FOREST MANAGEMENT AND STUMP-TO-FOREST GATE CHAIN-OF-CUSTODY SURVEILLANCE 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
http://www.in.gov/dnr/forestry/

CERTIFIED	EXPIRATION
27 June 2017	26 June 2022

DATE OF FIELD AUDIT
7-9 November 2017
DATE OF LAST UPDATE
29 January 2018

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Foreword

Cycle in annual surveillance audits				
☒ 1st annual audit	☐ 2nd annual audit	☐ 3rd annual audit	☐ 4th annual audit	☐ Other (*expansion of scope, Major CAR audit, special audit, etc.*):
Name of Forest Management Enterprise (FME) and abbreviation used in this report:				
Indiana Department of Natural Resources, DNR; Division of Forestry, DOF; or FME				

All certificates issued by SCS under the aegis of the Forest Stewardship Council (FSC) require annual audits to ascertain ongoing conformance with the requirements and standards of certification. A public summary of the initial evaluation is available on the FSC Certificate Database http://info.fsc.org/.

Pursuant to FSC and SCS guidelines, annual / surveillance audits are not intended to comprehensively examine the full scope of the certified forest operations, as the cost of a full-scope audit would be prohibitive and it is not mandated by FSC audit protocols. Rather, annual audits are comprised of three main components:

- A focused assessment of the status of any outstanding conditions or Corrective Action Requests (CARs; see discussion in section 4.0 for those CARs and their disposition as a result of this annual audit);
- Follow-up inquiry into any issues that may have arisen since the award of certification or prior to this audit; and
- As necessary given the breadth of coverage associated with the first two components, an additional focus on selected topics or issues, the selection of which is not known to the certificate holder prior to the audit.

Organization of the Report

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Forest Stewardship Council. This section is made available to the general public and is intended to provide an overview of the evaluation process, the management programs and policies applied to the forest, and the results of the evaluation. Section A will be posted on the FSC Certificate Database (http://info.fsc.org/) no less than 90 days after completion of the on-site audit. Section B contains more detailed results and information for the use by the FME.

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SECTION A – PUBLIC SUMMARY

1. General Information

1.1 Annual Audit Team

Auditor Name:	Beth Jacqmain	**Auditor role**:	FSC Lead Auditor, SFI Auditor
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 public land management. Jacqmain is a qualified ANSI RAB accredited ISO 14001 EMS Lead Auditor and is a qualified FSC Lead Auditor for Forest Management/Chain of Custody. Jacqmain has audited and led FSC certification and precertification evaluations, harvest and logging operations evaluations, and has participated in joint SFI and American Tree Farm certifications. Jacqmain is a 9-year member of the Forest Guild and 20 years adjunct-faculty with Itasca Community College, Natural Resources Department. Jacqmain's experience is in forest management and ecology; the use of silviculture towards meeting strategic and tactical goals; forest timber quality improvement, tree regeneration, thinning operations, pine restoration, and fire ecology in conifer dominated systems.		
Auditor Name:	Ruthann M. Schulte	**Auditor role**:	SFI Lead Auditor, FSC Auditor
Qualifications:	For decades Ruthann has worked on issues related to landscape management, wildlife management, and the long-term stewardship of private forest and ranch lands. Over her career, she has coordinated forest certification programs for private industry. Ruthann holds a B.S. in Biology from Siena Heights College in Adrian, Michigan and a Masters of Biology from the University of Louisville in Louisville, Kentucky. She is an ISO 14001 accredited auditor and has served on internal audit teams for ISO 9001. Ms. Schulte is an auditor for the SCS Forest Management and Chain of Custody programs.		
Auditor Name:	Norman Boatwright	**Auditor role**:	Team Auditor/Technical Expert
Qualifications:	Norman Boatwright is the president of Boatwright Consulting Services, LLC located in Florence, South Carolina. BCS handles typical forestry consulting, SFI, ATF and FSC Audits, Phase I Environmental Site Assessments, Forest Soil Mapping, Wetland Delineation, and other Biological Services. Norman has over twenty-nine years' experience in intensive forest management, eighteen 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 acres, Endangered Species Assessments on timberland across the South, and managed soil mapping projects on over 1.3 million acres. From 1985-1991, he was Division Manager at Canal Forest Resources, Inc. and was responsible for all forest management activities on about 90,000 acres of timberland in eastern South Carolina. Duties included budgeting and implementing land and timber sales, site preparation, planting, best management 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

1.2 Total Time Spent on Evaluation

A. Number of days spent on-site assessing the applicant:	3
B. Number of auditors participating in on-site evaluation:	3
C. Additional days spent on preparation, stakeholder consultation, and post-site follow-up:	4
D. Total number of person days used in evaluation:	**13**

1.3 Standards Employed

1.3.1. Applicable FSC-Accredited Standards

Title	Version	Date of Finalization
FSC-US Forest Management Standard	V1-0	8 July 2010
FSC-STD-50-001, Requirements for Trademark Use	V1-2	25 November 2010
All standards employed are available on the websites of FSC International (www.fsc.org), the FSC-US (www.fscus.org) or the SCS Standards page (www.scsglobalservices.com/certification-standards-and-program-documents). Standards are also available, upon request, from SCS Global Services (www.SCSglobalServices.com).		

1.3.2 SCS Interim FSC Standards

Title	Version	Date of Finalization
SCS FSC Chain of Custody Indicators for Forest Management Enterprises	6-0	5 December 2016
This SCS Interim Standard was developed by modifying SCS' Generic Interim Standard to reflect forest management in the region and by incorporating relevant components of the Draft Regional / National Standard and comments from stakeholders. More than one month prior to the start of the field evaluation, the SCS Draft Interim Standard for the country / region was sent out for comment to stakeholders identified by FSC International, SCS, the forest managers under evaluation, and the National Initiative. A copy of the standard is available at www.scsglobalservices.com/certification-standards-and-program-documents or upon request from SCS Global Services (www.SCSglobalServices.com).		

