indianaforest< td=""><td>interview</td><td></td></rae@indianaforest<>	interview	
		alliance.org>		
Kerry Steiner	Indiana Native	100 North Senate	Email	N
	American Indian	Avenue, Room		
	Affairs Commission	N300, Indianapolis,		
		IN 46204		
		317.234.4887		
Allen Pursell	The Nature	812-737-2087	Phone interview	Y
	Conservancy			

Appendix 4 – Additional Evaluation Techniques Employed

Refer to Appendix 7, which includes a detailed description and review of DOF's High Conservation Value Forest identification and classification process. Appendix 8 serves a similar function for socioeconomic impacts.

Appendix 5 – Certification Standard Conformance Table

C= Conformance with Criterion or Indicator *C/NC*= Overall Conformance with Criterion, but there are Indicator nonconformances *NC*= Nonconformance with Criterion or Indicator *NA*= Not Applicable

REQUIREMENT	C/NC	COMMENT/CAR
Principle #1: Compliance with Laws and FSC Principle Forest management shall respect all applicable laws treaties and agreements to which the country is a si	country in which they occur, and international , and comply with all FSC Principles and Criteria.	
1.1 Forest management shall respect all national and	С	
local laws and administrative requirements.		
1.1.a Forest management plans and operations	С	2016:
demonstrate compliance with all applicable federal,		DoF remains in conformance with all applicable legal
state, county, municipal, and tribal laws, and		requirements. DoF continues to works proactively with US Fish and Wildlife Service to to ensure

<i>administrative requirements</i> (e.g., regulations). Violations, outstanding complaints or investigations are provided to the <i>Certifying Body</i> (CB) during the annual audit.		compliance with the ESA for both the Indiana bat and northern long-eared bat. There have been no changes to the status of outstanding complaints or investigations. DoF is a unit of the Department of Natural Resources, a state agency within the executive branch of the Indiana state government. DoF reported that a notice of intent to sue issued on May 25, 2011 by an environmental NGO, but that no follow-up action on the NGO's part has occurred.
1.1.b To facilitate legal compliance, the <i>forest owner</i> or <i>manager</i> ensures that employ.5.byees and contractors, commensurate with their responsibilities, are duly informed about applicable laws and regulations.	С	2016: Verified DoF Timber Sale Agreement references to OSHA requirements, compliance with federal/ state/ local laws, discrimination, BMPs, wet weather access, fire prevention and control, etc.
1.2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.	С	
 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. 1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO 	C	2016: Verified through interviews and records that DoF is paying 15% of net timber sale proceeds to the county from which the timber sale originated. IC 14-23-4-5& 6 requires the Division to return to counties from where timber was sold 15 percent of the net timber sales receipt as well as a maximum of \$1,000 unless the county legislative body allows more to fire departments that have an agreement with the Division.
Conventions, ITTA, and Convention on Biological Diversity, shall be respected.		
1.3.a. Forest management plans and operations comply with relevant provisions of all applicable binding international agreements.	C	2016: In the State of Indiana, there is one forest species covered under CITES, <i>Panax quinquefolius</i> or American ginseng. In the United States, each state is responsible to regulating the commercial sale of this CITES-listed species. Commercial harvest of ginseng is regulated through the <i>Indiana Administrative Code</i> , <i>Title 312, Article 19 Research, Collection, Quotas, and</i> <i>Sales of Plants</i> , and <i>Indiana Code IC 14-31-3, Chapter</i> <i>3. Ginseng</i> . Commercial harvesters and sellers must obtain permits and licenses through the State of Indiana and adhere to harvesting practices intended to maintain the ginseng resource.

		ITTA is not applicable. Federal and State regulations, such as the Endangered Species Act, are intended to address issues of biodiversity, such as RTE species. ILO Conventions that the US has ratified are met through federal and state laws. Convention 87 applies
		to both public and private organizations, while Convention 98 is inapplicable to government organizations.
1.4. Conflicts between laws, regulations and the FSC	С	
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.		
1.4.a. Situations in which compliance with laws or	С	2016:
regulations conflicts with compliance with FSC		Confirmed that DoF is aware of requirement to raise
Principles, Criteria or Indicators are documented and		any conflicts between laws and FSC Principles to SCS.
referred to the CB.		
1.5. Forest management areas should be protected	С	
from illegal harvesting, settlement and other		
unauthorized activities.		
implements measures intended to prevent illegal and unauthorized activities on the <i>Forest Management</i> <i>Unit</i> (FMU).		 Evidence of conformance includes: Active marking of property boundaries with all boundaries painted approximately every 5 years. For properties where boundary is uncertain, DoF works with surveyor to establish boundary. DoF gates access roads. ATV's are prohibited on State Forests, except for disabled hunters. DoF maintains a "good neighbor database" and invites the public to yearly open houses. DoF maintains a close working relationship with Law Enforcement. DoF does a good job posting state forest regulations and trail closures. Through interviews, document review, and field inspection the auditors confirmed all of the above occurring on the Yellowwood, Morgan Monroe, Owen-Putnam, and Greene-Sullivan State Forests during the 2016 audit.
		To ensure that State Forest timber harvests are aboveboard, post-sale audits are used to count stumps and verify that the final harvest conformed to the sale contract. Ten percent of closed sales are

		inspected annually in audits. The audits are intended to deter illegal harvest and avoid any allegations that foresters might be allowing loggers to take additional trees on the side. The 2016 Stump Audit report is available here, <u>https://in.gov/dnr/forestry/files/fo- Stump_Audit_Report-2016.pdf</u> .
		DoF works closely with law enforcement officers to curtail illegal activities. No signs of significant illegal activities were found at the sites visited during the 2016 audit.
		DNR does allow some exceptions to access regulations. Notably for allowing disabled access via motorized vehicles in designated non-motorized area for recreational hunting.
		DNR's Law Enforcement Division (LED), <u>https://secure.in.gov/dnr/lawenfor/</u> , employs conservation officers who serve the public and protect the natural heritage of the state of Indiana. The division operates 10 law enforcement districts throughout the state. The Law Enforcement Division is Indiana's oldest state law enforcement agency, and one of the most diverse.
		The Law Enforcement Division also has an Investigations Section. These investigations are primarily focused on exploited or commercialized wildlife. They use a variety of techniques including specialized surveillance and undercover operations.
		Interviews with forestry staff in 2016 confirm that LED works in close cooperation to protect the state's natural resources from unauthorized and illegal use.
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.	С	2016: DoF works closely with law enforcement officers to curtail illegal activities. No signs of significant illegal activities were found at the sites visited during the 2016 audit. No ATV activity was observed during the assessment. DoF attempts to deal with unauthorized horse trails by hindering entrances to them and repairing existing authorized trails. Morgan-Monroe, Owen-Putnam and Greenwood- Sullivan State Forests had horse trails inspected during the 2016 audit. All were in conformance with the standard. The Owen-Putnam trail had sustained

		damage on a portion of the trail near a creek. Water
		bring the trail into conformance.
1.6. Forest managers shall demonstrate a long-term	С	
commitment to adhere to the FSC Principles and		
Criteria.		
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.	С	2016: DoF has made a public commitment to manage the state forests in conformance with the FSC Principles & Criteria. Language was updated in 2012 and is available here, <u>http://www.in.gov/dnr/forestry/files/fo- FSC_letter.pdf</u> .
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.	С	2016: DoF includes the entirety of the state forest FMU within the scope of the FSC certificate. Additionally, DoF manages a separate FSC certificate of non- industrial timber lands through the Classified Forest Program.
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.	С	2016: DoF has not experienced any significant changes in ownership or management during the past year. DoF understands the requirement to notify SCS of any significant change.
Principle #2: Long-term tenure and use rights to the land legally established.	and for	est resources shall be clearly defined, documented and
2.1. Clear evidence of long-term forest use rights to the	С	
land (e.g., land title, customary rights, or lease		
agreements) shall be demonstrated.		
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.	C	2016: DoF was established through legislation in the 1920s. The ownership of State Forests can be verified through county records and at the central office. DoF tracks legal ownership through State Land Office with online GIS mapping system and deed links for each parcel. Internally, DoF has a managed-land database.
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.	C	2016: Lease agreements are maintained at the DoF Central Office and are the responsibility of John Friedrich. On previous visits to Central Office SCS auditors have found lease agreements to be well documented.

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.	С	2016: DoF is taking significant actions to reduce the risk of unauthorized activities by periodically (5 years) reviewing all property boundaries which may include repainting or marking of lines. DoF maps include property boundaries and information on other use rights (e.g., rights-of-way). These maps are prepared during the planning phase prior to timber sales and other contracted management activities going out to bid. Timber sales visited in 2016 audit with external boundaries were marked.
2.2. Local communities with legal or customary tenure	С	
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.		
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.		
2.2.a The forest owner or manager allows the exercise	С	2016:
of <i>tenure</i> and <i>use rights</i> allowable by law or regulation.		lenure and use rights are well respected by DoF.
		Customary recreational uses are accommodated and managed in an exemplary manner. Observed numerous examples of recreational uses being promoted, made accessible, and improved for use by future generations.
2.2.b In FMUs where tenure or use rights held by	С	2016:
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		The primary mechanism for consulting with concerned and affected stakeholders is an annual open house.
benefits of such rights.		Good neighbor letters are sent prior to timber harvests per page P-5
		http://www.in.gov/dnr/forestry/files/manual/fo-P.pdf.
		This was confirmed by review of 2016 documents
		provided upon request by state forester. Interviews
		with staff in 2016 confirm consistent knowledge of, and routine use of these letters.
		Considerable efforts are made to get attendance at
		the open house, such as drawings, free food, free
		saplings, and education.

		Confirmed through interviews with DoF staff that they maintain regular contact with permittees and other people with rights to use of resources on the FMU.
2.3. Appropriate mechanisms shall be employed to	С	
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.		
2.3.a If disputes arise regarding tenure claims or use	С	2016:
rights then the forest owner or manager initially		DoF maintains an open door policy both at the level of
attempts to resolve them through open		the central office and each state forest. Confirmed
communication, negotiation, and/or mediation. If		open door policy is used at Yellowwood, Owen- Butnam, Morgan, Monroe and Green, Sullivan State
these good-faith efforts fail, then federal, state,		Forests during the 2016 audit
and/or local laws are employed to resolve such		DoF staff regularly check boundaries for timber sales
disputes.		that abut other ownerships. Additionally, they apply a
		no-harvest buffer zone to these types of sales.
2.3.b The forest owner or manager documents any	С	2016:
significant disputes over tenure and use rights.		DoF tracks legal ownership and boundary disputes
		through the State Land Office. Most issues deal with
		lines or other utilities or residential uses (examples:
		gardens, yards, dog houses, sheds) into state lands.
Principle #3: The legal and customary rights of indigenou	s people	s to own, use and manage their lands, territories, and
resources shall be recognized and respected.	1	
3.1. Indigenous peoples shall control forest	NA	
management on their lands and territories unless they		
delegate control with free and informed consent to		
other agencies.		
3.1.a Tribal forest management planning and	NA	The FMU does not include any tribal lands or
implementation are carried out by authorized tribal		enterprises, as confirmed in record review in C2.1.
representatives in accordance with tribal laws and		
customs and relevant federal laws.		
3.1.b The manager of a tribal forest secures, in	NA	The FMU does not include any tribal lands or
writing, informed consent regarding forest		enterprises.
management activities from the tribe or individual		
forest owner prior to commencement of those		
activities.		
3.2. Forest management shall not threaten or diminish,		
either directly or indirectly, the resources or tenure		
rights of indigenous peoples.		

 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. 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. 	C	 2016: The DoF sends letters to both federally recognized and unrecognized tribes with ancestral connections to the State of Indiana. For additional, new efforts see closing of OBS 2015.1 and 3.3.a of this report. 2016: DoF continues to identify and protect archeological sites on DoF lands. In 2016, DoF identified and appropriately documented several sites as confirmed by documentation review and interviews with staff foresters and Forestry Archeologist. Forestry staff made available documentation for pre-management activity reviews for all sites visited during the audit (see Audit Itinerary for detailed listing of Compartment/Tracts and State Forests visited). In all case, with no exceptions, these reviews were completed prior to commencement of management activities.
3.3. 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.	С	
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.	C (OBS)	 2016: In 2015 an Observation was issued regarding this indicator. The following was investigated and confirmed during the 2016 audit. The DNR holds a position on the Indiana Native American Indian Affairs Commission (INAIAC). Established under Indiana Code 4-23, the Commission meets quarterly to discuss, study, and make recommendations to the appropriate federal, state, and local governmental agencies in areas of concern of the State's Native and non-Native people and communities. Currently the Commission includes seventeen individuals (8 representing various Native Tribes/Nations, 7 representing State agencies, the Present Pro Tempore appointee, and the Speaker of the House appointee). The objective of the Commission is to bring together Native communities, to assist in identifying and providing opportunities to the community, and to enhance social, cultural, community, and economic development in Indiana. The Director of the DNR is one of the members of the Commission. The Division of Forestry will work through the Commission to seek guidance in regards

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).	C	to consultation with tribal representatives when circumstances are brought to the Division's attention concerning known sites of current or traditional cultural, archaeological, ecological, economic, or religious significance. The Commission also thus serves as a means for Native American tribes or individuals to express concern or interests to the DNR regarding the Division's activities, procedures, and/or land holdings. SCS staff reviewed and confirmed The Indiana Native American Indian Affairs Commission (INAIAC) was established by Section 3 of Chapter 32 under Indiana Code 4-23. (A copy of this statute may be found here, <u>http://in.gov/inaiac/files/INAIAC_IC_4-23-32.pdf</u> .) Additional information regarding links to upcoming events, resources, news releases, public meetings, information about the Commissioners may be found on the INAIAC website, <u>http://in.gov/inaiac/2345.htm</u> . Minutes for 2016 meetings were reviewed and confirmed that the Director of the Indiana DNR attended these meetings. Direct consultation with relevant Native American organization confirm organizations have found adequate opportunities to express concerns or interests to the DNR. 2016: If notices or consultation with tribal groups yields no protective information, the DoF has developed protection measures for areas of special significance in the absence of protection measures provided for archaeological sites by tribal representatives. The definition and process for protection of cultural
		Minutes for 2016 meetings were reviewed and
		confirmed that the Director of the Indiana DNR
		attended these meetings. Direct consultation with
		relevant Native American organization confirm
		organizations have found adequate opportunities to
	C.	express concerns or interests to the DNR.
3.3.b In consultation with tribal representatives, the	C	2016: If notices or concultation with tribal groups yields no
forest owner or manager develops measures to		protective information, the DoF has developed
protect or enhance areas of special significance (see		protection measures for areas of special significance
also Criterion 9.1).		in the absence of protection measures provided for
		archaeological sites by tribal representatives.
		The definition and process for protection of cultural
		http://www.in.gov/dpr/forestry/files/manual/fo-
		M.pdf.
		Projects are submitted to the state Forestry
		Archaeologist using this form,
		http://www.in.gov/dnr/forestry/files/manual/fo-II-M-
		<u>1.pu</u> . Additional forms and procedures relevant to protection of special areas may be found on the state
		forestry procedures manual page here.
		http://www.in.gov/dnr/forestry/5197.htm
3.4. Indigenous peoples shall be compensated for the	NA	
application of their traditional knowledge regarding the		
use of forest species or management systems in forest		
use of forest species or management systems in forest operations. This compensation shall be formally agreed		
use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before		

3.4.a The forest owner or manager identifies whether	NA	DUF does not employ any traditional knowledge in its
<i>traditional knowledge</i> in forest management is being		EMP and field level management practices
used.		This and held-level management practices.
3.4.b When traditional knowledge is used, written	NA	DOF does not employ any traditional knowledge in its
protocols are jointly developed prior to such use and		forest management.
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	NA	DOF does not employ any traditional knowledge in its
confidentiality of tribal traditional knowledge and		forest management.
assists in the protection of such knowledge.		
Principle #4: Forest management operations shall mainta	in or enl	nance the long-term social and economic well-being of
forest workers and local communities.		
4.1. The communities within, or adjacent to, the forest	С	
management area should be given opportunities for		
employment, training, and other services.		
4.1.a Employee compensation and hiring practices	С	2016:
meet or exceed the prevailing <i>local</i> norms within the		DoF employment is managed under state laws and
forestry industry.		regulations by the Indiana State Personnel
		Department (SPD). The agency's mission, values,
		benefits, compensation determination, etc. are
		described online. Regarding wages, see observation,
		DEIOW III 4.1.C.
		The Indiana public employee handbook provides
		detailed information.
4.1.b Forest work is offered in ways that create high	С	2016:
quality job opportunities for employees.		Interviews with staff during 2016 site visits indicate
		that DoF has a good mentoring program for new hires,
		including frequent interaction with central office
		personnel. The DoF forestry community is supportive.
		Foresters are provided with many training
		send staff to in-state training events. Forestry science
		and management training is supported at the highest
		levels of the DoF in support of protecting and
		managing forest resources. Training records were
		provided during the 2016 audit for forestry staff in
		Yellowwood, Morgan-Monroe, Owen-Putnam, and
		Greene-Sullivan State Forests.
4.1.c Forest workers are provided with fair wages.	С	2016:
		The State pay plan for Forester 2 and Forester 3
		Positions were reviewed by the Indiana State Personnel Department in 2016. The finding supported
		and resulting in an increase of the nav range for these
		positions. The pay range was increased approximately