2 Annual Audit Dates and Activities

2.1 Annual Audit Itinerary and Activities

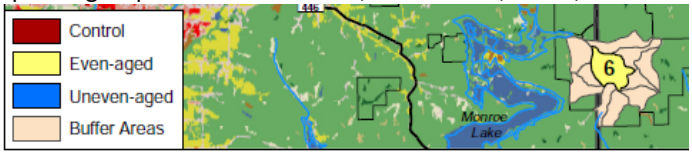
Date: Monday, November 6, 2017	
DNR Central Office	Office Document Review: Schulte and Boatwright.
Selmier State Forest (SSF): Pollinator yard (All SSF sites: Schulte and Boatwright)	Cooperative project with the Jennings County Soil and Water Conservation District. This site is on an old log landing from 2012. The County seeded the log yard with pollinator habitat, posted an informational board about the project and will use it for an education day when fifth graders come out to the State Forest for an annual trip. In the past the trip

	has included discussions about forestry, soils, and water quality. Now the pollinator station will be added on. The area can also be used as a landing for the upcoming harvest if needed.
SSF: Tract 3* Sale – sold but not active	Tract 3 is about 72 acres of upland hardwoods with quite a bit of tulip poplar and some pine plantings. Focus of harvest is on drought stressed tulip poplar and ash mortality from EAB. There are also a few small regeneration openings prescribed. Sale area marked for harvest. The area is flat and a good growth site so will regenerate tulip poplar. Some grapevines were found in the tract during marking so were cut. Interim bat measures were implemented.
SSF: Interpretive Trail	There is a 20 stop interpretive trail that runs through this State Forest. The trail was developed in conjunction with the County. A pamphlet teaches visitors about forestry topics including BMPs, water quality, and wildlife habitat. This provides the opportunity for recreation and public education in a working forest. The trail will be closed during harvest operations.
SSF: Cultural site in marked sale area (sale indicated in site 2)	A cultural site was known to exist in the harvest area. The staff archeologist was consulted. A 100' buffer around the site was identified. The area had been flagged and no trees were marked within the 100' buffer. Although the flagging had been removed, it will be replaced prior to harvest as well as describing the restrictions to the logging crew during the pre-harvest meeting. The harvest area is sold but it is not anticipated to be harvested over the winter.
Tuesday, November 7	**Jackson-Washington State Forest**
Jackson-Washington State Forest Office	FSC Opening meeting: introductions, audit scope, confidentiality and public summary, conformance evaluation methods and tools, CARs process, relevant work safety, emergency and security procedures for the audit team, review audit plan, document review, stakeholder input; questions.
Jackson-Washington State Forest, Washington County (WSF): Starve Hollow State Recreation Area (All WSF sites: Jacqmain and Boatwright)	Site with 13-15 cabins built using wood from state forests. Lake dredging, hiking/mountain biking, beach picnic area, Forest Education Center, comfort station for RVs (showers), planted white oak to replace individual ash killed by EAB.
WSF: C08T13, C08T20	Sale set up, not yet cut. In two blocks 80 acres and 60 acres. Central hardwood stand. Primary species: Oak species, beech, sugar maple. Thinning. Examined log yard, boundaries, used old skid trails. TSI contract to remove unharvested, marked trees in the mid-story. Plan to spray invasives. Snag retention when safe and not impairing operations.
WSF: C08T08	TSI focused in releasing walnut on 5 acres. A 90 acre stand mixed hardwoods, early to late successional stages. Post-harvest TSI to create more snags. Proposed Activities: Mark harvest/sell timber, Post-harvest TSI, Inventory and Mgt Guide. Primarily sugar maple, American beech, and oak species. 123.5 ba/ac, 91 BA sawtimber. Non-native Invasive Species include silt grass and multi-flora rose.
WSF: Seed orchard	Seed orchard for American chestnut with 15-16th and 31-32nd generations hybridized with Chinese chestnut species with resistance to chestnut blight.
WSF: C10T41	Planting on 6 acres on old field with mixed bottomland hardwoods at 700-800 trees per acre. Species: burr oak, swamp white oak, pecan, cherrybark oak. Sprayed prior to planting, early spring 2017. Heavy deer browse.
WSF: Cucumber magnolia	A 40-acre stand containing cucumber magnolia (*Magnolia acuminata*) managed by Nature Preserve. Discovered 1984 during timber sale marking. Instituted a protection