		 15%. Pay of existing employees was increased to the new base pay level or 3%, whichever was greater. These pay increases went into effect in September 2016. Property manager and upper staff compensation was not part of the State Personnel Department review. SCS auditor examined relevant documents and confirmed these changes that improved pay and benefits in support of continued conformance to this indicator. See closing of OBS 2015.2 for additional detail.
4.1.d Hiring practices and conditions of employment are non-discriminatory and follow applicable federal, state and local regulations.	C	 2016: DOF's timber sale contract, item 20, includes a statement that contractors must conform to non-discriminatory policies in accordance to applicable federal and state laws. "4A TSI Bid-Contract under \$75,000" item 16 includes a requirement on nondiscrimination. Federal and State hiring and civil rights postings were observed in the State Forest offices. DOF uses the <u>E-Verify</u> system to do background checks on new employees for compliance with Homeland Security. There have been no discrimination reports in recent years. DOF must abide by federal and state laws when hiring new workers. For example, IC 22-9-2 covers age discrimination. The state government agency, the Indiana Civil Rights Commission (http://www.in.gov/icrc/) handles cases of discrimination and states that in Indiana: The people of Indiana are entitled by law to work and seek employment without being discriminated against on the basis of their disability (physical or mental), national origin, ancestry, race, color, religion and gender. An employee or an applicant for employment may file a complaint when: The alleged discriminatory act occurred within the past 180 days An employer or potential employer has six or more employees
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.	С	2016: The State of Indiana purchases goods and services from the lowest responsive and responsible bidder. Impacting the determination of "responsive and responsible" are a number of factors, including Executive Orders and statute-mandated preferences.

l II	n addition to the Buy Indiana. OneIndiana and Indiana
V	/eteran's Business Enterprises program, which
	preferences Indiana husinesses the state has set
۲ م	to als to promote minority and women's husiness
5	enterprise participation on state contracts. These
	proforences plus others are outlined in a
μ	plicitation's hid package
S	olicitation's did package.
۲ ۲	Additionally, the state is required to purchase goods
	rom Indiana's State Use Program (A program of the
	ndiana Association of Renabilitation Facilities) and
P	PEN (Prison Enterprise Network) Products when these
V	rendors are able to provide products to State
S	pecifications.
Т	hese initiatives are impacting the way the state is
d	designing bid packages and the way those bid
r	responses are evaluated
C	DneIndiana : Effectively leverage the State's
p	ourchasing power to create savings for taxpayers. By
С	combining and streamlining purchase activities, the
S	State can achieve lower pricing and better value on
С	commonly purchased goods and services.
В	Buy Indiana: Increase the amount of each State
a	purchasing dollar that is spent with Indiana companies
t	o \$0.90.
Т	The Minority and Women's Business Enterprises
C	Division (MWBE) acts on behalf of the State of
li	ndiana to actively promote, monitor and enforce
t	he standards for certification of minority and
v	vomen's business enterprises
h	ndiana Veteran's Business Enterprises: Sets a goal
f	or the Indiana Department of Administration (IDOA)
t	o procure at least 3 percent of state contracts with
li	ndiana veteran-owned small businesses (IVBEs).
T	The <u>Indiana State Use Program</u> is a preferential
p	ourchasing program that provides employment
С	opportunities to people with disabilities
а	and encourages state, county and other units of
g	government to purchase products and services from
а	approved State Use vendors without competitive
b	pidding.
<u>P</u>	PEN Products (Prison Enterprises
Ν	Network) manufactures goods and provide services
u	using labor through Indiana's prison industries.
	Most timber cales are surplaced by contractors with its
	viosi uniber sales are purchased by contractors within

		DoF completes many construction projects with
		Prison Enterprises laborers.
4.1.f Commensurate with the size and scale of	С	2016:
operation, the forest owner or manager provides		The DNR provides a series of videos online here,
and/or supports learning opportunities to improve		https://www.youtube.com/user/idnrvideos.
public understanding of forests and forest		DOF makes significant contributions to the public
management		education, such as: Active participation in local Project
mendgement.		Learning Tree programs; hosting numerous logger
		training sessions (e.g., Game of Logging or GOL); DOF
		has established forestry research/demonstration
		http://www.boofgroststudy.org/
		The DoE participates in a variety of programs such as
		nublic field days, the Forest Management for Private
		Woodland Owners course organized by Purdue
		University. Master Naturalist classes. Indiana
		Conservation Officer Camp, and presentations to
		various groups.
		During 2016 field site visits, the auditor observed
		interpretive displays and self-guided forestry trails.
		In addition to enforcing state laws, Indiana
		conservation officers are active in a variety of non-law
		enforcement activities, such as outdoor education
		tranner, Karl Kelley Youth Camp, and the Becoming
		an Outdoors Woman programs
		Logging education and training actively provided
		opportunities for natural resource contractors to learn
		more about and understand objectives and
		requirements for managing state lands. These
		trainings are tracked through the Indiana Logger
		Training Database,
		http://www.in.gov/dnr/forestry/9317.htm, There is a
		dedicated logger training coordinator and
		administrator of the database who also conducts
		Internal BIVIP field conformance and uses those results
		no morn both logger and internal lorester training
		Finally DoE maintains a website
		http://www.in.gov/dpr/forestry/3605.htm_that
		provides a variety of forestry publications and
		presentations.
4.1.g The forest owner or manager participates in	С	2016:
local economic development and/or civic activities.		DOF makes substantial contributions to the local
based on scale of operation and where such		economy. Payments in Lieu of Taxes (set at 15% of net
		timber sales) are an important source of revenue for

opportunities are available.		many towns. Additionally, forest managers make attempts to purchase goods and services locally, such as servicing vehicles locally or purchasing materials from local businesses. Furthermore, the state forests provide a number of excellent recreation opportunities. Recreation constitutes a significant portion of economic activity during certain times of the year in many small rural communities. The document, "Indiana's Hardwood Industry: It's Economic Impact", by Robert M. Swain, Blue River Consulting, 2016 reports a variety of economic statistics for Indiana. Figures included in this report are that \$147,042,438 was paid to land owners for timber. For every \$1 paid to the landowner for timber, \$26.43 of value was added to the final product. Direct employment of 38,401 people in Indiana and indirect employment accounted for 91,745 additional jobs. Annual wages resulting from Indiana's hardwood industry are estimated to be around \$1.2 billion, generating an estimated \$43 million in state and \$12.7 million in local payroll taxes Forest products are Indiana's 4th largest manufacturing sector.
4.2. Forest management should meet or exceed all	С	
applicable laws and/or regulations covering health and	_	
safety of employees and their families.		
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).	С	 2016: DoF takes active steps to ensure safety, such as: safety inspections from a DNR Safety Officer occur at each state forest; safety meetings take place once per month; safety training classes are offered, e.g., chainsaw safety for DoF employees; DoF provides insect repellant and safety boots for staff; DoF is an active support of logger education in Indiana. During 2016, auditor observed DoF employees conforming to relevant safety protocols, interviews confirmed staff are knowledgeable and find the steps above to be routine. The Indiana Occupational Safety and Health Administration (IOSHA) is dedicated to ensuring workplace safety and health. IOSHA's Whistleblower Protection Unit works to maintain the integrity of the Indiana Occupational Safety and Health Act by

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.	C	protecting the rights that law gives to employees. Among these rights are the ability to file, without reprisal, safety and health complaints with a government agency or company management and the freedom to participate in an IOSHA inspection. 2016: DoF's timber sale agreement (4A Timber Sale Agreement includes several items related to safety (see items 12, 13, 15, 16, 18, and 19), http://www.in.gov/dnr/forestry/files/manual/fo-II-G- 2.pdf. The TSI contract (4A TSI Bid-Contract under \$75,000) includes a section on compliance with all applicable federal, state, and local laws, which includes OSHA safety requirements.
4.2.c The forest owner or manager hires well-qualified service providers to safely implement the management plan.	С	2016: DoF's timber sale agreement, see 4.2.b above, requires that at least one logger on each job site have at least complete Game of Logging (GOL) Level 1 training, and Best Management Practices (BMPs). Logger interviews during 2016 audit confirmed that harvest contractors are aware of, able to report specific trainings, and other elements of safety related requirements. At active logging jobs staff foresters were able to provide training records of operators immediately upon request. Auditors also confirmed these records are available in a database maintained and available online here, <u>http://www.in.gov/dnr/forestry/9317.htm</u> .
4.3 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	С	
4.3.a Forest workers are free to associate with other workers for the purpose of advocating for their own employment interests.	C	2016: The right for workers to freely associate and unionize is clearly protected by U.S. and Indiana law. ILO Convention 98, however, does not apply to public sector workers. Under U.S. Federal Law and consistent with ILO 98, public sector employee rights are established by the U.S. Congress for federal employees and by state legislatures for state, county and local public sector employees. The right to organize is outlined in IC 22-7 (accessed Oct 31, 2015). Indiana passed a right-to-work law ending mandatory union dues in 2012, when 22.8 percent of Indiana's government workers were union members. By 2014,

		the Indiana State's government union membership
1.2 b The forest evener or manager has effective and	C	rate had increased to 25.5 percent.
4.5.0 The follest owner of manager has effective and culturally sensitive mechanisms to resolve disputes	C	The Indiana Civil Service complaint procedure is
between workers and management		enacted at <u>IC 4-15-2.2-42</u> . Employees in the state civil
		service, except those appointed by the governor, may
		file a complaint concerning the application of a law,
		identify the law rule or policy allegedly violated the
		facts supporting the allegation, and the remedy the
		employee is requesting.
		A dispute procedure is outlined in 4A TSI Bid-Contract
		under \$75,000. For the timber sale contract (4A
		Timber Sale Agreement), there is no specific language
		on dispute resolution other than reference to bringing
		disagreement.
4.4. Management planning and operations shall	С	
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.		
4.4.a The forest owner or manager understands the	С	2016:
likely social impacts of management activities, and		social impacts and incorporate into management.
incorporates this understanding into management		1. Ongoing archeological review of projects.
effects on:		2. Open houses for public to review planned
 Archeological sites and sites of cultural, historical 		
o ,		management.
and community significance (on and off the FMU;		management.3. Posting of management plans for public review on website.
and community significance (on and off the FMU;Public resources, including air, water and food		management.3. Posting of management plans for public review on website.4. Timber sales are offered at different scales
 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and investing another businesses.
 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); Aesthetics; 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. Public resources including air water and soil
 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); Aesthetics; Community goals for forest and natural resource 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. Public resources, including air, water, and soil, have been evaluated for both 'direct' and
 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); Aesthetics; Community goals for forest and natural resource use and protection such as employment, 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. Public resources, including air, water, and soil, have been evaluated for both 'direct' and 'indirect' effects of management activities as well
 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); Aesthetics; Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health; 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. Public resources, including air, water, and soil, have been evaluated for both 'direct' and 'indirect' effects of management activities as well as the cumulative effect of said activities on these
 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); Aesthetics; Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health; Community economic opportunities; 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. Public resources, including air, water, and soil, have been evaluated for both 'direct' and 'indirect' effects of management activities as well as the cumulative effect of said activities on these public resources. The results of this analysis are located within the 2008 Environmental
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 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); Aesthetics; Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health; Community economic opportunities; Other people who may be affected by management operations. 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. Public resources, including air, water, and soil, have been evaluated for both 'direct' and 'indirect' effects of management activities as well as the cumulative effect of said activities on these public resources. The results of this analysis are located within the 2008 Environmental Assessment (EA) document.
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 and community significance (on and off the FMU; Public resources, including air, water and food (hunting, fishing, collecting); Aesthetics; Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health; Community economic opportunities; Other people who may be affected by management operations. A summary is available to the CB. 		 management. Posting of management plans for public review on website. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. Public resources, including air, water, and soil, have been evaluated for both 'direct' and 'indirect' effects of management activities as well as the cumulative effect of said activities on these public resources. The results of this analysis are located within the 2008 Environmental Assessment (EA) document. The 2015 Indiana Forestry Strategic Directions planning documents and process address social impacts

14 h The forest owner or manager socks and	C	2016.
A.A.D The follest owner of manager sets and		State Forest planning documents and resource
considers input in management planning from people		management plans are open to public comment for at
who would likely be affected by management		least 30 days prior to finalization. Additionally, DoF
activities.		holds several public meetings and open houses
		throughout the state each year to solicit and address
		public comments.
		The following were examined during the 2016 audit:
		1. For the Indiana Division of Forestry Strategic Plan,
		http://www.in.gov/dnr/forestry/files/fo-
		<u>State Forest Strategic Plan 2015 2019.pdf</u> :
		Public Plan Input Process: The DoF goal is update
		the strategic plan approximately every 5
		years. The DoF has a public input procedure,
		https://in.gov/dnr/forestry/files/fo-
		<u>Public_Input_Procedure.pdi</u> that describes the
		provided detailed formats, public meetings, online
		access and other means by which the public could
		provide input for the proposed strategic plan. The
		2016 auditors confirmed this process was
		followed. DoF also provided a summary of
		comments, and responses.
		2. The State Forests hold Open Houses : The
		properties provide information about upcoming
		property projects including timber sales. Guests
		can ask questions and/or provide comment
		directly to property staff. Comment cards are also
		available for people who prefer to provide a
		written statement or comment. Forestry staff will
		respond to specific questions. Dor provided for
		Houses "2016OpenHouseRelease dos" These
		schedules are nosted online once approved. The
		2015, and past open house schedules to 2006 are
		provided here.
		http://www.in.gov/dnr/forestry/3644.htm
		3. Forest Stewardship Coordinating Committee: At
		least once a year the Forest Stewardship
		Coordinating Committee convenes. Description of
		this group is here,
		<u>http://in.gov/dnr/forestry/6252.htm</u> The annual
		meeting is open to all groups with an interest in
		the forests of Indiana. The meeting attracts
		representatives from a range of organizations:
		professional forester groups, trail groups,
1	1	environmental groups, wildlife groups, state and

4.4.c People who are subject to direct adverse effects		 federal agencies. Topics for the meetings vary, but there is always time for groups to report on activities they are planning or items of concern. The DoF provided the agenda from the most recent committee meeting, "stewardship mtg 9-2016.pdf". The group information and meetings times/locations are listed here, <u>http://www.in.gov/dnr/forestry/6252.htm</u>. 4. The Division of Forestry also has a place to ask questions or provide comment on our website: <u>http://www.in.gov/dnr/forestry/2856.htm</u>. Whe n comments are received, they are forwarded to the appropriate staff member to respond. If you would like a particular example, let me know and I will provide. Finally, each State Forest property page provides an email address as well as a property-specific newsletter. For example, the Owen-Putnam property page may be found here, <u>http://www.in.gov/dnr/forestry/4815.htm</u>. 2016:
of management operations are apprised of relevant	C	There are two principal ways that people are apprised
activities in advance of the action so that they may		of relevant activities: 1) timber sales & state forest
express concern.		management guides are on the website and
		stakeholders can provide comments; and 2) Open
		nouses (at open nouse will have list of planned activities). DoE also attempts to prenare news releases
		to advertise events. For adjacent landowners, a
		notification letter or other communication on
		upcoming timber sales is a common practice. This
		letter may be found here,
A d For public foracts consultation shall include the	C	http://www.in.gov/dnr/forestry/files/manual/fo-P.pdf.
following components:	C	In Indiana, stakeholders are free to use the legal
1 Clearly defined and accessible methods for public		system to appeal planning decisions. However, DoF's
participation are provided in both long and short-		notification to adjacent landowners of upcoming
term planning processes, including harvest plans		activities, open door policies, annual open houses,
and operational plans;		and State Forest Stewardship Committee meetings
2. Public notification is sufficient to allow interested		action.
stakeholders the chance to learn of upcoming		Management planning documents, including
opportunities for public review and/or comment		upcoming timber sales, are made available to the
on the proposed management;		public online. The public can also access publications
3. An accessible and affordable appeals process to		Anyone can put in a public information request at any
planning decisions is available.		time per DoF's policy. The requests are reviewed on
Planning decisions incorporate the results of public		case by case basis. Unless there is some legal reason
consultation. All draft and final planning documents,		(RTE species, archaeological site, etc.) or the
	1	EQUILIENTED A VIALENUL EAUVIOL DUDIE COMMENT INE

 and their supporting data, are made readily available to the public. 4.5. Appropriate mechanisms shall be employed for resolving grievances and for providing fair 	C	information is typically released. There may be a cost to the requestor for copying or other document production. In general, if someone really wants a disclosable document, they will get it from DoF. Based on comments in the media, Indiana's 2015 Forestry Strategic Directions planning process that vests drafting and review in the elected Executive Branch and Governor-appointed NRC troubles some interest groups that would like more direct involvement in all phases of plan development and review. The FSC standard does not, however, prescribe the methods an organization uses for public input. As noted previously, the 2015 Forestry Strategic Directions process involved three public meetings, and DoF commitment to address stakeholder input. The State Forest schedules for open houses each year is posted online, <u>https://secure.in.gov/dnr/forestry/3644.htm.</u>
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.		
4.5.a The forest owner or manager does not engage in negligent activities that cause damage to other people.	С	2016: DOF staff regularly check boundaries for timber sales that abut other ownerships. Additionally, they apply a no-harvest buffer zone to these types of sales, where needed. SCS' stakeholder consultation uncovered no cases of negligent behavior in DOF staff. DOF also reported no pending cases of this nature. DoF staff routinely inspect campgrounds for hazardous trees and remove high risk trees. Signs are posted to warn recreational users in the vicinity of timber harvests.
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	C	 2016: DOF's notification to adjacent landowners of upcoming activities, open door policies, annual open houses, and State Forest Stewardship Committee meetings are avenues for resolving grievances prior to legal action. Also, DOF's active boundary marking is evidence of an effort to outright avoid a common type of grievance. Past audits have confirmed use of the appeals process. For example, the DoF provided an example in 2015 of a state citizen using the court appeals process.

ongoing good faith efforts to resolve the grievances, and maintains records of legal suites and claims.		to contest timber harvesting on State Forests. Case IFA v. DNR 53C06-0207-PL-01246 was first filed in 2002. The petitioner just moved to dismiss the case in September 2015.
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.	С	 2016: There has been no substantiated damage or loss of income caused by DOF. If claims are filed, they are handled by the State Attorney General and litigated accordingly. Stakeholder input received for the 2016 audit related to compensation to Counties for perceived damage to County roads. SCS will include indicator 4.5.c for focused stakeholder consultation and follow up in 2017.
Principle #5: Forest management operations shall encou services to ensure economic viability and a wide range of	rage the f environ	efficient use of the forest's multiple products and mental and social benefits.
5.1. 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	С	
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.	С	2016: DoF continues to demonstrate financial ability to implement management activities in a manner consistent with FSC standard. Despite several years of reduced funding (beginning in FY 09 with the loss of the mill tax), DoF has found ways to accomplish its management activities and strategic objectives. A very committed group of DoF employees (who have been willing to put in extra time after hours) has been key to accomplishing objectives while funding has diminished. The 2015 DoF annual report, http://www.in.gov/dnr/forestry/files/fo- DNR DoF 2015 Annual Report.pdf provides detailed information regarding Timber Sale Volume and Sale Prices, summary of timber management activities across the entire State Forest system for 2015 in comparison to prior years, Timber Sale Revenue and Costs and Revenue to Counties, and Forest Recreation Revenue,
5.1.b Responses to short-term financial factors are limited to levels that are consistent with fulfillment of this Standard.	С	2016: As reported in prior years, despite reduced budgets, DoF staff are able to implement core management

		activities to fulfill this standard with considerable
		dedication and commitment.
5.2. Forest management and marketing operations	С	
should encourage the optimal use and local processing		
of the forest's diversity of products.		
 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. 5.2.b The forest owner or manager takes measures to 	C	2016: Most timber harvesting activities are carried out by local logging contractors, who sometimes purchases sales of standing timber and market the material themselves. The group COC certificates managed by the State also allow members to market FSC-certified products. Timber stand improvement (TSI) is typically contracted to local service providers. 2016:
optimize the use of harvested forest products and explores product diversification where appropriate and consistent with management objectives.		Observed acceptable utilization at harvest sites during 2016 audit. As DoF primarily sells standing timber, it is up to the purchaser to market the product. Although there are very limited pulp wood markets in Indiana, there are generally good markets for most species of hardwood. There are typically several bidders, generally local, for each timber sale offering. The group COC certificate managed by DoF is designed to assist group members to market certified products. Common products include veneer, pallets, lumber, and furniture grade material.
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.	C	2016: A range of sale sizes are carried out in an attempt to allow successful competition by different sized operations. Ferdinand State Forest sometimes will divide a unit into separate pine and hardwood sales in order to ensure more loggers (who typically would not harvest pine) have an opportunity to bid. As part of the State of Indiana's 'Buy Indiana' initiative, every state agency takes part in trying to achieve the goal that 90 cents of every dollar is spent on goods and services provided by businesses located in Indiana.
5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.	C	
5.3.a Management practices are employed to minimize the loss and/or waste of harvested forest products.	C	2016: Utilization observed on harvest sites during the assessment was good in that mostly branches, tops and forked stems were left on site. This is particularly

		good given that there is not a strong pulp wood
		market in the state.
5.3.b Harvest practices are managed to protect	С	2016:
residual trees and other forest resources, including:		See section 2.1. Audit team observed good protection
 soil compaction, <i>rutting</i> and erosion are 		of residual trees. In the case of rare exceptions, Dof
minimized;		Comportment 10 Tract 16) Butting concerns were
• residual trees are not significantly damaged to the		only detected on one selected harvest (Compartment
extent that health, growth, or values are		1. Tracts 1, 11, 1) that had to be logged in wetter
noticeably affected;		conditions than desired because of Indiana bat
 damage to NTFPs is minimized during 		restrictions.
management activities: and		
 techniques and equipment that minimize impacts 		BMPs, contract terms, and timber sale oversight by
to vegetation soil and water are used whenever		field personnel collectively result in operations taking
feasible		place well within reasonable limits for residual stand
		as veneer foresters are sensitive to harvesting
		damage that would preclude this use if it occurred.
5.4. Forest management should strive to strengthen	С	
and diversify the local economy, avoiding dependence		
on a single forest product.		
5.4.a The forest owner or manager demonstrates	C	2016:
knowledge of their operation's effect on the local		Considering DoF's efforts to manage for outdoor
economy as it relates to existing and notential		recreation, the production of timber products, wildlife
markets for a wide variety of timber and non-timber		habitat, watershed health, and biodiversity, there is
forest products and services		excellent conformance with this indicator. Specific
		observations include:
		All areas visited sold a broad range of products including some any structure of a solution of the so
		arado:
		• The group COC certificate has many members and
		continues to grow indicating steady demand for
		certified products:
		 Forest recreation opportunities on DoF
		administered forests are exceptional and certain
		activities, such as horseback riding, are only
		available on DNR or private lands.
5.4.b The forest owner or manager strives to diversify	С	2016:
the economic use of the forest according to Indicator		Recreation of all kinds is available. The forest products
5.4.a.		State's COC group cortificator
5.5. Forest management operations shall recognize	C	
maintain and where appropriate enhance the value	C	
of forest services and resources such as watersheds		
and fisherios		
and insheries.		

5.5.a In developing and implementing activities on the	С	2016:
FMU, the forest owner or manager identifies, defines		DoF policies are clearly oriented towards maintaining
and implements appropriate measures for		and enhancing the full suite of forest services and
maintaining and/or enhancing forest services and		careful attention to BMP's is an example of efforts to
resources that serve public values, including municipal		maintain forest services. See HEE report (8B
watersheds, fisheries, carbon storage and		HEE Annual report 2006-2010) for an analysis of
sequestration, recreation and tourism.		forest services, which include recreation, ecosystem
		services, etc.
5.5.b The forest owner or manager uses the	С	The designation and respect of protected areas and
information from Indicator 5.5.a to implement		the implementation of BMPs is consistent with
appropriate measures for maintaining and/or		maintaining or enhancing watersheds, fisheries,
enhancing these services and resources.		carbon, recreation, and tourism.
5.6. The rate of harvest of forest products shall not	С	
exceed levels which can be permanently sustained.		
5.6.a In FMUs where products are being harvested,	С	2016:
the landowner or manager calculates the sustained		DoF current harvest target is 14 mmbf, which is
yield harvest level for each sustained yield planning		approximately 50% of growth. The current growth
unit, and provides clear rationale for determining the		estimate is based on 3 methods: 1) 50 FIA plots on
size and layout of the planning unit. The sustained		2005 system-wide inventory is compared to the
yield harvest level calculation is documented in the		inventories done in the 1980s and 3) Increment
Management Plan.		borings were collected during the 2005 System Wide
		Inventory (SWI) and growth was estimated using the
The sustained yield harvest level calculation for each		Burrel-Ashley system. All 3 estimates of net annual
planning unit is based on:		growth are about 28 million bf;
• documented growth rates for particular sites,		The overall harvest goal for the system (14 mmbf) is
and/or acreage of forest types, age-classes and		allocated proportionally to the properties based on
species distributions;		standing volume percentages, with adjustments for
• mortality and decay and other factors that affect		special situations such as variations univer in large
net growth;		previous growth/vield data as described above and is
• areas reserved from harvest or subject to harvest		allocated to each forest based on the 2005 System
restrictions to meet other management goals;		Wide Inventory figures with the intent being to not
• silvicultural practices that will be employed on the		over harvest any particular forest. These figures are
FMU;		then adjusted based on special circumstances such as
 management objectives and desired future 		ine need for salvage cuts (e.g., salvage after tornado
conditions.		
The calculation is made by considering the effects of		The Indiana Division of Forestry has developed a
repeated prescribed harvests on the product/species		TODUST TOTEST INVENTORY SYSTEM.
and its ecosystem, as well as planned management		A continuous forest inventory where 1/5 of the land
treatments and projections of subsequent regrowth		base is inventoried each year is in the 8 th year. After
beyond single rotation and multiple re-entries.		measure the plots allowing for growth computation
		A preliminary comparison is being calculated, but

		another year of inventory is needed to come close to
		a statistically-reliable growth estimate. The system
		design is based on 10 years to develop a reliable
		growth estimate.
5.6.b Average annual harvest levels, over rolling	С	2016:
periods of no more than 10 years, do not exceed the		Timber Sale Volumes Sold in the Past Ten Years:
calculated sustained vield harvest level		2014-2015 14.2 mmbf
		2013-2014 17.1 mmbf
		2012-2013 12.0 mmbf
		2011-2012 14.4 mmbf
		2010-2011 14.0 mmbf
		2009-2010 10.6 mmbf
		2008-2009 12.1 mmbf
		2007-2008 11.3 mmbf
		2006-2007 10.3 mmbf
		2005-2006 7.7 mmbf
		Harvest records for the sites visited show that DoF
		does not exceed the calculated harvest rate; the
		average annual harvest rate 2005-2015 is 12.4 mmbf.
		See documented cited in 5.6.a.
5.6.c Rates and methods of timber harvest lead to	С	2016:
achieving desired conditions, and improve or maintain		The combination of even- and uneven-aged
health and quality across the FMU. Overstocked		management is used to produce mixed age classes
stands and stands that have been depleted or		and species. Regeneration narvests are used to
rendered to be below productive potential due to		generate young age classes of oak-nickory type. The
natural events, past management, or lack of		conditions in consistent with some site characteristics
management are returned to desired stocking levels		particularly on more mesic to wet-mesic sites with few
and composition at the earliest practicable time as		oak-hickory species and associates
iustified in management chiectives		
justified in management objectives.		Because DoF is harvesting approximately 50% of
		estimated growth, there is room to allow additional
		salvage operations without cutting beyond sustainable
		compared with projections through time. It is
		anticipated that the final cycle of fixed plot
		continuous forest inventory will enable more accurate
		estimates of growth patterns across the resource
		base. SCS notes that Principle 5 should be re-
		examined in 2017 once this new information is
		available.
5.6.d For NTFPs, calculation of quantitative sustained	С	2016:
yield harvest levels is required only in cases where		DoE does not have any significant commercially
		bor does not have any significant commercially
products are harvested in significant commercial		harvested NTFPs.

	r	
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.		
Principle #6: Forest management shall conserve biologica	al diversi	ty and its associated values, water resources, soils, and
unique and fragile ecosystems and landscapes, and, by so	o doing, I	maintain the ecological functions and the integrity of the
forest.		
6.1. Assessments of environmental impacts shall be	С	
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.		
6.1.a Using the results of <i>credible scientific analysis,</i>	С	2016:
best available information (including relevant		There have been no changes to the environmental
databases), and local knowledge and experience, an		assessment since it was generated in 2008.
assessment of conditions on the FMU is completed		DOF's Environmental Assessment on the increased
and includes:		hickory communities on the Indiana State Forest
1) Forest community types and development, size		System 2008 documents items 1-6 for that community
class and/or successional stages, and associated		type, which is the dominant community type found in
natural disturbance regimes;		the State Forest System.
2) Rare, Threatened and Endangered (RTE) species and		The Natural Heritage Data Center which is part of the
<i>rare ecological communities</i> (including plant		Natural Heritage Network, a worldwide system of
communities);		Heritage Programs lead by <u>NatureServe</u> is consulted in
3) Other habitats and species of management		The Hardwood Ecosystem Experiment (HEE)
concern;		https://heeforeststudy.org/ is informing practices on
4) Water resources and associated riparian habitats		the State forests.
and hydrologic functions;		The Strategic Direction document identifies
5) <i>Soil resources</i> ; and		development of Wildlife Habitat Management Plans
6) <i>Historic conditions</i> on the FMU related to forest		for each property. As this is a goal in the overarching
community types and development, size class and/or		accument for the properties management the staff
successional stages, and a broad comparison of		Bat HCP is completed. Information sources for
historic and current conditions.		development of the plans will come from the Natural
		Diversity Database, unique features identified by
		foresters in the field, and findings from the HEE.

		The history of the tract is included in each management guide.
 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. The assessment must incorporate the <i>best available information</i>, 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. 	C	2016: Short-term site impacts are addressed when writing the resource management guides developed for each tract when initiating management. Long-term impacts are in environmental assessment and will be addressed in the Habitat Conservation Plan (HCP). DoF continues making significant progress with USFWS on finalizing the HCP.
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.	C	 2016: Site level management guidelines have been developed for a number of T and E species (Indiana Bat, Timber Rattlesnake). <u>Management Guidelines for</u> <u>Compartment-level Wildlife Habitat Features</u> have been developed and are applied. BMP's protect soil resources, riparian habitat, and long-term ecological viability of the forest. The bat guidelines developed for the Division of Forestry in conjunction with USFWS are implemented until the Bat HCP is finalized.
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.	С	2016: Management planning documents (drafts and final versions), including environmental impact studies, the State Wildlife Action Plan drafted collaboratively with the DNR Fish and Wildlife Division, and other assessments are made completely available to the public online. The public can also access publications and data on the website or upon request. Once DoF submits an updated HCP for bat conservation, it is required to undergo public review.
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6.2 Safeguards shall exist which protect rare,	С	
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.		
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 to site-disturbing management activities, or management occurs with the assumption that potential RTE species are present. 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.	C	 2016: DoF has a program to protect threatened and endangered species. Training is periodically provided on endangered species identification and management, most notably for Indiana bat habitat. There are 101 state-listed Threatened and Endangered (T and E) animal species (on Indiana State Forest lands the Indiana Bat, the Gray bat, and the Northern long-eared bat have the only endangered or threatened designation for fauna at the federal level). DoF participates in state and federal programs to research and protect T and E species. DoF actively uses the Division of Nature Preserves' Natural Heritage Database to screen for T and E species in management areas. T and E species locations are identified as part of the process of writing the resource management guide prior to management activities. If a species is detected in a database query management occurs with the assumption that potential RTE species are present, except in rare circumstances. One example of the exception was a 40 year old detection of a RTE species and nothing since. The detection was still acknowledged in the management guide developed for the tract. An Environmental Assessment developed for the State Forests identifies threats to RTE species on the property. DoF employees a wildlife biologist who is engaged
		unusual wildlife issue.
6.2.b When RTE species are present or assumed to be	С	2016:
present, modifications in management are made in		When RTE species are known to occur (by querying
order to maintain, restore or enhance the extent,		the Natural Heritage Database), staff will determine
quality and viability of the species and their habitats.		appropriate steps to protect the species. These steps
<i>Conservation zones</i> and/or <i>protected areas</i> are		may include a consultation with the biologist or

established for RTE species, including those S3 species	ecologist or written species- specific management
that are considered rare, where they are necessary to	plans to accommodate individual species
maintain or improve the short and long-term viability	requirements. Staff consult NatureServe web site to
of the species. Conservation measures are based on	search for management guidelines for T and E species.
relevant science, guidelines and/or consultation with	
relevant, independent experts as necessary to achieve	
the conservation goal of the Indicator.	
6.2.c For medium and large public forests (e.g. state	2016:
forests), forest management plans and operations are	DoF follows its interim guidelines on the conservation
designed to meet species' recovery goals, as well as	of the Indiana Bat. These guidelines were developed
landscape level biodiversity conservation goals.	by its biologist in consultation with federal agencies. DoF is close to receiving approval for its HCP to address Indiana Bat conservation. Research is showing that management of State Forests is compatible with conservation goals for Indiana Bat. Pauli, Benjamin (2014). Nocturnal and Diurnal Habitat of Indiana and Northern Long Eared Bats, and the Simulated Effect of Timber Harvest on Habitat Suitability, A Dissertation Submitted to the Faculty of Purdue University by Benjamin P. Pauli. Other species recovery efforts are: - Native Virginia pine at Clark SF - Chestnut – Cooperative project with American Chestnut Foundation and Purdue - Cucumber Magnolia at Jackson Washington SF - Short's Goldenrod at Crawford SE (1 of 2 locations in
	 Short's Goldenrod at Crawford SF (1 of 2 locations in the world) Yellowwood at Yellowwood SF The 2015-2019 Strategic Plan identified the goal to: Work toward a long term balance in forest stand ages and structure with 10% of forest acreage in or developing older forest conditions (e.g. nature preserves and high conservation forests) as well as 10% in early successional, young forests (0-20 years old). Many areas within the state forests have been designated for the development of older forest conditions, such as nature preserves and research sites. A similar level of commitment to the equally important establishment of early successional habitat is not currently available on state forest properties. A state forest early-successional habitat management program will be developed to strategically identify areas where the management priority is to both regenerate oak-hickory dominated stands and provide a consistent availability of young forest habitat.