	area around the magnolia patches. Can be managed at Nature Preserve request. TSI work had been completed. Concerns: regeneration and recruitment may require active management and gap generation may be needed.
WSF: C09T24	Sale set up, 135 acres mixed hardwoods with selection thinning in RSA (BCA). Dying red pine being removed on about 5 acres. Old homestead site with filled in cistern, evaluated for safety. Knobstone trail runs through sale area. Trail will be closed and rerouted during the sale. Logger will be responsible for trail restoration after sale is completed.
WSF: C11T18,19	Mixed hardwood selection harvest on 21 acres. Blowdown harvest 15-acre old field planted pine. Logging accident site, incident 10/17/16 with Investigator's report and conclusions.
WSF: Land acquisition site	Land purchase under the President Benjamin Harrison Indiana Conservation Trust program in cooperation with the Wild Turkey Federation. Intersection existing state lands containing the Knobstone Trail. Purchased through the Division of Land Acquisitions.
Jackson-Washington State Forest, Jackson County (JSF): Site 1 – C1 T11* Closed Sale (All JSF sites: Schulte)	Pine and hardwood stand. 63 acres. Pine has been declining. Regeneration harvest with openings (20 acres total) to return the stand to native hardwoods. Sale closed out in 2015. TSI has been completed. File was reviewed and during operations there was an issue with rutting but it was addressed at the time and was no evidence was observed during the site visit. BMPs were observed. This was an area planted in pine by the CCCs. They also built buildings in the 1930s.
JSF: C1 T11 Hiking trails	A hiking trail boarders the sale in site #1. During operations the trail was closed down. BMPs were installed on portion of trail along the sale unit. The area is close to the office so staff answered questions and educated the public as inquiries were made about operations. Aesthetics are considered on a case by case basis and balance visual issues with forest management.
JSF: C2 T17 Recently closed sale	Hardwood stand. 72 acres. Salvage harvest to remove poplar and oak impacted by drought. Sold in 2013 and closed in 2017, extension granted due to bat rules, wet erodible soil, and logger injury. Single tree selection with some openings (12 aces total). Ash removed in anticipation of EAB reaching the site. Harvest area includes an archery range that was closed during operations. Stream buffer observed.
JSF: C3 T1* Sold in 2016 not yet harvested	Oak hickory stand. 60 acres. Single tree selection with 1.6 acres opening to remove planted Loblolly and Virginia pine and regenerate to native hardwoods (yellow poplar, maple, oak, hickory, and black walnut). Observed opening boundary and property boundary.
JSF: C2 T15 Active operation but closed down during audit visit for wet weather	Hardwood stand with planted pine. 77 acres. Single tree selection with openings totaling 25 acres. Hardwood openings marked with boundaries and individual trees within marked as well. Pine opening boundary was marked and volume estimated – take all trees within boundary. Homestead in sale area. Flagging observed marking 100' buffer around the cultural site. Observed signage for trail closure.
JSF: C3 T15 Sale very early in the process – marked not approved	Hardwood stand. Single tree selection to remove overly mature and poorly formed trees. Group selection opening totaling 4 acres. New forester developing plan will consult with Project Manager and Property Program Specialist on marking close to road since Skyline Drive is a scenic road and a tourist destination. Fire tower in harvest area is a cultural feature so is considered. Observed skid trails marked on steep slopes. Discussion of skidding practices. Group relocated down the road to observe past skidding practices in similar circumstances on a closed sale. Area was inspected. Observed stable, seeded skid trails and no evidence of significant disturbance.

JSF: Knobstone Glades Nature Preserve	The Knobstone Glades Nature Preserve is 60 acres in 3 blocks and is a Forest of Exceptional Conservation Value. Glades are forest openings with sparse herbaceous vegetation growing on and around bedrock outcroppings. Stunted gnarled-looking chestnut and blackjack oaks grow in and around these openings. The dry, open condition supports a number of prairie grasses as well. The area is periodically treated with prescribed fire. Observed signed boundary of nature preserve.
JSF: Bald Eagle Nest	The bald eagle was first observed in 2007 when developing a sale in the general area. At the time US Fish and Wildlife Service was consulted and guidance was followed. The nest has been observed by staff and has successfully fledged young every year since.
JSF: Nursery	The nursery grows about 3 million trees each year in a variety of species, primarily hardwood. Trees are sold to private landowners and other forestry operations for conservation planting but some are used on State Forest lands for afforestation projects or the very limited circumstances where regeneration is inadequate and replanting is necessary.
Wednesday, November 8	**Pike and Ferdinand State Forests**
Pike/Ferdinand State Forest Office	Brief opening meeting for new attendees.
Pike State Forest (PSF) C9T1 (All PSF sites: Jacqmain)	Mixed hardwoods with openings for regeneration. Sold not yet cut. Mixed hardwoods with some short, eastern white, and Virginia pine with over 33 tree species in 61 acre stand. Thinnings, mixed with small gap productions for intolerant tree species. Boundary openings which are patchcut to remove planted off-site pine species and shift to other hardwood species regeneration, especially oak. Good advanced oak regen.
PSF: C9T2&3	Sale set up, sold, not opened yet on 116 acres. Dominated by yellow poplar and sycamore with other hardwoods. Regeneration openings established along boundary, inspected. Conditions in contract for fire lane clearing and protection of pipeline ROW running through sale area. ROW protected by installed timber mats at designated points. Intermittent stream with bridge installed. BMPs specified for stream protections (no skid trails through and no log landings on).
PSF: C12T2&3	Selection thinning completed on 180 acres. Protection in contract for recreation shelter, family campground, recreational trails and clean-up of trails. Discussions about inspection processes. Inspected skid trails, water bars, river crossing (no cut/equipment buffer for river). Forester found issues during sale administration, corrected and documented issues (damage to residuals and improperly installed water bars). Forester also documented fixing of issues.
PSF: C12T2&3A	Spray site for shrub honeysuckle along roadside departing previous site. Identified 2015, treated once, honeysuckle recovered and re-emerged this is 2nd treatment, 7/21/17. Foliar application, mapped, prescription and chemical information provided.
PSF: C12T1	Selection harvests, 152 acres, completed November 2015. Openings established, TSI and grapevine control. Landing and skid trail inspections. Conditions for road safety adjacent to county road. Discussions about wildlife habitat (bats, broad-winged hawks), snags, RTE, TSI work to complete clearing of openings.
PSF: C11T2,3,4	Inspected 2015 harvest site, 85 acres, main haul road, landings, and gates. Blowdown openings are adjacent to Pike State Forest Horse Trail System. Conditions for clearing horse trails after harvest. Issues documented during sale administration inspections including drainage crossings, debris and limbs in creek (RMZ). Corrections documented. Cultural ID site. Discussion: logger qualifications and forester demonstration of on-line logger qualifications website.
PSF: Cultural feature	Commemorative stone installed in response to input from indigenous tribal outreach at old CCC building. DNR invited input and consulted with tribal representatives during the Indiana state bicentennial celebration. Tribal representatives oversaw installation.