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).	C	Three Back Country areas, totaling over 6,000 acres across the State, are managed to develop late seral conditions. 2016: DoF field staff regularly patrol the FMU to detect unauthorized activities and work with interested user groups to avoid adverse impacts to flora, fauna, and soil resources. For example, SCS observed signage at district offices regarding ginseng harvesting. SCS also noted that district offices were working with horse rider groups on maintaining established trails. When planning new trails to be developed they are routed to exclude areas of concern.
6.3. Ecological functions and values shall be maintained	С	
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.		
 6.3.a. Landscape-scale indicators 6.3.a.1 The forest owner or manager maintains, enhances, and/or restores under-represented successional 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. 	C	 2016: DoF has a goal to maintain 10% of the forest in the underrepresented early successional stage. Nature Preserves are being identified and protected on DoF property and across the State. DoF strategic plan is to maintain 10% of the forest in an older forest condition. Areas designated for older forest condition include: Nature Preserves on State Forests Control units (no harvest) of Hardwood Ecosystem Experiment (HEE). Three units at about 200 acres each. 'No harvest zone' around active Indiana bat hibernacula on state forests Back Country Areas (BCA) located on Morgan-Monroe/Yellowwood, Jackson-Washington, and Clark state forests
 6.3.a.2 When a <i>rare ecological community</i> 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, <i>conservation zones</i> and/or <i>protected areas</i> are established where warranted. 6.3.a.3 When they are present, management maintains the area structure communities and its area. 	C	 2016: Most rare ecological communities have been protected as Nature Preserves. Once a Nature Preserve is established, management decisions are made by or in consultation with the Division of Nature Preserves. DoF has a policy to allow management to occur in rare ecological communities if it maintains or enhances the viability of the community. 2016: DoE has developed procedures to assess and identify
maintains the area, structure, composition, and		Type 1 and Type 2 old growth on state forests. This

processes of all **Type 1** and **Type 2 old growth**. 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 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).

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).

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).

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:

- 1. Old growth forests comprise a significant portion of the tribal ownership.
- 2. A history of forest stewardship by the tribe exists.
- 3. High Conservation Value Forest attributes are maintained.
- 4. Old-growth structures are maintained.

guidance includes definitions of old growth classifications consistent with indicator 6.3.a.1, and a continuous assessment protocol used in the routine development of tract management guides. DoF has a process to identify and evaluate potential old forest. Some areas are being evaluated, but none have been identified as Type 1 or 2. DoF has other areas on the forests that are being managed for late serial conditions, but do not yet meet the definition of Type 2.

5 Conservation zones representative of old growth		
stands are established		
6 Landscape level considerations are addressed		
 Zandscape rever considerations are addressed. 7 Bare species are protected 		
6 3 h To the extent feasible within the size of the	C	2016
ownership, particularly on larger ownerships	C	IDNR DIVISION OF FORESTRY STRATEGIC DIRECTION
(generally tens of thousands or more acres)		2015-2019 includes the following goals:
management maintains, enhances, or restores habitat		- Work toward a long term balance in forest stand
conditions suitable for well-distributed populations of		ages and structure with 10% of forest acreage in
animal species that are characteristic of forest		or developing older forest conditions (e.g. nature
accosystems within the landscape		preserves and high conservation forests) as well
		vears old)
		 Conserve and manage wildlife habitats, cultural
		resources and high conservation value forests
6.3.c Management maintains, enhances and/or	С	2016:
restores the plant and wildlife habitat of <i>Riparian</i>		Indiana Logging and Forestry Best Management
Management Zones (RMZs) to provide:		Practices: BMP Field Guide (BMP Field Guide) is used
a) habitat for aquatic species that breed in		by field foresters to guide the protection of RMZs.
surrounding uplands;		lowland connectivity (a, b, and c) and maintenance of
b) habitat for predominantly terrestrial species that		riparian vegetation and soils (d and e).
breed in adjacent aquatic habitats ;		
c) habitat for species that use riparian areas for		
feeding, cover, and travel;		
d) habitat for plant species associated with riparian		
areas; and,		
e) stream shading and inputs of wood and leaf litter		
into the adjacent aquatic ecosystem.		
Stand-scale Indicators	С	2016:
6.3.d Management practices maintain or enhance		Indiana DoF has an increased emphasis on
plant species composition, distribution and frequency		management and sustainability of oak-hickory
of occurrence similar to those that would naturally		(Indiana State Forests Environmental Assessment
occur on the site.		2008-2027).
6.3.e When planting is required, a local source of	С	2016:
known provenance is used when available and when		Seedlings planted in the forest are grown in the local
the local source is equivalent in terms of quality, price		nursery. The exception would be at times of low
and productivity. The use of non-local sources shall be		acorn production when regionally local stock would be
justified, such as in situations where other		sought.
management objectives (e.g. disease resistance or		
adapting to climate change) are best served by non-		
local sources. <i>Native species</i> suited to the site are		
normally selected for regeneration.		

 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: a) large live trees, live trees with decay or declining health, <i>snags</i>, and well-distributed coarse down and dead woody material. <i>Legacy trees</i> where present are not harvested; and b) vertical and horizontal complexity. Trees selected for <i>retention</i> are generally representative of the dominant species found on the site. 	C	 2016: DoF has an excellent guide "Management guidelines for compartment-level wildlife habitat features" that field foresters use to maintain or enhance site-level habitat components, such as large live trees, declining trees, and snags. During 2016 audit, confirmed guidelines are being followed.
 6.3.g.1 In the Southeast, Appalachia, Ozark-Ouachita, Mississippi Alluvial Valley, and Pacific Coast Regions, when <i>even-aged systems</i> 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. 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. 	С	 2016: DoF primarily employs uneven-aged management practices, such as individual tree selection and group selection. Even-aged management practices include clearcuts and shelterwood systems. A clearcut to convert non-native pine to hardwood on Yellowwood State Forest included sufficient retention within islands. DoF was previously practicing even-aged management on an experimental basis as documented in the HEE report. The IDNR DIVISION OF FORESTRY STRATEGIC DIRECTION 2015-2019 includes a goal to: Continue to use the uneven-aged system as the primary silvicultural system on the state forests while increasing the use of shelterwood and other even aged regeneration practices and management prescriptions.
 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: 1. Is developed by qualified experts in ecological and/or related fields (wildlife biology, hydrology, landscape ecology, forestry/silviculture). 2. Is based on the totality of the <i>best available information</i> including peer-reviewed science regarding natural disturbance regimes for the FMU. 	С	2016: There are no even-aged management restrictions in the Lake States/ Central Hardwood region or otherwise imposed by state/ local law or regulation.

2	Is spatially and tomporally avaiiat and includes		
3.	is spatially and temporally explicit and includes		
4	maps of proposed openings of areas.		
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.		
5.	Is reviewed by independent experts in wildlife		
	biology, hydrology, and landscape ecology, to		
	confirm the preceding findings.		
6.3	h The forest owner or manager assesses the risk	С	2016:
ot,	prioritizes, and, as warranted, develops and		During the development of the management guide for
imp	elements a strategy to prevent or control <i>invasive</i>		out which includes Section #5 Non-native Invasive
spe	<i>cies,</i> including:		Species where such species are listed including
1.	a method to determine the extent of invasive		management actions. These species, along with
	species and the degree of threat to native species		management and monitoring actions, are most often
	and ecosystems;		also included in the management guide.
2.	implementation of management practices that		In addition to the regular efforts, in 2016 Yellowwood
	minimize the risk of invasive establishment,		and Morgan-Monroe State Forests nired interns to
	growth, and spread;		first year that DoE hired a crew specifically to address
3.	eradication or control of established invasive		invasive species. The two properties identified
	populations when feasible: and,		problem areas that needed to be addressed. This
4.	monitoring of control measures and management		crew was funded in house.
	practices to assess their effectiveness in		The Division received a federal Joint Chiefs grant along
	preventing or controlling invasive species.		with NRCS and Hoosier National Forest with the
			overarching goal of oak restoration. DoF will be using
			regeneration
			In 2016, auditors visited an area where the forester
			had sprayed stilt grass and was experimenting to find
			the most effective way to eradicate it. Another stop
			was to an area where a forester had found wisteria
			from an old homestead had locally become an issue
			killing overstory mature trees. It was determined the
			wisteria could be eradicated, with multiple
			stilt grass in the area was also treated
			DoE participates in the Southern IN Cooperative Weed
			Management Area.
6.3	i In applicable situations, the forest owner or	С	2016:
ma	nager identifies and applies site-specific fuels		When applicable, DoF maintains site-level fire plans
ma	nagement practices, based on: (1) natural fire		that are primarily conducted in oak-hickory
reg	imes, (2) risk of wildfire, (3) potential economic		understories to control competing species. This

losses, (4) public safety, and (5) applicable laws and regulations. 6.4. 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.	C	regime mimics natural periodic ground fires that historically occurred in this habitat type. 2016 site visit included a stop at a prescribed burn at HEE management unit U9-09 with the two objectives of reducing accumulated fuels and reduce litter and duff depth to allow for oak and hickory seedling establishment.
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) <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. 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.	С	2016: In 2008, DoF worked with Division of Nature Preserves (DNP) to complete a community gap analysis in natural region sections that contain state forests. This analysis included all state forests and considered the natural communities that were expected to be found in each natural region section and whether protected samples existed and to what extent. Further coordination with DNP personnel developed a listing of known sites on state forests that would be further evaluated to serve as RSAs. All state forests were considered during this process. In 2009, DoF identified a continuous, on-going process to identify natural communities on state forests to serve as future candidate RSAs, where needed. A description of this process was included in the DoF response to CAR 2008.1 and addressed during the 2009 surveillance audit. DoF field personnel from all state forests received training on RSA surveys during a 2009 property section meeting and instructed on this process.
 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. Large FMUs are generally expected to establish RSAs of purpose 2 and 3 within the FMU. 	C	 2016: See 6.4.a. While not specifically designated as RSAs, DoF has identified ecosystems that would naturally exist on the FMU and are underrepresented. They have employed efforts to enhance the development of these ecosystems. 1) DoF has identified that early successional forests are underrepresented and has developed a goal of having 10% of forest acreage in early successional, young forests. 2) Additionally, as noted in the HEE, oak-hickory stands that previously dominated Indiana's forest are not replacing themselves. A priority has been placed

		on successfully regenerating oak-hickory forests
64 c Management activities within RSAs are limited to	C	
low impact activities compatible with the protected	C	DoF has a policy to limit management activities in
RSA objectives excent under the following		RSAs to those that will improve the desired ecological
circumstances:		condition of the stand.
a) harvesting activities only where they are necessary		
to restore or create conditions to most the		
to restore of the protocted PCA, on to mitigate		
objectives of the protected RSA, of to mitigate		
conditions that interfere with achieving the RSA		
objectives; or		
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.		
6.4.d The RSA assessment (Indicator 6.4.a) shall be	С	2016:
periodically reviewed and if necessary updated (at a		10 years have not passed since the last RSA
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.		
6.4.e Managers of large, contiguous public forests	С	2016:
establish and maintain a network of representative		See 6.4.a
protected areas sufficient in size to maintain species		Ihree Back Country areas, totaling over 6,000 acres
dependent on interior core habitats.		conditions
		Most of the State Forest properties each have a large
		contiguous feature. Management is conducive to
		maintaining this attribute.
6.5 Written guidelines shall be prepared and	С	
implemented to control erosion; minimize forest		
damage during harvesting, road construction, and all		
other mechanical disturbances; and to protect water		
resources.		
6.5.a The forest owner or manager has written	С	2016:
guidelines outlining conformance with the Indicators		The State of Indiana BMP manual and timber harvest
of this Criterion.		contracts contain information that details the
		specification for conformance to this criterion.
		Forest Procedures Manual
		(http://www.in.gov/dnr/forestrv/5197.htm).
		In 2016 DoF also implemented new rutting guidelines.
6.5.b Forest operations meet or exceed Best	С	2016:

Management Practices (BMPs) that address components of the Criterion where the operation takes place.		DoF's implementation of BMPs meets or exceeds the components of this criterion on timber harvest operations. Field sites inspected during the 2016 audit were in conformance with BMP requirements. Forestry field staff interviewed confirmed knowledge of implementation of BMP requirements for timber sales and other management activities. Without exception field staff either had copies of the BMP field guide books in vehicles, had it at their desk, or were able to access online by smart phone as requested during the audit.
 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: 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. Disturbance of topsoil is limited to the minimum necessary to achieve successful regeneration of species native to the site. Rutting and compaction is minimized. Soil erosion is not accelerated. Burning is only done when consistent with natural disturbance regimes. Natural ground cover disturbance is minimized to the extent necessary to achieve regeneration objectives. Whole tree harvesting on any site over multiple rotations is only done when research indicates soil productivity will not be harmed. Low impact equipment and technologies is used where appropriate 	C	2016: Indicator 6.5.c requires that "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." The DoF rutting guidelines designed to protect soil resources allow for continued hauling and skidding as long as the ruts can be smoothed so that they do not exceed 18" in depth. This guideline alone may not be effective at preventing root damage, changes in hydrology, and compaction that often occur when ruts are being made. Smoothing of ruts does not alleviate the root damage, compaction, and changes to hydrology associated with rutting. DNR initiated a process in 2015 to strengthen soil compaction and rutting guidelines, which are still in draft form. Some State Forest staff have been trained regarding new expectations, but others including timber producers have not. See response to OBS 2015.3 for additional detail.
6.5.d The transportation system, including design and placement of permanent and temporary haul roads, skid trails, recreational trails, water crossings and	С	2015: Although sites visited in 2015 demonstrated good to excellent main haul roads (upgraded in recent years to handle more wet-weather traffic and larger log

 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: access to all roads and trails (temporary and permanent), including recreational trails, and offroad travel, is controlled, as possible, to minimize ecological impacts; road density is minimized; sediment discharge to streams is minimized; there is free upstream and downstream passage for aquatic organisms; impacts of transportation systems on wildlife habitat and migration corridors are minimized; area converted to roads, landings and skid trails is minimized; habitat fragmentation is minimized; 		trucks), auditors observed some rutting and erosion on recreational trails, especially those open for equestrian use (e.g., Turkey Ridge Fire Trail 301, Fox Hollow Fire Trail/Horse Trail/Wagon Route). Continued conformity with this indicator could be strengthened through improvement in the maintenance of recreational trails which are placed on forest access roads or fire trails, consistent with Indiana BMP Guide page 15: "Insure that all erosion control and water management measures (e.g. water bars, drainage dips, culverts and ditches) are working." 2016: See response to OBS 2015.4 . Sites visited in 2016 demonstrated good to excellent main haul roads.
 6.5.e.1 In consultation with appropriate expertise, the forest owner or manager implements written Streamside Management Zone (SMZ) buffer 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. 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. 	C	2016: As the Lake States/ Central Hardwood region has no recognized FSC regional SMZ buffer requirements, DoF defaults to SMZ buffer width established in the BMP manual and, where applicable, any forest- specific restrictions established through county or township ordinances. All harvests observed in the 2016 evaluation met these SMZ requirements.

6.5.e.2 Minor variations from the stated minimum	С	2016:
SMZ widths and layout for specific stream segments,		The SCS team uncovered no variations from minimum
wetlands and other water bodies are permitted in		SIVIZ Widths established in the recommended BIVIPs.
limited circumstances, provided the forest owner or		for variation in the past and expresses no plans to do
manager demonstrates that the alternative		so in the future.
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.		
6.5.f Stream and wetland crossings are avoided when	С	2016:
possible. Unavoidable crossings are located and		Stream crossings on DoF meet BMPs. BMPs include
constructed to minimize impacts on water quality,		avoiding crossings when possible and to install
hydrology, and fragmentation of <i>aquatic habitat.</i>		appropriate BMPs based on stream channel size and
Crossings do not impede the movement of aquatic		DoE allowed the free movement of aquatic species
species. Temporary crossings are restored to original		Temporary crossings are restored and debris removed
hydrological conditions when operations are finished.		to allow flow.
		2016 site visit to a tract where a temporary bridge
		was installed. Impacts were minimized and crossing
		was restored.
6.5.g Recreation use on the FMU is managed to avoid	C	2016:
negative impacts to soils, water, plants, wildlife and		biking camping hunting mountain hiking and
wildlife habitats.		horseback riding. DoF has postings near state forest
		offices on what types of activities require permits and
		which do not.
		DoF field staff regularly patrol the FMU to detect
		unauthorized activities and work with interested user
		groups to avoid adverse impacts to flora, fauna, and
		district offices regarding ginseng harvesting SCS also
		noted that district offices were working with horse
		rider groups on maintaining established trails.
		During the 2016 evaluation a damaged horse trail was
		observed in Owen-Putnam State Forest. The forester

6.5.h Grazing by domesticated animals is controlled to	C	had found the issue and has a plan to address it, potentially in cooperation with the horse group that regularly uses the trail. During the site visit there was no evidence of sediment delivery to the nearby steam. 2016: There is no grazing by domesticated animals on DoF
species composition and viability of the riparian vegetation, and the banks of the stream channel from erosion.		forestland. No evidence of grazing was discovered during the 2016 audit.
6.6. 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.	С	
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).	C	In 2015 the DoF was found to use pesticides on the FSC HHP list for bedbug control/prevention in State Forest recreation cabins: Suspend SC Deltamethrin Tempo SC Beta-cyfluthrin; 1,2-Propanediol Transport Bifenthrin; acetamiprid Temprid SC Imidacloprin; beta-cyfluthrin DNR also reported use of copper sulfate for lake algae control. That product was added to the HHP list in 2015. 2016: The DoF removed the developed campground areas at Starve Hollow State Recreations Area, Deam Lake State Recreation Area, and Greene-Sullivan State Forests. These areas have family cabins that are under integrated pest management and insect treatments. Heat treatments and insecticides are used. Several of the most effective insecticides are not allowed under FSC. All applications occur within the cabins and they are currently excised from the certificate. The DoF developed maps delineating the

		excised areas. Probability of a timber sale in the excised areas is low for reasons including: high recreation use, low timber value due to risk of imbedded material, and poor form species with low value in area. Any removed trees would either be used for internal use (wood heating) or in the case of a salvage sale the excised area would be sold separately (uncertified) from the remainder of the State Forest property. Boundaries of sale area would be marked. DoF discontinued use of copper sulfate and are in conformance with the requirements of this indicator.
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.	С	2016: Chemical use in 2012-2013 was primarily aimed at treating invasive exotic species such as Ailanthus and Japanese knotweed, as well as general TSI – girdle and cut stump treatments. Evidence of using the least environmentally damaging formulation was seen at Greene Sullivan State Forest where difficult to kill Japanese knotweed was treated with Garlon and other species were treated with less damaging glyphosate.
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.		
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.	С	2016: No aerial application occurs on DoF. All application is by hand spray. State workers who apply chemicals are licensed applicators and are instructed to follow the label guidelines for each chemical. MSDS are also available for each chemical, which address the potential risks. Workers must record the amount and type of all chemicals. The amount of chemicals

		applied on each state forest is reported and
		summarized at the central office on an annual basis.
6.6.d Whenever chemicals are used, a written	С	2016:
prescription is prepared that describes the site-		DoF pesticide use record sheet includes notes on
specific hazards and environmental risks, and the		effectiveness of treatment. These records are sent
precautions that workers will employ to avoid or		annually to the Forest Properties Specialist for review
minimize those hazards and risks, and includes a map		Verified for Greene Sullivan State Forest
of the treatment area.		State workers who apply chemicals are licensed
Chemicals are applied only by workers who have		applicators and are instructed to follow the label
received proper training in application methods and		guidelines for each chemical. MSDS are also available
safety. They are made aware of the risks, wear proper		for each chemical, which address the potential risks.
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	С	2016:
and the results are used for adaptive management.		DoF documents applications in a chemical use log.
Records are kept of pest occurrences, control		Chemicals are only used for invasive plants and
measures, and incidences of worker exposure to		for treatment of Japanese knotweed at Greene
chemicals.		Sullivan State Forest.
6.7. Chemicals, containers, liquid and solid non-organic	С	
wastes including fuel and oil shall be disposed of in an		
environmentally appropriate manner at off-site		
locations.		
6.7.a The forest owner or manager, and employees	С	2016:
and contractors, have the equipment and training		Refer to State of Indiana Laws at the Department of
necessary to respond to hazardous spills		reference to compliance with state and federal laws
		which implies spill procedures. Contractors
		interviewed understood spill response procedures and
		were able to demonstrate spill kits on site.
6.7.b In the event of a hazardous material spill, the	С	2016:
forest owner or manager immediately contains the		See 6.7.a.
material and engages qualified personnel to perform		
the appropriate removal and remediation, as required		
by applicable law and regulations.		
6.7.c. Hazardous materials and fuels are stored in	С	2016:
leak-proof containers in designated storage areas,		Gas and lubricant containers were stored in a central
that are outside of riparian management zones and		riparian zones and other sensitive features. SCS
away from other ecological sensitive features, until		and the second
		auditors observed idle equipment with no evidence of
they are used or transported to an approved off-site		persistent leaks.

persistent fluid leaks from equipment or of recent		
groundwater or surface water contamination.		
6.8. Use of biological control agents shall be	С	
documented, minimized, monitored, and strictly		
controlled in accordance with national laws and		
internationally accepted scientific protocols. Use of		
genetically modified organisms shall be prohibited.		
6.8.a Use of <i>biological control agents</i> are used only as	С	2016:
part of a pest management strategy for the control of		Biological control agents are no longer used on the
invasive plants, pathogens , insects, or other animals		forest. There has been no recent introduction of
when other pest control methods are ineffective, or		plological control on State Forest properties, as
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	С	See 6.8.a.
applied by trained workers using proper equipment.		
6.8.c If biological control agents are used, their use	С	See 6.8.a.
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.d Genetically Modified Organisms (GMOs) are not	С	2016:
used for any purpose		There is no use of GMOs on the FMU, as confirmed in
		interviews and review of the FMP.
6.9. The use of exotic species shall be carefully	C	
controlled and actively monitored to avoid adverse		
ecological impacts.		
6.9.a The use of <i>exotic species</i> is contingent on the	С	2016:
availability of credible scientific data indicating that		manual and application in the RMP manual DOF
any such species is non-invasive and its application		generally uses winter wheat or oats depending on the
does not pose a risk to native biodiversity.		season (coldness) for closeouts. However, with the
		increased incidence of Japanese Stiltgrass (exotic) on
		some State Forests, DOF has started using fescues
		(exolic), especially the shorter varieties as they are
		some research to show that Kentucky 31 fescue can
		crowd out stiltgrass. Winter wheat and oats

6.9.b If exotic species are used, their provenance and the location of their use are documented, and their	C	 application works well the first growing season, however as the seed does not cover the ground completely they just tend to make a very good cover for stiltgrass to seed in. The Division of Nature Preserve ecologists, would rather have the tradeoff for fescue persistence than the spread of more stiltgrass. 2016: State Forest Procedure Manual Section W: Pest and
ecological effects are actively monitored.		Invasive Species Management with Appendix of recommended seeding mixtures (State Forest Procedure Manual Section W.doc).
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	С	2016: As the species used to re-seed landings and other exposed areas, they tend to remain at the planted location. Like many state agencies, DOF discontinued the use of some seed mixes once they were proven to be invasive.
 6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion: 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. 	C	
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).	C	2016: No forest conversion has occurred in the past year, as confirmed in interviews and review of the FMP.
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).	С	2016: No forest conversion has occurred in the past year.
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	С	2016: No forest conversion has occurred in the past year.

c are related and all need to be conformed with for		
conversion to be allowed).		
6.10.d Natural or semi-natural stands are not	С	2016:
converted to plantations. Degraded, semi-natural		No natural forest areas have been converted to
stands may be converted to restoration plantations.		plantations. DoF's management can be characterized
	6	as natural forest management.
6.10.e Justification for land-use and stand-type	C	2016:
conversions is fully described in the long-term		there are areas where 3^{rd} parties own the Oil Gas and
management plan, and meets the biodiversity		Mineral (OGM) rights as well as places where the
conservation requirements of Criterion 6.3 (see also		state may own the rights.
Criterion 7.1.l)		, 3
6.10.f Areas converted to non-forest use for facilities	С	2016:
associated with subsurface mineral and gas rights		In regards to subsurface property rights, the majority
transferred by prior owners, or other conversion		of coal rights are owned by others at Greene-Sullivan.
outside the control of the certificate holder, are		There are outstanding subsurface rights on some
identified on maps. The forest owner or manager		State Forests tracts. DOF thes to get surface rights as
consults with the CB to determine if removal of these		the State Forests is very limited. Rights-of-way for
areas from the scope of the certificate is warranted.		federal and state highways and RxR tracks are largely
To the extent allowed by these transferred rights, the		out of the control of DoF. DoF should keep SCS
forest owner or manager exercises control over the		informed of any conversion activities.
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.		
Principle #7: A management plan appropriate to the sc	l ale and i	ntensity of the operations shall be written
implemented, and kept up to date. The long-term object	ives of m	panagement, and the means of achieving them, shall be
clearly stated.		
7.1. The management plan and supporting documents	С	
shall provide:		
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.		
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.		
	1	

b) b) Mans describing the forest resource base including		
b) If maps describing the forest resource base including		
ownership		
i) Description and justification of harvesting techniques and		
equipment to be used.		
7.1.a The management plan identifies the ownership	С	2016:
and legal status of the FMI l and its resources		DoF's ownership of the State Forest system has been
including rights hold by the owner and rights hold by		established through state legislation.
including rights held by the owner and rights held by		
others.		Ownership, legal status and resources are
		documented as provided several sections of the
		Procedures manual
		(http://www.in.gov/dnr/forestry/3647.htm) including
		legal status, treaty rights, easements, deed
		restrictions, and leasing of the forest and its
		resources.
		For example, per page 3, Section T, "Records and
		Files",
		http://www.in.gov/dnr/forestry/files/manual/fo-T.pdf,
		records on property lines and land ownership are
		based on the legal land description - section,
		township, and range.
		Documentation includes all line and evidence location
		work done. This includes maps and descriptions of line
		evidence located (monuments, markers, fencing, etc.)
		including evidence interior, exterior and on line.
		Properties acquire records of pertinent known survey
		markers from county surveyor offices. Properties
		provide county surveyor offices with updated survey
		marker location information.
		Properties will maintain a file of all known survey
		prints, private and state, that involve state property
		nines. Properties, when possible, obtain copies of
		prints for all private surveys adjacent to the
		survey print they obtain to a Property Specialist
		Properties maintain a file of deads for the state
		property. In addition, properties obtain and maintain
		a file of deeds for adjacent private land
71 b The management plan describes the history of	C	2016
land use and nast management, surrent forest tures		History of past management is included in several
and use and past management, current rolest types		management planning documents including the
and associated development, size class and/or		Indiana Statewide Forest Assessment 2010 Current
successional stages, and natural disturbance regimes		forest types and stand development are addressed in
that affect the FMU (see Indicator 6.1.a).		the Statewide Forest Assessment and individual FMPs
		for state forests. Past and current natural
		disturbances are addressed in several management

		planning documents, such as Increasing Wildlife Habitat Diversity on Forested Lands managed by the Indiana Department of Natural Resources and Will Restricting Timber Harvesting from State Forest "Backcountry Areas" Benefit Our Species of Greatest Conservation Concern? Environmental Assessment (EA) – Natural disturbance regimes are described. The compartment management guides explain the past land use and management of the compartment, such as past ownership and what management has happened since DoF has taken management control.
 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. 		 2016: Current plans have regeneration expectation statement and are encapsulated in a variety of documents including: Strategic plan Draft HCP Management Resource Guide Desired future conditions – management guides (see "Overall" section and Strategic plan Management guides are reviewed prior to timber sale being marked Desired future condition statements are nested within several sections of the State Forest procedures manual, the Indiana State Forest Environmental Assessment and within tract management guides. This process aims to institutionalize the inclusion of a desired future condition' discussion on tract level management
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.	С	2016: Tract Management Guides describe the landscape context of each tract. Management guides for review and archived management guide examples are posted here, <u>http://www.in.gov/dnr/forestry/3635.htm</u> .
 7.1.e The management plan includes a description of the following resources and outlines activities to conserve and/or protect: rare, threatened, or endangered species and natural communities (see Criterion 6.2); plant species and community diversity and wildlife habitats (see Criterion 6.3); water resources (see Criterion 6.5); soil resources (see Criterion 6.3); 	C	2016: Addressing this Indicator includes a compendium of documents that altogether guide or control activities in a manner to conserve and protect the criteria listed. The site level resource management guide (RMG) addresses site-level planning. An example of a 2013 RMG including references to several of these criteria may be found here, http://www.in.gov/dnr/forestry/files/fo-

• Representative Sample Areas (see Criterion 6.4);		YW MM C7 T12 03182013.pdf. The site level
• High Conservation Value Forests (see Principle 9);		resource management guide covers any water
Other special management areas.		resources on the site and describes the soils. The DoF
		designates specific areas as High Conservation Value
		Forests (HCVF) (more detailed description included
		under Principle in following sections of this table).
		The DoF has completed a gap analysis for
		PSA/s may be found here
		ksA's may be found here,
		Conserving special places pdf
		Also used is the Indiana State Forest Environmental
		Assessment 2008-2027 (FA) which details increased
		emphasis on management and sustainability of oak-
		hickory communities on the Indiana State Forest
		System. The EA may be found here.
		http://www.in.gov/dnr/forestry/files/fo-
		StateForests EA.pdf. The EA provides extensive
		treatment of potential environmental impacts
		including soils, RTE species, plant/community
		diversity, and aquatic and terrestrial wildlife habitat.
7.1.f If invasive species are present, the management	С	2016:
plan describes invasive species conditions, applicable		Evidence examined:
management objectives, and how they will be		Invasive species plan
controlled (see Indicator 6.3.j).		Site plan
		• See CFI (5A_draft_CFI)
		Strategic Plan
		• State EA (see 7.1.e, above)
		The State Forest Management Strategy discusses
		applicable management objectives for invasive species
		and the need for prioritization of those needing
		control. Management guides for state forests state
71 The management plan describes insects and	C	
7.1.g The management plan describes insects and		The DoE plans include EAB Gynsy moth and have EAB
diseases, current or anticipated outbreaks on forest		silvicultural guidelines and considerations. Activities
conditions and management goals, and how insects		observed on sites during the 2016 audit on planned
and diseases will be managed (see Criteria 6.6 and		active, and completed harvest sites included
6.8).		numerous examples of current EAB outbreak and
		mortality management. Surveys are conduct for both
		EAB and Gypsy Moth by the DoF.
7.1.h If chemicals are used, the plan describes what is	С	2016:
being used, applications, and how the management		Plans provided during the audit described chemical
system conforms with Criterion 6.6.		use and applications consistent with Criterion 6.6.
		Documents for several sites included descriptions
		and/or summaries of chemical use, objectives in terms

		of targeted pests, and by licensed pesticide
7.1.i If biological controls are used, the management	С	2016:
plan describes what is being used, applications, and		DoF does not currently use biological control agents.
how the management system conforms with Criterion		
6.8.		
 7.1.j The management plan incorporates the results of the evaluation of social impacts, including: traditional cultural resources and rights of use (see Criterion 2.1); potential conflicts with customary uses and use rights (see Criteria 2.2, 2.3, 3.2); management of ceremonial, archeological, and historic sites (see Criteria 3.3 and 4.5); management of aesthetic values (see Indicator 4.4.a); public access to and use of the forest, and other recreation issues; local and regional socioeconomic conditions and economic opportunities, including creation and/or maintenance of quality jobs (see Indicator 4.1.b and 4.4.a), local purchasing opportunities (see Indicator 4.1.g). 	C	2016: A full evaluation of social impacts was conducted and may be found here, <u>http://www.in.gov/dnr/forestry/files/fo-</u> <u>Perceptions ExecSum.pdf</u> . The narrative of how this is used to inform forest management planning is summarized in Surveys and reports as detailed in Appendix 8. These coupled with public comments periods on management plans and management activities, open houses, and various opportunities for public involvement such as meetings and personal communications, facilitate in management planning and provide a valuable source of input from DoF's consumers and stakeholders. Comments received via these various opportunities are taken into consideration and incorporated into management planning and operations.
7.1.k The management plan describes the general purpose, condition and maintenance needs of the transportation network (see Indicator 6.5.e).	С	2016: Auditors reviewed the BMP and Management guides which together provide a description of access to different timber sales and describe any needs for maintenance and repair. Road systems are maintained as a GIS feature class
7.1.I 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.	С	2016: The updated and approved Strategic Plan that the overarching strategic direction of the program may be found here, <u>www.in.gov/dnr/forestry/files/fo-</u> <u>State Forest Strategic Plan 2015 2019.pdf</u> . The EA, described in 7.1.j above, with provision for sustaining oak-hickory forests. The procedures manual provides the description of the silvicultural systems used across the state forests and the rationale for their use in terms of creating the desired age and species class distributions. The silviculture guidelines are provided here,

		https://secure.in.gov/dnr/forestry/files/manual/fo-
		<u>F.pdf</u> .
7.1.m The management plan describes how species	С	2016:
selection and harvest rate calculations were		No models are used to determine allowable harvest.
developed to meet the requirements of Criterion 5.6.		Allowable harvest is based on actual system wide
		forest inventory. Continuous Forest Inventory (CFI)
	6	Summary. See Indicator 5.6.a above.
7.1.n The management plan includes a description of	C	2016:
monitoring procedures necessary to address the		Indiana DOF completes annual and periodic
requirements of Criterion 8.2.		wildlife guilds such as snag and cavity trees spring
		resident bird populations, summer breeding bird
		populations, forest amphibians, and deer impacts
		from browsing. Methods used for monitoring are
		provided in the annual report "Indiana Division of
		Forestry Properties Section Wildlife Habitat Program
		2010 Annual Report"
		Department of fisheries conducts annual creel census.
		The Wildlife monitoring annual report and CFI
		procedures includes reference to methodologies.
7.1.0 The management plan includes maps describing	С	2016:
the resource base, the characteristics of general		DoF has detailed maps for all properties in both the
management zones, special management areas, and		central and field offices. GIS database has layers for
protected areas at a level of detail to achieve		property boundaries, roads, special management
management objectives and protect sensitive sites.		protected from the general public's view.
7.1.p The management plan describes and justifies the	С	2016:
types and sizes of harvesting machinery and		Timber harvest contracts specify equipment
techniques employed on the FMU to minimize or limit		limitations and requirements. Harvest machinery for
impacts to the resource.		where special equipment is required may be specified.
		Most operators use grapple or cable skidders.
74 m Diama fan hamvesting soud stiel i 100 - 110		Contract terms are outcome based.
7.1.q Plans for narvesting and other significant site-		2010:
disturbing management activities required to carry		contracts site plans burn plans and management
out the management plan are prepared prior to		guides Environmental limitations and safeguards are
implementation. Plans clearly describe the activity,		described, such as T and E species presence, and
the relationship to objectives, outcomes, any		riparian areas. Timber harvest contracts specify health
necessary environmental safeguards, health and		and safety requirements, and include maps of the
safety measures, and include maps of adequate detail.		unit.
7.1.r The management plan describes the stakeholder	С	2016:
consultation process.		When conducting the Statewide Forest Assessment &
		Strategy, DoF documented how it coordinated
		stakenoider consultations on a web page titled
		stakenoluer coordination
		http://www.in.gov/anr/forestry/5438.ntm

		DoF has included a section called "Submitting a Public
		Comment" on its webpage:
		http://www.in.gov/dnr/forestry/3646.htm.
7.2 The management plan shall be periodically revised	С	
to incorporate the results of monitoring or new		
scientific and technical information, as well as to		
respond to changing environmental, social and		
economic circumstances.		
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.	С	In early 2015, the DoF received authorization from the Executive Branch to proceed with updating the Forestry Strategic Plan. The Indiana process entailed DoF drafting the plan, review of the draft plan by the DNR Executive Office with approval to seek public input, and DoF conducting public meetings and inviting online input, which closed Oct 31. Additional actions included DoF response to stakeholder comments, adjustments to the plan and final review by the Executive Branch. Fee proposals in the plan were also be taken to the Indiana Natural Resources Commission (NRC) for approval. Final approval for the <i>IDNR Division of Forestry</i> <i>Strategic Direction 2015-2019</i> has been obtained and the Division has been working under this plan since early 2016. The Plan can be found on the Division's website: <u>http://www.in.gov/dnr/forestry/files/fo-</u> <u>State Forest Strategic Plan 2015 2019.pdf</u> .
		For additional detail see closing of OBS 2015.7 .
7.3 Forest workers shall receive adequate training and	С	
supervision to ensure proper implementation of the		
management plans.		
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.	С	2016: DoF details the minimum requirements for all of its positions with HR. DoF conducts meetings and trainings so that employees understand and consistently implement their portions of the FMP. DoF maintains records of trainings and meetings. Contract loggers must submit evidence of required training in order to qualify for state harvests. Foresters, managers, and specialists interviewed have professional natural resources degrees (mostly in forestry) from major universities. In 2016, reviewed a subset of staff training records (11/1/2016) confirming documentation of training.