PSF: Pike State Forest Fire tower	Fire tower vandalism incident and site inspection. Damage to logger equipment and cooperation with law enforcement. Fire tower had been closed 10 years prior. A protective fence installed in 2016 following initial vandalizing incidents. In 2017 a logger's bulldozer left onsite was used to damage fence and gain access to closed fire tower. Perpetrators were identified from video footage. Case is currently being pursued in cooperation with local law enforcement.
PSF: C12T5,6	Blowdown salvage from storm 28 February 2011. There were 2 areas of blow down in about 4 acres with patch of White and Virginia pine with mixed hardwoods where a harvest had already been planned. After harvest TSI was done, 2013. Observed abundant snags and oak regeneration in sapling size classes. Oaks > 100/acre, also other abundant hardwood species including hickory, yellow poplar, sweet gum, sycamore, ash, cherrybark oak, and other oak species. Japanese honeysuckle identified for future treatment.
PSF: Cup Creek Acquisition	Old mining land acquired through the James Ellis Trust. Approximately 2,000 acres, mostly mined with some undisturbed patches. Property acquired 2007 although project started in early 2000's. Discussions: oak species planting, holding ponds, contamination remediation from mining releases (acid).
Ferdinand State Forest (FSF): C1 T10* Closed sale. Completed 2017. (All FSF sites: Schulte and Boatwright)	Hardwood stand. 82 acres. Single tree selection with 10 smaller openings and one larger 7 acre opening. Installed an observation deck with an informational board at the larger opening on the road to educate the public about forest management. On the walk through the harvest area observed embedded skid trails and some failing waterbars but no delivery of sediment to ephemeral watercourse. BMP report from inspection done after sale closure that identified issues discussed with forester and accurately reflected what the auditors saw in the field.
FSF: C2 T5 Oak regeneration experimental stand	This is a somewhat experimental stand. It is an old shelterwood in a pine stand, harvested in about 2005. The area has had TSI and was planted with an equal number of each black, red, and white oaks totaling 2,500 trees. The oaks are now being overtopped by poplar so there are plans to conduct a prescribed fire on 30 acres to encourage stronger oak regeneration.
FSF: C1 T7 Closed sale. Completed 2017.	Hardwood stand with oak and poplar. Partial improvement thinning and partial salvage from 2016 storm blowdown (about 500 trees). Completed in fall 2017. The area has bike trails. An individual approached staff about rerouting a bike trail. Staff responded to the request and worked together with a volunteer group to reroute the trail. The trails were closed during operations in the area. A seep was identified in the corner of the sale and was clearly marked on the map to avoid. Saw several snags due to chestnut oak mortality.
FSF: C3 T2, 3, 4, & 5 Closed sale. Completed 2012. Public hike 2017.	Single tree selection and openings on planted white and Virginia pine. Harvest to encourage native hardwood regeneration on a total of 332 acres. Yellow poplar and some oak regen observed. Neighbor had questions about the harvest. The forester offered to lead an informational tour. However, the neighbor preferred to conduct her own so obtained a permit and advertised a public tour to walk through the harvest area. Forester attended as a member of the public on his day off and answered questions.
FSF: C8 T2 Open sale but not active during audit.	Hardwood stand – areas of oak/hickory, beech/maple and poplar. 119 acres of single tree removal with several small openings. Ash removed. Open sale harvest -- felled but not yarded. Tried to conduct logger interview but he wasn't working. Two home sites in sale area. One visited and observed buffer flagging. Forester identified the area as a potential cultural site so contacted the archeologist early on.
FSF: C8 T1 Closed sale. Completed 2017.	Oak/hickory stand with pine component. Harvested August 2017. 80 acres selection harvest with openings. Improvement harvest with pine to native hardwood conversion. One area of Virginia pine left because of lack of market. Will leave in the stand as diversity. Two cultural features in sale area.
FSF: C6 T11 Closed sale. Completed 2017.	Hardwood stand. 16 acres of single tree selection with small openings. Ephemeral stream crossing, no flow in channel during audit. Crossings minimized. Marked boundary observed. Tulip poplar and maple regeneration observed.

FSF: Eagle Rock Site	Site with cultural features. Rock shelter under outcrop. This site includes a short waterfall and a large, flat area of sandstone bedrock that lies across the East Fork of the White River. Thought to have been utilized in prehistoric period as well as by settlers. Outcrop used for seasonal camp shelter. Inhabitants processed resources in the area.
Thursday, November 9	**Martin State Forest**
Martin State Forest Office	Brief opening meeting for new attendees.
Martin State Forest (MSF): C4T7	Thinning for improvement, salvage dead and dying ash on 130 acres. Landing inspections, TSI. Indiana Bat Restriction Zone discussion regarding bat habitat preferences and habitat protection requirements. Cost-data provided. Successional trends shifting to more shade-tolerant species of beech/maple. Maintenance and renewal of oak on this site will require active management to emulate natural disturbances patterns to which oak is adapted (e.g. fire).
MSF: C4T3,4	Silvicultural experiment on 118 acres, thinned throughout with 3 different TSI treatments for oak/hickory regeneration. Treatments included prescribed burn and mid-story tree removal with treatment size categories and chemical/no-chemical options.
MSF: C4T2	Mixed hardwoods and oak-hickory stand covering about 100 acres. Thinning to improve crop trees, restore old field to forest, and salvage ash. Dry stream crossing.
MSF: C7T2,3	Sale set up not yet cut on 211 acres, accessibility a challenge for management (> 1 mile skid necessary). Improvement thinning to remove mature oaks, poplars and undesired species. Discussions: stream crossings, crop tree criteria.
Martin State Forest Office	Auditor deliberations
Martin State Forest Office	Closing meeting. Review any outstanding problems or issues encountered during audit; presentation of the audit conclusions; any new CARs or OBS and their classification; confidentiality and public summary; questions
Friday, November 10	**Yellowwood State Forest – Unit 6 of the Hardwood Ecosystem Experiment (HEE)**
HEE Unit 6 Overview	This unit has two 10-acre shelterwood treatments, two 10-acre overstory removal (wildlife opening) treatments, and four 10-acre burn areas (which will become the next patchcut and shelterwood treatments in 2028). The remaining acres of the 200 acre "research core" is unharvested and unburned. An overview of the composition and history of the area as well as the specifics regarding the harvest treatments for each research unit are provided in *The Hardwood Ecosystem Experiment: A Framework for Studying Responses to Forest Management* (Saunders and Arseneault, 2013, United States Department of Agriculture, Forest Service, Northern Research Station, General Technical Report NRS-P-108, https://www.fs.fed.us/nrs/pubs/gtr/gtr-nrs-p-108.pdf). Saunders unpublished data: In 2008, after 250 plots out of 716 had been sampled across all nine units (which are about 200 acres each), there were only 2,520 oaks found and of those, only **80 oak saplings**. After all 716 plots had been surveyed in 2008, there were only about **100+ oak saplings total.**
Wildlife opening, stop 1	10-acre areas with overstory removal down to 2" diameter trees in 2008-9. • 683 vegetation inventory plots were installed across the 9 research core areas in Yellowwood State Forest using a 75m x 150m grid. Complete inventories of all plots were designed to follow a 4-year schedule (Saunders and Arseneault, 2013). • The second primary objective of the HEE is to determine the impacts of these systems on populations of herbaceous plants and avian and terrestrial amphibian species groups. Discussions avian, salamander, snake, and other wildlife study results. 