		The DoF provides Annual Division meetings for both internal and external trainings. Logging contractors: DoF personnel conduct 100% monitoring of timber sales post-harvest and uses those results to inform training needs for a variety of trainings to improve performance in the field. Interviews with logging contractors confirm that such training is considered of great value in meeting expectations and contract requirements when conducting harvests.
7.4 While respecting the confidentiality of information,	С	2016:
forest managers shall make publicly available a		The following documents serve as DoF's public
summary of the primary elements of the management		summary.
plan, including those listed in Criterion 7.1.		• The 2015 annual report, http://www.in.gov/dpr/forestry/files/fo-
		DNR DoF 2015 Annual Report.pdf
		State Forest Environmental Assessment
		(http://www.in.gov/dnr/forestry/files/fo-
		<u>StateForests_EA.pdf</u>)
		DIVISION OF FORESTRY STRATEGIC DIRECTION
		<u>2015-2019</u>
		Resource Management Guides Management guides for individual tracts are available
		(http://www.in.gov/dnr/forestry/3643.htm.)
		DoF's webpage also includes other documents that
		are completely accessible to the public.
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.	С	2016: Plans and supporting documentation are available through the Indiana open records laws. DoF holds annual open house meetings at each State Forest to discuss operational plans, which are available on the Internet. Examples of open houses were provided to the auditor and examined for conformance to this Indicator.
		DoF gathered stakeholder comments during 2015 Forestry Strategic Plan public meetings and via a web form. Public review for the Strategic Plan also entailed submittal to the DNR Executive Office.
7.4.b Managers of public forests make draft	C	2016:
management plans, revisions and supporting		since 2010, are publically available on DoF website
accumentation easily accessible for public review and		www.in.gov/dnr/forestry/3635.htm.
address nublic composite and readifieth and readifieth		Forest management plan drafts, revisions and
address public comments and modify the plans to		supporting documentation are readily available on
ensure compliance with this standard.		the DoF website as detailed throughout Principle 7 findings above.

Principle #8: 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.		
Applicability Note: On small and medium-sized forests (see Glossary), an informal, qualitative assessment may be		
appropriate. Formal, quantitative monitoring is required	d on larg	e forests and/or intensively managed forests.
8.1 The frequency and intensity of monitoring should	С	
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.		
8.1.a Consistent with the scale and intensity of	С	2016:
management, the forest owner or manager develops		DOF has developed monitoring protocols in overall
and consistently implements a regular,		conformance to C8.2 that are systematically
comprehensive, and replicable written monitoring		implemented and replicable. Monitoring protocols are
protocol.		forests. Results are published or summarized in
		reports in most cases
		System-wide inventories follow procedures as
		described in the Resource Inventory section of the
		Procedures Manual. Additionally, DOF is directed by
		many different planning documents, and each has
		different monitoring strategies:
		Forest Health Protection monitors various insect and
		disease levels annually; Division of Fish and Wildlife
		has various monitoring routines from annual surveys
		to more periodic surveys; Division of Forestry
		inspections of active timber sales, appual 2nd-party
		monitoring of BMPs 20-year monitoring of the
		inventory, and 5-year statewide permanent plot
		inventory analysis through FIA; Other
		inventories/monitoring on DOF properties includes
		Natural Areas inventory, fish population monitoring,
		cultural/archeological resource inventory.
8.2. Forest management should include the research	С	
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.		

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.	С	2016: DoF meets the breadth of this Indicator through its periodic system-wide inventory and CFI system, which together cover items a)-f). The process to evaluate regeneration in regeneration opening (group selection and clear-cuts) is described in the new form "State Forest Timber Sale Post- Harvest Evaluation". The form includes Y/N answers for regeneration adequacy, presence of invasive species, and actions needed.
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.	C	2016: During active operations, monitoring generally includes at least weekly site inspections with the results documented on the Timber Sale Visitation and Evaluations. Each sale is also officially "closed out" with an inspection by a central office forester. Documentation was reviewed for a selection of sites visited during the audit.
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.	C	2016: Permits are not allowed for ginseng harvesting on State Forests. The Division of Nature Preserves is responsible for regulating the harvest and trade of ginseng in the State. Sales records are kept for each timber sale that allow for volume analysis at the district and whole-state forest system level. Current harvest data shows that harvest does not exceed growth.
 8.2.c The forest owner or manager periodically obtains data needed to monitor presence on the FMU of: 1) Rare, threatened and endangered species and/or their <i>habitats</i>; 2) Common and rare plant communities and/or habitat; 3) Location, presence and abundance of invasive species; 4) Condition of protected areas, set-asides and buffer zones; High Conservation Value Forests (see Criterion 9.4). 	C	 2016: Indiana DoF properties section wildlife biologist completes annual monitoring <u>snag and cavity</u> <u>trees</u>, and spring resident bird populations. Monitoring of summer breeding bird populations, forest amphibians, and deer impacts from browsing were suspended in 2012/2013 due to development of the bat HCP and are anticipated to resume in 2017. Division of Fish & Wildlife, fisheries section conducts annual creel census. The State of Indiana has a breeding bird atlas. Periodic surveys are completed for bats in caves. Periodic surveys are completed for the wood rat. Ruffed Grouse drumming surveys are completed. Nature Preserves completes annual or biennial surveys on preserves. DoF completes monitoring of BMP's annually.

		-
		 T and E species that were previously undetected in other surveys are reported to the Natural Heritage Inventory Database. Monitoring of HCV occurs as part of site inspections and, if near an active harvest, as part of harvest monitoring. Should HCVs undergo active management, such as prescribed fire, DoF monitors the response (e.g., regeneration). The Division of Nature Preserves monitors each HCV either annually or biennially. DoF cooperates with the <u>Indiana Invasive Species Council</u> on monitoring and prevention. <u>Hardwood Ecosystem Experiment</u> (HEE), a 100 year research project, continued including research on Indiana bats. There was a change in an existing management buffer due to the finding of an Indiana bat maternity roost tree. <u>EcoBlitz</u> is occurring in the backcountry area of the Morgan- Monroe and Yellowood State Forests. When management guides are updated, the invasive species section is also updated. Informal monitoring also occurs and since most field staff are licensed applicators, they may treat trouble spots quickly. As part of HCP development, extensive bat monitoring has occurred across Indiana State Forests. Results of this monitoring have been
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.	C	 2016: Evidence of monitoring includes the following reports and records: Timber sale inspection reports Annual BMP monitoring report results Contract monitoring (TSI forms) More fundamental to meeting this indicator, DoF inspects active timber sales and conducts post-harvest reviews to ensure that objectives and BMPs are being met. BMP audit reports from 2006-2015 are located here, <u>http://www.in.gov/dnr/forestry/7532.htm</u>.
8.2.d.2 A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	С	2016: DoF monitors road construction and maintenance by tracking how many miles are completed each year per property. Informal inspections occur during and after timber harvests.
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	С	2016: Summary and Monitoring of Social Impacts of State Forest Management Activities (CAR 2011.3 and

economic opportunities (see Indicator 4.1.g), the		2011.11 Summary and Monitoring of Social
creation and/or maintenance of quality job		Impacts.doc)
opportunities (see Indicator 4.1.b), and local		
purchasing opportunities (see Indicator 4.1.e).		State Forest Environmental Assessment:
		(http://www.in.gov/dnr/forestry/files/fo-
9.2 d 4 Stakeholder reconnects to management	C	<u>StateForests_EA.pdf</u>)
activities are monitored and recorded as necessary	C	Strategic Plan and FA has stakeholder comments and
		responses recorded. Stakeholder comments and
		responses to Management Guides are summarized on
		DoF website.
		All stakeholder comments in regard to the 2015-19
		Forestry Strategic Directions will be summarized and
	_	responses prepared as part of the planning process.
8.2.d.5 Where sites of cultural significance exist, the	С	2016:
opportunity to jointly monitor sites of cultural		No tribes have expressed interest in monitoring sites
significance is offered to tribal representatives (see		of cultural significance. Many sites are pre-instoric, making it difficult to tell which tribal groups were
Principle 3).		present.
8.2.e The forest owner or manager monitors the costs	С	2016:
and revenues of management in order to assess		Costs of arranging each timber sale is included in each
productivity and efficiency.		site plan for later analysis. The budget office maintains
		information on all expenditures and income. DoF's
		upper management analyses budgets for individual
		projects and the department as a whole to assess
8 3 Documentation shall be provided by the forest	C	
manager to enable monitoring and certifying	C	
organizations to trace each forest product from its		
origin, a process known as the "chain of custody."		
83 a When forest products are being sold as ESC-	C	2016:
certified the forest owner or manager has a system	C	See the Chain of Custody Appendix for more
that prevents mixing of ESC-certified and pon-certified		information. DOF maintains a COC system that
forest products prior to the point of sale, with		prevents the mixing of certified and non-certified
accompanying documentation to enable the tracing of		products prior to the point of sale and has
the harvested material from each harvested product		accompanying documentation to enable the tracing of
from its origin to the point of sale		the harvested material from the 'stump to the gate.'
	C	2010
8.3.D The forest owner of manager maintains	C	2010: See the COC Annendix for more details
motorial from each har vested and with from the a		see the coc Appendix for more details.
material from each narvested product from its origin		
to the point of sale.		
8.4 The results of monitoring shall be incorporated into		
the implementation and revision of the management		
pian.		
8.4.a The forest owner or manager monitors and	С	2016:

 documents the degree to which the objectives stated in the management plan are being fulfilled, as well as significant deviations from the plan. 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. 8.5 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. 	C	Post-harvest monitoring is conducted to track progress on individual Management Guides for each district. DoF carefully monitors progress on objectives in the plan since half its annual funding relies on product sales and services. Forest health deviations such as tree mortality from emerald ash borer and drought are closely monitored. 2016: The 2015-2019 Strategic Plan reflects results of monitoring and includes a number of changes. See Section 3 of the 2015 audit report. Monitoring showed a lack of oak regeneration in the state, prompting DNR to change harvest techniques to cut more gaps that help light-demanding seedlings like oaks. In 2014, DoF made over 400 acres of openings for early successional habitat. DoF also planted oaks in old fields to enhance the oak composition (see site notes). Based on interviews during 2015 site visits, DoF is not satisfied with soil compaction/rutting standards or residual tree damage guidance, and so they are in the process of revising those instructions.
including those listed in Criterion 8.2.		
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.	C	2016: All monitoring results are available on the public record. Many monitoring reports and analyses are available on the State of Indiana's website. For example, BMP monitoring results are published on the website annually.

Principle #9: 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.

High Conservation Value Forests are those that possess one or more of the following attributes:

- 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) Forest areas that are in or contain rare, threatened or endangered ecosystems
- c) Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control)

 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) 		
9.1 Assessment to determine the presence of the	C	
attributes consistent with High Conservation Value		
Forests will be completed, appropriate to scale and		
intensity of forest management.		
 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. 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 	С	 2016: In response to CAR 2011.12, DoF's updated HCVF documents address Indicator 9.1.a. See State HCVF description in Appendix 10 of the 2012 FSC Surveillance Audit Report. Currently, all HCVs are Nature Preserves. All Nature Preserves are mapped in GIS which was confirmed by GIS review. A map including HCVs was observed on the wall in the Yellowwood forest office. Per an interview, maps of the HCVs are also included in the Tract folders. Maps of most of the Nature Preserves that are HCVs are be found online at
requirements for legacy trees in Indicator 6.3.f.		http://www.in.gov/dnr/naturepreserve/4698.htm either listed or when one searches the map database.
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.	С	2016: DOF consulted Nature Preserves, local experts, and specialists when they identified HCVF's. The call for nominations for HCVFs remains open at any time, which is one of the main reasons that DOF demonstrates overall conformance to this indicator. The web document "INDIANA DIVISION OF FORESTRY HIGH CONSERVATION VALUE FORESTS" refers the reader to the Division of Nature preserves for more information on the classification and management of Nature Preserves. Nature Preserves has long had its own partners in assessing areas that may meet the definition of HCVs. For example, local land trusts and The Nature Conservancy have collaborated with Nature Preserves on classification and management of identified HCVs.
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.	С	2016: The web document "Indiana Division Of Forestry High Conservation Value Forests" summarizes the process used to identify HCVF, their locations and the process to provide comment. A general management strategy is also provided.
9.2 The consultative portion of the certification process must place emphasis on the identified	С	

conservation attributes, and options for the		
maintenance thereof.		
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.	С	2016: DoF utilizes experts in the Division of Nature Preserves, Indiana Heritage Trust, Division of Wildlife, Division of Historic Preservation and Archaeology, Purdue University, NGOs like The Nature Conservancy, and the USFWS regarding HCV identification and management strategies. There are currently 12 new areas under consideration for HCV designation. Three of them were open for public comment at the time of the audit <u>http://www.in.gov/dnr/forestry/3635.htm</u>
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.	С	2016: The Division of Forestry added a section to each HCVF on how public comments were considered. The Division posts HCVF information on the Division of Forestry website. Protection of HCVFs is an element of the 2015-2019 Forestry Strategic Directions Plan, which includes a public input process. There are currently 12 new areas under consideration for HCV designation. Three of them were open for public comment at the time of the audit and were reviewed. Future postings will be made to the same website, <u>http://www.in.gov/dnr/forestry/3635.htm.</u>
9.3 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.	С	
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.	С	2016: The web document "Indiana Division Of Forestry High Conservation Value Forests" summarizes management activities in HCVFs <u>https://www.in.gov/dnr/forestry/files/fo-</u> <u>HighConservationValueForests.pdf</u> . The Division of Forestry determined which divisions will have management responsibility of each of the HCVF and descriptions of the management measures to maintain and/or enhance the HCVF were added for each HCVF. These management measures are described in the Master Plan developed by the Division of Nature Preserves for each designated Nature Preserve. A sample of the Master Plans was

		reviewed. Currently all of the HCVs are in Nature
		Preserves.
9.3.b All management activities in HCVFs must	С	2016:
maintain or enhance the high conservation values and		The web document "Indiana Division Of Forestry
the extent of the HCVF.		High Conservation Value Forests" summarizes
		management activities in HCFVs.
		2016 field site visit included HCVF tract where
		monitoring had determined the management
		activities (none) were not accomplishing the desired
		outcome for the HCVF attribute State threatened
		reliowwood tree (<i>Cladastis lutea</i>). This tree requires
		management was not providing those openings and
		the Vellowwood seedlings were being shaded out A
		project to create openings is in process. The DoE has
		also proposed to greatly expanding the HCVE for the
		Yellowwood. It is anticipated that the expanded
		portion of the Yellowwood HCV will remain under the
		auspices of the DoF to provide the greatest amount of
		management flexibility to enhance the success of
		Yellowwood regeneration.
9.3.c If HCVF attributes cross ownership boundaries	С	2016:
and where maintenance of the HCV attributes would		DOF has not yet identified any HCV attributes that
be improved by coordinated management, then the		cross ownership boundaries. However, Nature
forest owner or manager attempts to coordinate		Preserves manages some HCVs in cooperation with
conservation efforts with adjacent landowners.		other adjacent public and private reserves. Inough
		por locus is on state-owned HCV some of the
		nronerties
9.4 Annual monitoring shall be conducted to assess the	С	
effectiveness of the measures employed to maintain or		
enhance the applicable conservation attributes.		
94 a The forest owner or manager monitors or	C	2016
narticipates in a program to annually monitor, the	C	Division of Nature Preserves undertakes monitoring of
status of the specific HCV attributes including the		HCVF. DoF's updated HCVF documents address
effectiveness of the measures employed for their		Indicator 9.4.a. Monitoring is the responsibility of
maintenance or enhancement. The monitoring		Nature Preserves. See State HCVF description in
maintenance of emancement. The monitoring		Appendix 7 of this Audit Report for detail.
program is designed and implemented consistent with		The Division of Nature Preserves monitors each HCV
the requirements of Principle 8.		either annually or biennially. The monitoring includes
		threats to the preserve including invasive species,
		primary natural communities, and assessment of the
		share the information with the property owner (Dec
		in the case of the HCVs) and discuss any problems and
		potential solutions.
9.4.b When monitoring results indicate increasing risk	С	2016:

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.		DoF has been working on an Indiana Bat HCP for some time. In the meantime, DoF applies its interim guidelines for Indiana Bat. DoF wildlife specialist indicates that other bat species may be at risk due to White-nose syndrome and that it awaits further information from cooperating organizations and
		The Division of Nature Preserves monitors each HCV either annually or biennially and meets with DoF regarding the results.
		to enhance the success of the Yellowwood tree (Cladastis lutea).
Principle #10. Plantations shall be planned and managed	in accor	dance with Principles and Criteria 1-9 and Principle 10

Principle #10: 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.