Wildlife opening, stop 2	10-acre burn areas (which will receive clearcut or shelterwood harvests in 2028-2029). Discussion RE regeneration of oak in order to sustain oak-hickory forest types. After all 716 plots had been surveyed in 2008, there were only about 100+ oak saplings total (Saunders unpublished data). Oak-hickory evolutionary adaptations to fire as a natural disturbance regime. Successional progression to more shade tolerant species in absence of disturbance, e.g., beech and maple. Value of oak-hickory for supporting wildlife diversity.
Oak Shelterwood	10-acre shelterwood harvests, completed second of a three-stage shelterwood harvest. Discussion of regeneration strategies for oak-hickory.

2.2 Evaluation of Management Systems

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. Changes in Management Practices

[X] There were no significant changes in the management and/or harvesting methods that affect the FME's conformance to the FSC standards and policies.

[ ] Significant changes occurred since the last evaluation that may affect the FME's conformance to FSC standards and policies (*describe*):

4. Results of the Evaluation

4.1 Existing Corrective Action Requests and Observations

	Finding Number: 2016.1
Select one: [ ] **Major 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) [X] Other deadline (specify): none
FSC Indicator:	4.4.a (see also 4.2.b and 4.5.a)

Justification: The Compartment 4, Tract 4 field site contained an old abandoned well flagged for safety. Forester had consulted with, and followed procedures as advised, by the state archaeologist to protect the well as a potential historical feature (homestead), notified the harvester operating in the adjacent stand of the well and upcoming safety precautions. Procedure was to flag the well and immediate surrounding so the logger would know the well location. However, there was nearby recreational trail which for the users the flagging would be unexplained. Current Indiana state laws may only address modern wells and well closures, however historical wells should also be evaluated if needed to be rendered safe.	
Observation: The FME should take actions to protect users from potential hazards, including wells that are not closed whether they are modern or historical.	
FME response *(including any evidence submitted)*	The Division of Forestry has developed a new policy regarding closure of historic wells on State Forest lands to ensure the protection of these historic remnants and the safety of users of the forests. Training and implementation of this new policy is beginning. A copy of the policy is attached (Well Closure Policy.pdf).
SCS review	SCS reviewed evidence submitted. The new Well Closure Policy includes provisions for evaluation and closure of modern and historical wells that both provides for safety in proximity to identified well locations as well as protection measures for those of archaeological significance. Interviews with staff confirmed knowledge of changes and procedures for consultation with relevant staff expert.
Status of CAR:	☒ Closed ☐ Upgraded to Major ☐ *Other decision (refer to description above)*

	Finding Number: 2016.2
Select one: ☐ **Major CAR** ☐ **Minor CAR** ☒ **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.	
Observation: The forest owner or manager should develop and consistently implement a regular, comprehensive, and replicable written monitoring protocol, consistent with the scale and intensity of management.	

FME response *(including any evidence submitted)*	The Division of Forestry will reemphasize the need to follow through on documentation and filing of documentation for timber sale inspection and monitoring. This will be followed up with spot reviews of files by Central Office staff to ensure procedures are understood and followed. The first spot checks occurred on October 18, 2017 during internal audit. Documentation checks will continue as the Forest Properties Specialist conducts timber harvest reviews throughout the year.
SCS review	SCS confirmed internal audits conducted on 18 October 2017 and reviewed results. Other aspects of the FME response were confirmed and sufficient to warrant closure of this CAR.
Status of CAR:	☒ Closed ☐ Upgraded to Major ☐ *Other decision (refer to description above)*

4.2 New Corrective Action Requests and Observations

	Finding Number: 2017.1
Select one: ☐ **Major CAR** ☒ **Minor CAR** ☐ **Observation**	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	☐ Pre-condition to certification/recertification ☐ 3 months from Issuance of Final Report ☒ 12 months or next audit (surveillance or re-evaluation) ☐ Observation – response is optional ☐ Other deadline (specify):
FSC Indicator:	FSC-STD-50-001, 1.15
Non-Conformity *(or Background/ Justification in the case of Observations)*: The standard timber sale contract template used by the Indiana DNR includes the use of "FSC" without the corresponding trademark symbol. As a public-facing document, this is considered a trademark use.	
Corrective Action Request *(or Observation)*: The use of the FSC "checkmark-and-tree" logo shall be directly accompanied by the trademark symbols ® or ™ (in superscript font). The symbol, which represents the registration status of an FSC trademark in the country in which FSC certified products or materials are to be distributed, is an intrinsic part of the logo. The appropriate symbol shall also be added to "FSC" or "Forest Stewardship Council" for the first use in any text. The registration status of the FSC trademarks for the US is listed in Annex 1.	
FME response *(including any evidence submitted)*	
SCS review	
Status of CAR:	☐ Closed ☐ Upgraded to Major ☐ *Other decision (refer to description above)*

5. Stakeholder Comments

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 past evaluations, 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:

5.1 Stakeholder Groups Consulted

ENGO	USFS
Academic	Forest Products Industry

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. 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.

5.2 Summary of Stakeholder Comments and Responses from the Team, Where Applicable

The FSC audit team received stakeholder comments prior to-, during- and following the on-site field portion of the audit. In response to this input, extensive additional consultation was conducting including those with academic, ENGO, and USFS scientists as well as DNR subject experts including: biologists, ecologists, botanist, natural heritage experts, and others as listed in the Appendix 2 under Stakeholder Consultations.
The majority of feedback received was positive. However, an environmental, non-governmental, non-profit organization (ENGO) submitted extensive, written comments per FSC procedures requires written response. Those have been summarized 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, https://us.fsc.org/download-box.188.htm.

Stakeholder comments	SCS Response
Economic concerns	
Social concerns	
The DNR offers only "token" stakeholder input for timber sales for recreation concerns. My input was received but DNR has still not seriously addressed (that I know of) the recreational users who want big, old forests where we can camp. The problem with Nature Preserves is we can't camp in them. Now they [IDNR] wants to take away the Back Country Areas. I know the Yellowwood tracts in question aren't really "old-growth", although there are some old trees but it doesn't seem like the DNR took our input seriously. The DNR should do more for recreation users who want big, old, forests where we can hike and camp. Part of the problem is we don't really understand how the DNR's long-term planning process works and don't trust what they're doing. Will they meet their promises that these forests will be only minimally managed [4-7 trees removed per acre]? Right now they say they will only take a few trees in "improvement" cuttings. How do we know or have a say in it if they [IDNR] decides to change it to a final cut? Their near- and long-term planning and process for managing the Yellowwood SF is just not transparent enough. People don't understand the difference between Back Country Areas and Nature Preserves. [Comments received post-2017 audit]	This concern intersects with the FSC FM US standard in Indicator 4.4.d which requires public forest managers to engage in stakeholder consultations for both short- and long-term planning. It is important to note that the IDNR has met these requirements allowing methods or mechanisms for public participation (as acknowledged by the stakeholder above). Long-term planning is done through a strategic plan which had consultation opportunities prior to approval of the 2015-2019 Strategic Plan. Short-term planning input is offered via Tract Management Guides. Management guides for review and archived management guide examples are posted here, http://www.in.gov/dnr/forestry/3635.htm. DNR provided evidence during the 2017 audit, and in prior audits, of tracking and responding to public concerns for timber sales across all the State Forests state-wide. The IDNR Division of Forestry Strategic Direction 2015-2019 is the current long-term plan. 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. The DNR provides a procedures manual with a 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-F.pdf. *Given the seriousness with which FSC takes community consultation and considerations this topic will be given additional review again during the 2018 audit.*
Environmental concerns	

The DNR had a timber sale adjacent to my land and my concerns are about erosion and introducing invasive species. [Comment received post-2017 audit]
Erosion: This concern intersects with FSC FM US standard in Indicator 5.3.b and 6.5.b/c. The IDNR generally meets these requirements through the use of BMPs, contract terms, and timber sale oversight by field personnel which collectively result in operations taking place well within reasonable limits for residual stand damage (5.3.b). Indicators 6.5.b and 6.5.c were not specifically examined this year but has been closely examined in year's past with 2014 findings resulting in the revision of rutting guidelines and corresponding training in 2015. Training around erosion control and revised guidelines for loggers and staff foresters was further investigated in 2016. However, further examination of full implementation of these guidelines is warranted and *will be included as a focus during the 2018 audit.* *Invasives:* Invasives are addressed the FSC standard under indicator 6.3.h which requires assesses the risk of, prioritization, and, as warranted, developing and implementing a strategy to prevent or control invasive species. The IDNR meets this through a variety of methods, implements practices to minimize risks of invasives, eradication when feasible, and monitoring for effectiveness in preventing or controlling invasive species. During the 2017 audit a variety of treatments were reviewed including multiflora rose, bush honeysuckle, Japanese honeysuckle, kudzu, wisteria and stiltgrass. For prevention, DoF has been doing education for users at trailheads, campgrounds and offices. In addition, newer requirements have been instituted for timber sales in the backcountry area of Yellowwood/Morgan-Monroe SF requires equipment cleaning. *This topic will be included as a focus during the 2018 audit.*
At the end of the 2016 audit stakeholder concerns were expressed regarding whether or not the DNR is giving due consideration to external nominations of High Conservation Value Forests. [post-2016 audit]
No non-conformity is warranted. The audit conclusions following the 2016 audit last year were as follows: the DNR has procedures in place for formal nominations with public information available online, http://www.in.gov/dnr/forestry/files/fo-HighConservationValueForests.pdf. However, given that FSC takes very seriously HCV related matters, SCS noted the question of consideration for *public nominations* to be given additional review during the 2017 audit. **During the 2017 audit this topic was investigated in more detail and depth and again determined the DNR is in conformance with FSC standard with regards to public consideration in designation of HCVFs under Criterion 9 including 9.1, 9.2, and 9.3.** The DoF reports one formal nomination in the last four years, Hurricane Creek HCVF within the Ferdinand State Forest. The HCVF proposal was accepted November 2010. Preliminary DNR review determined it was appropriate to move forward with a more detailed examination. The proposal was published for public review in 2016 and is currently in process of final determination and designations. The public review for formal designation is underway and the document for review may be found here Ferdinand State Forest HCVF public comment document, document: http://www.in.gov/dnr/forestry/files/fo-HCVF_Hurricane_Creek_10262016.pdf The DoF forms teams for review of these formal proposals and members from other divisions, such as Nature Preserves or external parties with pertinent expertise. The review team does activities such as onsite visits of nominated areas, examine attributes or criteria of conservation interest, reviews public comments, conducts any needed additional information gathering, and responds to public input as appropriate. The entire process for HCVF designation is provided in the document link provided above.