SCS has determined that Indiana State Forests do not have plantations as defined in P10 through field observation, management plans, and species managed.

Appendix 6 – SCS FSC Chain of Custody Indicators for Forest Management Enterprises

Version 6-0

REQUIREMENT	NC NC	COMMENT/CAR
1. Quality Management		
1.1 The organization shall appoint a management representative as having overall responsibility and authority for the organization's compliance with all applicable requirements of this standard.		Overall authority lies with the Certification Coordinator, Brenda Huter. Since timber sale administration is conducted at the level of each state forest, responsibilities are defined per job titles.
1.2 The FME shall maintain complete records of all FSC-related COC activities, including sales and training, for at least 5 years.		Indiana State <u>Records Retention</u> Regulations require all accounting-related records such as timber harvests be kept for a minimum of 10 years. Training records are kept digitally for the employees' term of employment.
1.3 The FME shall define its forest gate(s) (check all that apply): The forest gate is defined as the point where the change in ownership of the certified-forest product occurs.		Stump Stumpage sale or sales of standing timber; transfer of ownership certified-forest product occurs upon harvest. On-site concentration yard Transfer of ownership of certified-product occurs at concentratio yard under control of FME. Off-site Mill/Log Yard Transfer of ownership occurs when certified-product is unloaded purchaser's facility. Auction house/ Brokerage Transfer of ownership occurs at a government-run or private auction house/ brokerage. Lump-sum sale/ Per Unit/ Pre-Paid Agreement X A timber sale in which the buyer and seller agree on a total price, marked standing trees or for trees within a defined area before to wood is removed — the timber is usually paid for before harvestil begins. Similar to a per-unit sale. Log landing Transfer of ownership of certified-product occurs at landing/yard areas.
1.4 The FME shall have sufficient control over its forest gate(s) to ensure that there is no risk of mixing of FSC-certified forest products covered by the scope of the FM/COC certificate with forest products from outside of the scope prior to the transfer of ownership.		There is no risk of mixing since FME only makes sales of standing timber through lump-sum sales, which means that the purchaser takes legal possession prior to the transport of harvested materials and is therefore responsible for maintaining the chain of custody.

1.5 The FME and its contractors shall not process FSC-certified material prior to transfer of ownership at the forest gate without conforming to applicable chain of custody requirements. <i>NOTE: This does not apply to log cutting or de-barking units,</i> <i>small portable sawmills or on-site processing of chips/biomass</i> <i>originating from the FMU under evaluation.</i>	No processing occurs prior to the transfer of ownership.		
2. Product Control, Sales and Delivery			
2.1. Products from the certified forest area shall be identifiable as certified at the forest gate(s).	DNR identifies its COC claim and FSC code in timber sale contracts. Stumpage purchasers are notified that upon severance from the stump, all COC procedures become the responsibility of the purchaser.		
2.2 The FME shall maintain records of quantities/volumes of FSC-certified product(s).	FME maintains records of all pre-harvest volumes of timber products. All are sold as certified regardless of whether or not the purchaser maintains COC.		
 2.3. The FME shall ensure that all sales documents issued for outputs sold with FSC claims include the following information: a) name and contact details of the organization; b) name and address of the customer; c) date when the document was issued; d) description of the product; e) quantity of the products sold; f) the organization's FSC Forest Management (FM/COC) or FSC Controlled Wood (CW/FM) code; g) clear indication of the FSC claim for each product item or the total products as follows: i. the claim "FSC 100%" for products from FSC 100% product groups; ii. the claim "FSC Controlled Wood" for products from FSC Controlled Wood h) If separate transport documents are issued, information sufficient to link the sales document and related transport documentation to each other. 	Sales Contracts for 2016 audit sites were examined and found to be conformant. DNR uses a organization-wide template for use in all Timber Sale contracts. For example, from Contract 6331402 (Greene Sullivan), the signed agreement using their standard 2013 form includes all of the information required by 2.3. a) to h). These contracts were verified consistently and uniformly used in Yellowwood, Morgan-Monroe, Owen-Putnam, and Greene Sullivan timber sales inspected.		
required in 2.3 in the related delivery documentation, if the sales document (or copy of it) is not included with the shipment of the product. Note: 2.3 and 2.4 above are based on FSC-STD-40- 004 V2-1 Clause 6.1.1 and 6.1.2	FME does not issue delivery documents (trip tickets); COC procedures become the responsibility of the purchaser upon severance of timber from the stump.		
2.5 When the FME has demonstrated it is not able			
--	-----	---	--
to include the required FSC claim as specified above			
in 2.3 and 2.4 in sales and delivery documents due			
to space constraints, through an exception, SCS can			
approve the required information to be provided			
through supplementary evidence (e.g.			
supplementary letters, a link to the own company's			
webpage with verifiable product information). This			
practice is only acceptable when SCS is satisfied			
that the supplementary method proposed by the			
FME complies with the following criteria:			
a) There is no risk that the customer will			
misinterpret which products are or are not	C	No dolivary documents used	
FSC certified in the document;	C	No delivery documents used.	
b) The sales and delivery documents contain			
visible and understandable information so			
that the customer is aware that the full FSC			
claim is provided through supplementary			
evidence;			
c) In cases where the sales and delivery			
documents contain multiple products with			
different FSC Claims, a clear identification			
for each product shall be included to cross-			
reference it with the associated FSC claim			
provided in the supplementary evidence.			
FSC-ADVICE-40-004-05			
		N/A, FME does not use/ intend to use trademarks	
2 Labeling and Promotion		N/A_CW//FM contificates are not allowed to use FSC	
		N/A, CW/FINI certificates are not allowed to use FSC	
		CM//CM cortificates are found to be using trademarks)	
2.1 The EME shall adhere to relevant trademark use		CW/FW certificates are jound to be using trademarks	
s.1 The five shall durine to relevant trademark use		Saa Annay halaw	
the SCS Trademark Appendix for EMEs		See Alliex below.	
the SCS Hudemark Annex Jor Thils.			
		N/A, FME does not outsource any COC-related activities.	
4. Outsourcing		N/A, FME outsources low-risk activities such as	
		transport and harvesting.	
4.1 The FME shall provide the names and contact			
details of all outsourced service providers.	INA		

4.2 The FME shall have a control system for the		
outsourced process which ensures that:		
a) The material used for the production of		
FSC-certified material is traceable and not		
mixed with any other material prior to the		
point of transfer of legal ownership;		
b) The outsourcer keeps records of FSC-		
certified material covered under the	ΝΔ	
outsourcing agreement;	NA	
c) The FME issues the final invoice for the		
processed or produced FSC-certified		
material following outsourcing;		
d) The outsourcer only uses FSC trademarks		
on products covered by the scope of the		
outsourcing agreement and not for		
promotional use.		
5. Training and/or Communication Strategies		
5.1 All relevant FME staff and outsourcers shall be		All FME staff involved in timber sale administration
trained in the FME's COC control system		have been trained in contract administration and the
commensurate with the scale and intensity of		use of timber sale templates that contain FME's FSC
operations and shall demonstrate competence in		code and claim. Auditor viewed staff training records at
implementing the FME's COC control system.		Clark State Forest.
5.2 The FME shall maintain up-to-date records of its		
COC training and/or communications program,		
such as a list of trained employees, completed COC		FME staff receive COC-related training. Foresters
trainings, the intended frequency of COC training		demonstrated how training records are logged in an
(i.e. training plan), and related program materials		online database administered by the central office.
(e.g., presentations, memos, contracts, employee		
handbooks, etc.).		

SCS Trademark Annex for FMEs: FSC Trademarks, FSC-STD-50-001 V1-2

N/A, does not use/intend to use FSC trademarks for any purposes (finished with this section); or

N/A, is fully integrated and all trademark uses are treated under the COC Annex to this report that includes a full review of FSC-STD-40-004 and FSC-STD-50-001.

NOTE: This section is **applicable for all organizations that use or** *intend* **to use any FSC trademarks** for *promotional and/or on-product purposes*. For evaluation audits, it is acceptable to mark C if the client demonstrates an adequate awareness of the requirements through interviews and other applicable evidence. A requirement should be marked NC and a corresponding CAR should be issued for any nonconformance identified, such as use of FSC trademarks prior to granting of certification.

Description of how the organization	The Group Manager uses FSC trademarks on public Internet pages and in
currently uses, or intends to use,	educational publications and news releases.
FSC trademarks and/or labels,	
including but not limited to printed	

materials, Internet applications, on- product labeling, and other public- facing media:		
FSC-STD-50-001 V1-2, 1.9 Products intended to be labeled or promoted as FSC certified are included in the organization's certified product group list .	C NC C w/Obs	
Evidence: FME does not use on-product labeling.		
 FSC-STD-50-001 V1-2, 1.4, 1.6 – 1.8, 1.13 – 1.14 The organization does <u>not</u> use the FSC trademarks in the following ways: in connection with the sale or promotion of FSC Controlled Wood (§1.4) in any way that could cause confusion, misinterpretation or loss of credibility to the FSC certification scheme (§1.6) to imply any FSC endorsement or responsibility of the organization's activities outside of the certificate scope (§1.7) to imply any FSC responsibility for the production of products, documents or promotional materials (§1.8) in product brand names, company names or website domain names (§1.13) translated to another language with no English included (§1.14) 	X C NC C w/Obs	
FSC-STD-50-001 V1-2, 7.2 The FSC trademarks are not used together with the marks of other forest certification schemes in a way which implies equivalence or in a way which is disadvantageous to the FSC trademarks in terms of size or placement.	X C NC C w/Obs	
Sections 1.4, 1.6 – 1.8, 1.13, 1.14, and 7.2 Evidence: T The Certification Coordinator provided a log of trademark use authorizations from SCS at the opening meeting upon request.		
The auditor sampled web pages using FSC trademarks and observed an FSC license code or other elements of an FSC promotional panel. Trademark registration symbols were used as required.		
FSC-STD-50-001 V1-2, 1.11 Any information about FSC that is in addition to FSC trademarks and labels included in any material has been given prior approval by SCS.	X C NC C w/Obs N/A, no additional FSC information	
FSC-STD-50-001 V1-2, 1.15 The use of the FSC "checkmark-and-tree" logo is directly accompanied by the appropriate trademark symbols [®] or [™] (in superscript font). The appropriate symbol also accompanies the first use of "FSC" and "Forest Stewardship Council" in any text. NOTES :	X C NC C w/Obs N/A, one or more of the noted exceptions apply	

 The use of trademark registration symbol is not required for FSC claims in sales and delivery documents, or for the disclaimer/ statement specified in requirement 7.5 of FSC-STD-50-001 V1-2. The registration symbol is required for any other use of initials "FSC" on documents; however, the omission of the use of trademark registration symbol in promotional texts related to FSC on invoice templates, delivery notes and similar documents is possible if the software used to produce these documents does not support trademark registration symbols. This exception only applies to the use of the trademark registration symbol for the initials "FSC" and the name "Forest Stewardship Council". In January 2014, in Hong Kong, FSC changed the trademark symbol from [®] back to TM. Companies affected by this change which have approved artwork with the [®] registered trademark symbol for distribution in Hong Kong may continue to produce, distribute and sell into the market product using the registered trademark symbol on the FSC trademarks until 1 September 2015, with an additional liquidation period of six months, which expires 1 March 2016. All new artwork must use the TM trademark symbol. Where the FSC initials are used vertically in the traditional way of writing for Asian nations, the registration status symbol may be used in superscript font in either the top right corner (alongside C) as preferred. In this instance, mark "C". 		
FSC-STD-50-001 V1-2, 1.16	ХС	
All FSC trademark uses have been submitted to SCS for approval.	NC C w/Obs	
Sections 1.11, 1.15 and 1.16 Evidence: Certification Coordinator provided trademark approval by auditors.	og from SCS confirmed	
FSC-STD-50-001 V1-2, 1.10 All (previously approved) FSC labels only use the FSC label artwork provided on the label generator or otherwise issued or approved by SCS or FSC.	C NC C w/Obs X N/A, no approved FSC labels	
FSC-STD-50-001 V1-2, Sections 10, 11 and 12 All (previously approved) FSC labels and logos conform to the standard requirements for color and font (§10.1-10.3, 11.5, 11.7, 11.9), format and size (§10.4 - 10.7, 11.2, 11.3, 11.8), trademark symbol (§10.8, 11.4), FSC trademark license code (§10.9), label text (§10.10 - 10.15) and/or mini label requirements (§10.16 - 10.18). The label or logo is not being misused in any manner described in section 12.2.	C NC C w/Obs X N/A, no approved FSC labels	
Sections 1.10, 10, 11 and 12.2 Evidence: FME does not use on-product labels.		
Promotional use of the FSC trademarks		
N/A, does not use/intend to use FSC trademarks for promotional purposes (Skip Promotional section)		
NOTE: This section is applicable for all organizations that use or <i>intend</i> to use FSC trademarks for promotional purposes . For evaluation audits, it is acceptable to mark C if the client demonstrates an adequate awareness of the requirements through interviews and other applicable evidence. A requirement should be marked NC and a corresponding CAR should be issued for any nonconformance identified, such as use of FSC trademarks prior to granting of certification.		
FSC-STD-50-001 V1-2, 1.12, 4.4	C NC	

The FSC trademarks are not used to promote product quality aspects not covered by FSC certification (§ 1.12). Any claims regarding qualities outside the control of FSC , such as other environmental attributes of the product, are separated from text about FSC (§ 4.4).	C w/Obs X N/A, no additional quality claims
 FSC-STD-50-001 V1-2, 6.1 Catalogues, brochures, and websites meet the following requirements: a) The promotional panel, or at least the FSC trademark license code, is in a prominent place. b) When the products are not all on the same page, a link or text such as "Look for FSC certified products" is included next to the panel / code. c) FSC certified products are indicated by using the logo or with "FSC certified" in the product description. 	X C NC C w/Obs N/A, do not use trademarks in these items
FSC-STD-50-001 V1-2, 4.1 For labeled stationery and brochures printed on FSC-certified paper, the label is not in such a prominent position as to make it appear that any organization (or its products) represented in the publication is endorsed by FSC. (E.g. the FSC label is not placed on the front cover of the brochure or next to images of forest-based products which are not FSC certified.)	C NC C w/Obs X N/A, no such labeled items
FSC-STD-50-001 V1-2, 6.2 FSC certified products are not promoted using only the SCS Kingfisher and/or SCS Global Services logo .	X C NC C w/Obs
FSC-STD-50-001 V1-2, 7.3 FSC trademarks are not used at the top of document templates such as letterheads, sales documents and emails.	X C NC C w/Obs
FSC-STD-50-001 V1-2, 7.4 The FSC trademarks are not used on business cards to promote the organization's certification. NOTE: If authorization was duly received under the previous trademark standard, the organization may use the existing supply until it is depleted. In this case, the approval must be available and must have been granted prior to July 1, 2011.	X C NC C w/Obs N/A, approval granted prior to July 1, 2011
FSC-STD-50-001 V1-2, 4.2 If a business card is printed on FSC-certified paper , the mini label with product type is used at minimum size. The use of the mini label does not imply that the organization is affiliated with FSC.	X C NC C w/Obs N/A, no labeled business cards

FSC-STD-50-001 V1-2, 8.1, 8.2 All promotional items (e.g., mugs, pens, T-shirts, caps, banners, vehicles, etc.) display, at minimum, the FSC logo and FSC trademark license code (§8.1). Any promotional items made wholly or partly of wood (e.g., pencils, memory sticks, etc.) meet the applicable labeling requirements specified by FSC-STD-40-004 (§8.2).	C NC C w/Obs N/A, no FSC labels X on promotional items
FSC-STD-50-001 V1-2, 8.3 For FSC trademarks used for promotion at trade fairs the organization has clearly marked which products are FSC certified and the products carry an FSC label; or if no products are displayed, a visible disclaimer stating, "Ask for our FSC certified products," or, "We can provide FSC certified products upon request," is present. NOTE: Use of text to describe the FSC certification of the organization does not require a disclaimer.	C NC C w/Obs N/A, no FSC trademarks used for promotion at trade fairs
FSC-STD-50-001 V1-2, 9.1, 9.2 The organization takes full responsibility for the use of FSC trademarks by investment companies and others making financial claims based on their FSC certified operations(§9.1). Any such claims are accompanied by the disclaimer, "FSC is not responsible for and does not endorse any financial claims on returns on investments" (§9.2).	C NC C w/Obs N/A, no investment claims about FSC operations

Promotional Trademarks Section Evidence: Trademark approval logs presented at opening meeting, matched records by SCS for approvals. There was limited use of promotional material. The DNR website and Division of Forestry websites and about 15 sub- or associated- web pages were checked for FSC. Additionally, the DNR webpage has a search function which was used to search the term FSC and Forest Stewardship Council. Below is a screenshot copy of the first and most prominent use of FSC by the DNR, <u>http://www.in.gov/dnr/forestry/7532.htm</u> and uses the correct trademark symbol.

Forest Stewardship Council® (FSC®) reports (FSC-C012858)

Number and variety of promotional trademarks and associated approval records reviewed: The Group Manager uses FSC trademarks on public Internet pages and in educational publications and news releases. The first and most prominent use on DNR website was used appropriately and correctly (see above). The Certification Coordinator provided a log of trademark use authorizations from SCS at the opening meeting.