As recognized in 2016, the DNR may not implement a particular nomination from a submission if the places or values (called attributes) 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 DNR was found in conformance in their assessment of HCVFs.

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 during the audit. Interviews with Nature Preserves staff confirmed that data collection methods were in conformance with the standard. Both formal and informal consultations were demonstrated to be considered and new HCVFs completing the designation process in the last year are as follows: Greenbrier Knob/River's Ledge, Harrison-Crawford SF, (144.2 A); Pleasant Grove Valley, Owen Putnam SF, (64.2 A); Countyline Glades, Harrison-Crawford SF, (84.6 A); Section 9 Seep Springs, Owen-Putnam SF, (46.72 A); Ravinia Seeps, Morgan-Monroe SF, (52.4 A).

One ENGO offered extensive stakeholder comments. Their primary contention is that the Indiana DNR is not in conformance with 6.3.a.1 of the FSC FM US Standard. The comments are summarized under the following categories:

- General mismanagement of State Forests.
- DNR is not protecting old growth or producing old-growth in accordance with the FSC standard.
- DNR ignores relevant Ecoblitz data provided over multiple years.
- DNR does not properly consider rare, threatened, and endangered species in forest management planning and activities
- Cited in support of the above is a letter, "Scientists Letter to Govenor Holcomb"

Scientists Letter to Gov Holcomb 11-2-1

<u>Overall Summary of Response:</u>

No non-conformity is warranted. The summary audit conclusions for 2017 are that the DNR is in conformance with the relevant indicator identified by the stakeholder, 6.3.a.1. This indicator states, "*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.*"

Missing from the stakeholder's concerns was information about the landscape context of these tracts; an acknowledgement of real processes and actions being taken by DNR's Division of Forestry, Division of Nature Preserves, and Division of Fish and Wildlife with integrated work products regarding landscape, Forest, and property management; silvics and life history requirements of oak forest types and *Quercus* species evolutionary adaptations to natural disturbance patterns, specifically fire, and the low amounts of oak saplings in Yellowwood forests. Specific responses to allegations are below.

Auditors direct readers to prior year reports in which similar allegations were made and addressed in 5.3.1. These include detailed responses that are still relevant and applicable to current audit stakeholder comments, including 6.3.a.1 and 6.3.a.3 and other indicators under Criterion 6. No significant changes have occurred from these prior findings relative to old-growth and considerations of rare, threatened, and endangered species under the IDNR forest management system. Again, current evidence supports continued conformance with relevant indicators of the FSC Forest Management Standard.

<u>Detailed Responses:</u>

For the 2017 Audit the primary author of the Scientist Letter and signatories of the letter were solicited for further input. Additionally a premier conservation organization and natural resources scientists were consulted from several organizations. Those consultations resulted in reiteration of the above points as well as additional input regarding stakeholder consultations around recreation opportunities (see Social Concerns above).

Allegations of general mismanagement of forests, destruction of "old-growth", and improper management of Yellowwood specifically were determined to be inaccurate based on reviews of procedures and relevant documents, interviews with staff and external experts, and observations of implementation in the field.

The DNR DoF is constrained to manage State Forests under a Strategic Management plan. The current 2015-2019 strategic plan has this goal related to old forests: http://www.in.gov/dnr/forestry/3605.htm "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) (underline emphasis by auditors).

Many areas within the state forests have been designated for the development of older forest conditions, such as nature preserves and research sites. This information has been detailed in prior year FSC audit reports, see Appendix 8. 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 should be developed to strategically identify conditions and/or areas where the management priority is to both regenerate oak-hickory dominated stands and provide consistent (sustainable) availability of young forest habitat." Current levels of **young** forest age classes are lacking. However, the DNR has incorporated new research results for creating small wildlife openings (<10 acres) that serve to improve survival and growth of saplings. The auditors concluded the DNR was addressing the lack of saplings of these shade-intolerant, generally fire-adapted species, and thus no non-conformity was warranted for the need for more young, oak-hickory forests.

SCS solicited input from a number of stakeholders in order to corroborate allegations including biology researchers with relevant peer reviewed journal publications from data collected in Yellowwood State Forest, The Indiana Chapter of the Nature Conservancy, TNC staff that work within the Yellowwood State Forest, forest management professionals, and relevant academic experts. Additionally, auditors visited Yellowwood State Forest and met with scientists conducting research in Yellowwood State Forest. See Appendix 8 for additional detailed evidence.

The HEE is a 100-year study of forest management and its impacts on plants and animals, https://heeforeststudy.org/. Of particular note is that HEE data has contributed to more than 50 peer-reviewed journal publications. Peer reviewed articles must undergo intense scrutiny by other disciplinary experts in the field of interest. For example, study results about frog species would undergo examination by other experts in the field. This lends a higher level of confidence and reliability of both data collection methodology and scientific interpretation of results. The HEE publications include results in broad categories, including: 1) Vegetation: Forest Dynamics and Acorn Production; 2) Birds: Breeding birds, Cerulean warbler, Owls; 3) Mammals: Bats, Small mammals, White-tailed deer; 4) Reptiles & Amphibians: Salamanders; 5) Insects: Wood-boring beetles, Moths (Lepidoptera), and Spiders; and 6) Fire: Prescribed fire (https://heeforeststudy.org/research-activities/). Additional information may be found in the US Forest Service General Technical Report NRS-P-108, The Hardwood Ecosystem Experiment: A Framework For Studying Responses to Forest Management.