Rationale that sample choice is sufficient to confirm system is functioning effectively and as described: Auditors encountered the most prominent and consistently used promotional materials and documents. The DNR website and Division of Forestry websites and about 15 sub- or associated- web pages were checked for FSC. Additionally, the DNR webpage has a search function which was used to search the term FSC and Forest Stewardship Council.

Using the FSC labels on products		
X N/A, does not use/intend to use FSC on-product/packaging labels (Skip section 11)		
NOTE: This section is applicable for all organizations that use or <i>intend</i> to use FSC trademarks for on-product purposes . For evaluation audits, it is acceptable to mark C if the client demonstrates an adequate awareness of the requirements through interviews and other applicable evidence. A requirement should be marked NC and a corresponding CAR should be issued for any nonconformance identified, such as use of FSC trademarks prior to granting of certification.		
FSC-STD-50-001 V1-2, 2.1 For each on-product claim, the organization has selected the correct FSC label based upon the FSC claim that the product has been supplied with or is qualified for. <i>NOTE: For FM/COC certificates, the FSC label and claim is FSC 100%</i> .	C NC C w/Obs	
Sections FSC-STD-50-001 V1-2, 2.1 Evidence:		
FSC-STD-50-001 V1-2, 2.3 The FSC label is clearly visible on the product, its packaging or both.	C NC C w/Obs	
FSC-STD-50-001 V1-2, 2.6 Marks of other forestry certification schemes are not used on the same product (except for product promotion or educational purposes in an FSC labeled publication, as long as there are no claims about the paper of the publication being certified against the other certification scheme (§2.6.1)).	C NC C w/Obs	
FSC-STD-50-001 V1-2, 2.7 When products are being made for sale to retailers who may wish to use the FSC trademarks to promote them, the products carry the FSC label either on the product or on packaging which will be visible to the consumer .	C NC C w/Obs N/A, products not being made for sale to retailers	
FSC-STD-50-001 V1-2, 4.3 Where the FSC logo with the license code is applied as a heat brand or stencil directly to the product without all required label elements, a standard label is also used either on the packaging or attached as a sticker or hang-tag.	C NC C w/Obs N/A, no brand/stencil N/A, brand/stencil includes all elements	
Sections 2.2 – 2.7, 4.3 Evidence:	·	
Number and variety of on-product logos and associated approval records reviewed:		
Rationale that sample choice is sufficient to confirm system is functioning effectively and as described:		

Appendix 7 - Peer Review and SCS Evaluation Team Response to Peer Review

A peer review for a re-evaluation certification report was not required per FSC-STD-20-007 v3.0, 7.2.a).

Appendix 8 - State Forest Certification High Conservation Value Forests

Note that this appendix is employed as an additional evaluation technique to assess and provide information on DoF's High Conservation Value (HCV) identification and classification system.

The Forest Stewardship Council (FSC) provides for the designation of High Conservation Value Forests (HCVFs). These are forest areas that receive added consideration of management activities in order to maintain or enhance conservation value attributes. These attributes may be of biological, ecological, or cultural significance. General information about HCVFs is available of the FSC web site (www.fsc.org).

Beginning in 2007, the Division of Forestry (DoF) designated 15 areas containing a total of 1,926.4 acres as HCVFs. All of these initial areas were dedicated Nature Preserves. Dedicated Nature Preserves are a logical choice for designation at HCVFs since the attributes that make them Nature Preserve quality are the same biological or ecological attributes sought for HCVFs. In 2010 the Division of Forestry added 2 additional areas for a current total of 2,427.1 acres in HCVFs. The Division of Nature Preserves web page (dnr.in.gov) provides additional information on Dedicated Nature Preserves.

Under FSC standards, designation of areas as HCVFs does not preclude management activities. Management of HCVFs will be directed toward maintenance or enhancement of the condition for which the HCVF was designated.

Primary management responsibility of HCVFs that are also Dedicated Nature Preserves will be with the Division of Nature Preserves due to their expertise with botanical and ecological resources. DoF will have secondary management responsibility and will provide support and resources when possible. These are most likely to be HCV1, HCV2 and HCV3 type HCVFs (though not all HCV1, HCV2 and HCV3 areas will be Dedicated Nature Preserves).

Primary management responsibility of all other HCVFs will fall to DoF. This will include all 6 of the HCVFs types.

DESIGNATION OF HCVFs

While DoF will continue to nominate Dedicated Nature Preserves as designated HCVFs, it will also consider nominations of areas for HCVFs from interested, knowledgeable individuals. Below is the process for nominating, reviewing and designating HCVFs.

Nomination

Dedicated Nature Preserves will be nominated by DoF. The nomination process will consist of posting the Nature Preserve on the DoF website for public comment on the nomination as a HCVF.

Individuals may nominate areas for HCVF designation by sending a letter to **Brenda Huter, Certification Coordinator, Indiana Division of Forestry, 402 W. Washington Street, Room W296, Indianapolis, IN 46204;** <u>bhuter@dnr.in.gov</u>; **317-232-4105.** This letter should include location information of the proposed area – State Forest name, legal description by Section, Township and Range, and County. It should also include a map of the proposed area that also includes identifiable landmarks for reference (roads, intersections, rivers/lakes). Also provided should be a brief description from the nominator of the important attributes of the proposed area that make it worthy of consideration for a HCVF. Nominators must provide contact information – name, address, phone number and email address – so DoF can contact them to gather more information or to clarify nominations.

Public Comment

Nominated areas will be placed on the DoF website for public comment for a minimum of 30 days. Comments should be specific to the area and, in particular, should contain information on the attributes of the area in terms of the criteria for the HCVF types. Comments will be reviewed by a designated review team.

In addition, as part of the Nature Preserve dedication process, proposed nature preserves go before a public meeting of the Natural Resources Commission where public comments are taken about proposals.

Review Process

A review process for a nomination will last up to 6 months, and will involve a team from DoF, and possibly other knowledgeable persons if needed. DoF may add experts with pertinent expertise to the review team depending on the nature of the criteria to be considered. These may be people from sister agencies or outside state government. This time frame may be extended if there is seasonality to the attributes that are to be evaluated, and the extra time is needed to cover the season.

Members of the review team will perform an onsite visit of the nominated area. They will evaluate the nominated area against the criteria it is being nominated for, and in the context of other examples of the same type to determine if it warrants HCVF designation. They will review public comments, particularly in terms of gathering additional information on attributes of the nominated area.

Designation Decision

The review team will present the nomination and the results of its review to the State Forester. They will provide a recommendation regarding designation to the State Forester. The State Forester will have up to 60 days to make a final decision. He will give his decision to the review team.

Members of the review team will then post the designation decision of the DoF website along with a summary of comments received and a response to the comments.

For designated HCVFs, members of the review team will create a management strategy regarding the maintenance or enhancement of the attributes of the HCVFs, and monitoring of the areas. In the case of Dedicated Nature Preserves, the Master Plan for the Nature Preserve serves this function.

DESIGNATED HIGH CONSERVATION VALUE FORESTS

Clark State Forest

White Oak Nature PreserveHCV3143.1 acres

white oak/mixed oak and hickory forest

State/regionally rare (S3) and high-quality example of mesic upland.

Prescribed management to enhance or maintain described in Master Plan – control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves (DNP) and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Virginia Pine-Chestnut Oak Nature Preserve HCV 1 & HCV3 23.6 acres

Native Virginia pine and chestnut oak forest

Protected area (HCV 1.1) and high-quality example of regionally under-represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Alum Cave Hollow Nature PreserveHCV1 & HCV3142 acres

Siltstone cliffs, mesic, dry-mesic, and dry upland forests with native Virginia pine forest

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Harrison-Crawford State Forest

Post Oak - Cedar Nature Preserve HCV1 & HCV3 266 acres

Dry upland forest, mesic upland forest; glades; rare plants

Contains high quality state /regionally imperiled and rare (S2S3) limestone barrens and glade communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Scout Mountain Nature	Preserve	HCV1 & HCV3	40 acres

Mixed mesophytic forest with beech maple and oak-hickory types; cave – Myotis sodalis hibernacula

Contains high quality state /regionally critically imperiled and rare (S1) limestone cliff community.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development. Construction of barriers to limit cave access is prescribed.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by Division of Fish and Wildlife (DFW), DNP and DoF.

No known public comments received.

Leavenworth Barrens Nature Preserve H

HCV1 & HCV3 761.3 acres

Dry upland forest, mesic upland forest; glades; barrens; rare plants

Contains high quality state /regionally imperiled and rare (S2S3) limestone barrens and glade communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Bat Wing Cave Nature PreserveHCV110 acres

Cave – Myotis sodalis hibernacula

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development. Construction of barriers to limit cave access is prescribed. Additional buffer zone with management limitations outside the actual preserve covers 71 acres of adjoining forest.

Joint management by the Division of Fish and Wildlife, Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DFW, DNP and DoF.

No known public comments received.

Charles C. Deam Nature Preserve HCV1 & HCV3 258.9 acres

Floodplain forest, talus slopes, limestone cliffs, sandstone cliffs, upland forests, rare plants and animals

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DFW, DNP and DoF.

No known public comments received.

Blue River Gravel Wash Nature Preserve HCV1 & HCV3 78 acres

Floodplain forest, limestone cliffs, rare plants

Contains high quality state /regionally critically imperiled and rare (S1) gravel wash community.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DFW, DNP and DoF.

No known public comments received.

Jackson-Washington State Forest

Indian Bitter Nature Preserve	HCV1 & HCV3	35 acres
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Dry-mesic upland forest, mesic upland forest, cucumber magnolia

State/regionally rare (S3) and high-quality example of mesic upland.

Prescribed management to enhance or maintain described in Master Plan – remove competing vegetation around cucumber magnolia.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Knobstone Glades Nature Preserve	HCV3	60 acres
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Siltstone glades; xeric, dry and dry-mesic upland forest

Contains high quality state (S2) and globally (G2) imperiled siltstone communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Martin State Forest

Henshaw Bend Nature Preserve HCV3 77 acres

High quality mesic upland forest, river bluffs

State/regionally rare (S3) and high-quality example of mesic upland.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Tank Spring Nature PreserveHCV360 acres

Mesic upland forest, sandstone cliffs, prominent spring

State/regionally rare (S3) and high-quality example of mesic upland forest and sandstone cliff communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Morgan-Monroe State Forest

Scout Ridge Nature Preserve HCV1 & HCV3 14.5 acres

Mature beech maple forest

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Sweedy Hollow Nature Preserve HCV3 150.1 acres

Mesic, dry-mesic and dry upland forest; mesic floodplain forest; sandstone cliff communities

State/regionally rare (S3) and high-quality example of mesic upland forest and sandstone cliff communities.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Low Gap Nature Preserve	HCV3	320 acres

Mesic, dry-mesic and dry upland forest

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Contains state/regionally rare (S3) and high-quality example of mesic upland forest.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Yellowwood State Forest

Crooked Creek Nature Preserve HCV1 35 acres

Yellowwood tree; mesic and dry-mesic forest

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Miller Ridge Nature PreserveHCV1 & HCV330.6 acres

Yellowwood tree; mesic, dry-mesic and dry upland forest

Contains state/regionally rare (S3) and high-quality example of mesic upland forest.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

DECLINED HCVF NOMINATIONS

Morgan-Monroe State Forest

Back Country HCVF

No type designated

3,104 acres

Mesic, dry-mesic and dry upland forest

No management prescription provided

Management by the Division of Forestry.

Monitoring will be performed through periodic inspection by DoF.

One known public comment received it was in opposition to the designation. The comment recommended these designations originate with the DNP. The nomination was rejected. Subsequently, the Low Gap Nature Preserve was dedicated, and then designated a HCVF.

Appendix 9 - Summary and Monitoring of Social Impacts of State Forest Management Activities

**This was originally produced by the IDNR in 2012 and is copied in total below.

The Indiana Department of Natural Resources – Division of Forestry (DoF) takes into consideration social impacts of management activities, incorporating them into management planning and operations. Some of the factors considered when making discussions include archaeological and culturally significant sites, public resources, aesthetics, community goals and economic opportunities.

Archaeological sites and sites of cultural, historical, and community significance are placed under consideration prior to management activities. Cultural resources, both within and outside of the Forest Management Unit (FMU), are evaluated to determine if the planned activity will result in an adverse impact to these sensitive resources. Section M of the Resource Procedure Manual, which is located on the DoF webpage at *www.in.gov/dnr/forestry/3647.htm*, describes how these resources are addressed and incorporated into decision making procedures. Public involvement is available through several opportunities. Management guides include a section for cultural resources and are available for public comment on the DoF web page at *www.in.gov/dnr/forestry/3634.htm*. In addition, projects that require a Certificate of Approval through the DNR – Division of Historic Preservation and Archaeology (DHPA) are also posted for a public comment period. DHPA handles the posting of these projects as well as the evaluation of the received comments.

Public resources, including air, water, and soil, have been evaluated for both 'direct' and 'indirect' effects of management activities as well as the cumulative effect of said activities on these public resources. The results of this analysis are located within the 2008 Environmental Assessment (EA) document published by DoF and indicates that although some short term effects may occur (such as smoke from prescribed burns or dust from road construction) the effects should remain at "a level that would be minor, localized, and would not have a measurable long term effect." In specifically addressing those items used as food resources by DoF's customers the study found that while some negative impacts may result from management activities, they should not be in levels that would affect population, and, in fact, some species may benefit from the planned management activity (DoF 2008).

Aesthetics were also reviewed for the EA and included both visual effects and noise that resulted from management activities. The study concludes that while management activities would visually alter the FMU, these effects should remain short term and would only last as long as the activity was in progress. Also, areas which initially may appear as an altered landscape would, during the following growing seasons, begin to regrow. The draft EA, which described management considerations and activities, was made available for public comment by posting the manuscript on the DoF web page from May 8, 2008 to July 15, 2008. A statewide news release, which was also sent directly to key stakeholders, announced the availability of the review period. The comments received and DoF's responses were summarized within the final print of the EA. In addition, DoF does consider and utilize Visual Enhancement Areas (VEA) during management activities. Management within VEAs and recreational

areas typically consist of the removal of dead or hazard trees and/or the selective removal of trees with a high risk of loss or death during the next management cycle.

Community goals for forest and natural resource use and protection is obtained through open houses and other available formats for public input, such as meeting with friend groups or comments received via personal communications. Community economic opportunities are made available not only through harvests but also events held on the properties. Harvests are scaled to different sizes to attract a wide variety of bidders. A portion of the proceeds (15%) from sales on the FMU, which equate to nearly \$2.5 million per year, are returned to the county for investment into community. For the 2010-2011 fiscal year, over \$283,000 was distributed to the counties as a direct result of the timber management program (DoF 2010). According to the 2005 Strategic Plan, for every dollar of timber sold approximately \$10.25 is generated in additional direct revenue to the Indiana economy (INDNR 2005). Furthermore, the 2005 BioCrossroads report detailing Indiana's agricultural economy states that Indiana's hardwood industry employs over 47,000 Hoosiers (Meeusen and Swain 2005).

Social-economic issues are, in part, monitored by organizations outside of the DoF. These organizations often work in cooperation with the DoF and their reports, which are made available to the public, are considered sufficient in monitoring of the social-economic issues and, therefore, DoF has not attempted to reconstruct the same studies. One example of such a report is the yearly *Indiana Forest Products Price Report and Trend Analysis* published by Purdue University which follows the economic trends of Indiana's primary forest manufactures (Hoover 2011, 2010, 2009). The report not only analyzes market trends but also the social-economic basis behind these movements. A 2011 study by Hoover and McCoy looks at the social-economic impact of the Morgan-Monroe-Yellowwood State Forest complex. Although the study focuses on the one management unit, the results of the analysis can be extrapolated across the entire FMU (Hoover and McCoy 2011). Furthermore, the results of DoF's monitoring of social-economic issues have also been summarized in a report by Purdue and DoF titled *Indiana's Hardwood Industry: It's Economic Impact* (Hoover and Settle 2010). This report breaks down Indiana's hardwood industry by producers, primary industry, and secondary industry and discusses factors that affect its economic impact and structure.

In 2009 DoF precipitated a survey of Indiana residents concerning their opinion of the State Forest. The results of the survey were published as *Indiana Residents' Perception of Woodland Management "Indiana Woodland Monitor 2009 (IWM-09)"*. A total of 1,402 Indiana adult (18 years or older) residents completed the survey, permitting DoF the ability to gage its customers perceptions. The majority of the respondents (78%) indicated that they, or someone in the household, engaged in select outdoor activities. The majority also approved of harvesting trees for management if overseen by a professional forester (85%) or for wildlife habitat improvement (82%). The majority of the respondents (61%) also approved of harvesting in order to make lumber or other wood products. Furthermore, 88% of the respondents agreed with the statement "Indiana woodlands should be managed for a balance of wood products that we use, and other benefits like recreation, wildlife, and good water quality" (Amberg 2010). In addition, the DoF provides a written annual timber sale summary to all properties, staff, and key stakeholders. This summary includes a comparison between the recently completed fiscal year and the previous fiscal year covering the total price received, price per board foot, sawtimber volume, harvest target acres, acres of opening, volume of trees, etc. Also included is a breakdown of the harvests by species as well as information on the amount of dollars returned to the counties through the timber management program. This information is summarized not only at the system level, but also by individual properties within the system allowing not only for comparison of the state but also regional comparisons within the state.

Surveys and reports such as the ones mentioned above are just one of several ways in which social and social-economic impacts are incorporated and monitored by the DoF. These coupled with public comments periods on management plans and management activities, open houses, and various opportunities for public involvement such as meetings and personal communications, facilitate in management planning and provide a valuable source of input from DoF's consumers and stakeholders. Comments received via these various opportunities are taken into consideration and incorporated into management planning and operations.

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