FSC auditors consulted with the HEE scientists who then provided a copy of a letter which may be found here, http://www.jconline.com/story/news/opinion/letters/2017/10/13/letter-young-forests-future-hoosiers/762687001/]

> **"Indiana Forest Alliance claims that our forests are a rich mosaic of different age classes, and that forest management is not needed to maintain forest health because natural disturbances are sufficient. We disagree, as do multiple data-driven, peer-reviewed studies. After decades of relying primarily on natural disturbance, young forests are badly under-represented. Nearly 60 percent of forestland in our region is 40 to 80 years old, but only 8 percent of forestland is 20 years or younger. Young forests are needed as habitat for dozens of wildlife species and to reverse the ongoing shift in forest composition from oak to maple. Forest management, including prescribed fire and regeneration harvests, is critical to reliable creation of young forest, promotion of biodiversity, and the future health of Indiana forests."**

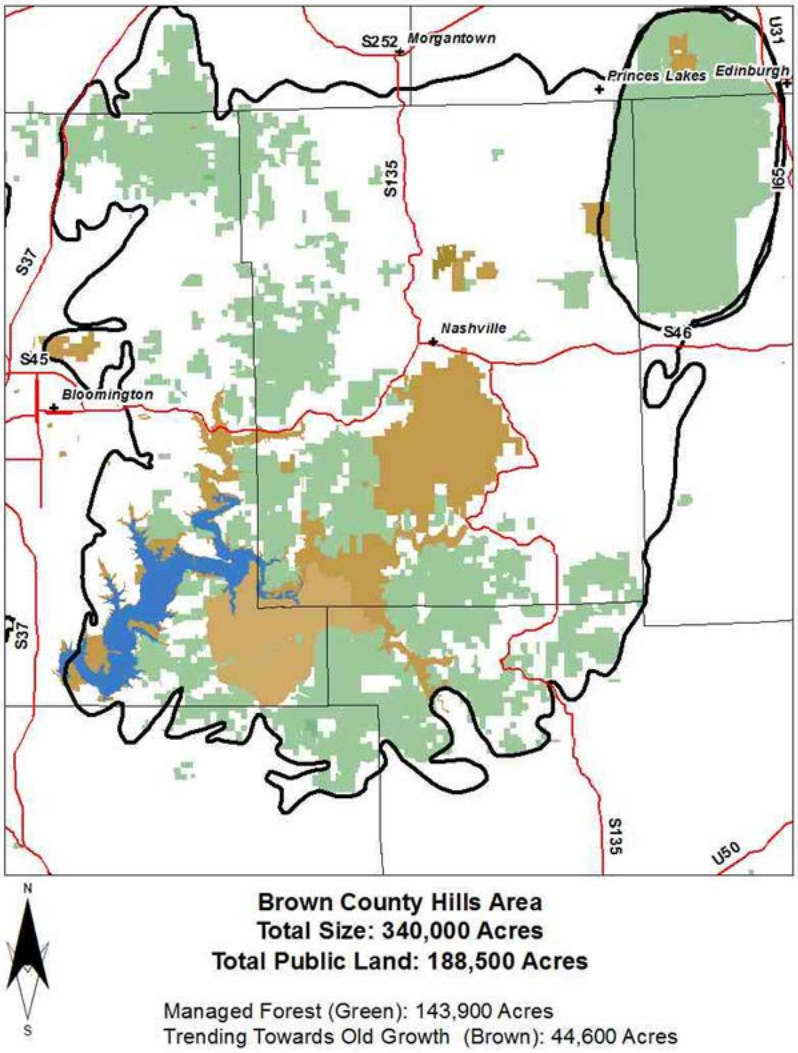
Interviews with wildlife experts pointed out that the oak species present in the canopies of these forests play an important role in providing habitat for wildlife through provision of food sources (mast in the form of acorns), ground and soil characteristics from leaf litter and woody debris, snags and standing green oak trees, and other critical features. However, scientists project that these oak forests may decline in their oak components in the absence of regular, natural fires to which oaks are adapted. Scientists found that oaks, although present in the canopy are not replacing themselves and these forests are predicted to shift towards more shade-tolerant species such as beech and maple. There are times, places, and site conditions where beech and maple are appropriate, but many of the oak stands, where present, were established under natural fire regimes. These fire conditions would stimulate oak sprouting, provide sufficient sunlight for oaks to outcompete species such as beech and maple (which are adapted to shadier conditions), and provide other benefits. HEE scientists posted these and similar conclusions here, http://www.jconline.com/story/news/local/2017/09/15/purdue-professors-finding-burns-timber-harvests-may-benefit-indianas-hardwood-forests/670123001/.

This information from HEE research projects was incorporated into creating studies around developing wildlife openings to produce young oak forests and have been demonstrated to be successful (See Site Notes). The DoF as well as other conservation organizations use this information to modify forest management practices. For example, other studies have found reduction in oak diversity and shifting species composition to more shade tolerant species with less species diverse stands, https://academic.oup.com/forestry/article/86/2/255/548218. HEE scientists consulted by the auditors confirmed by interview and emails that DoF is appropriately incorporating scientific knowledge gained through these studies. Another organization who has used this scientific information is The Nature Conservancy (TNC). TNC has conducted broad landscape analysis down to detailed stand level evaluations of the broader Brown Hills area, which includes the Yellowwood State Forest. DoF has also included TNC information into their management processes as confirmed by interviews with TNC staff.

Stakeholder input specific to Yellowwood State Forests was solicited from TNC. Details specific to Yellowwood were provided by TNC staff and includes more information about the landscape context. TNC provided a map that looks at all the public lands around Morgan Monroe and Yellowwood State Forest. The Nature Conservancy takes a landscape-level view of this heavily forested natural area. TNC's synopsis of their perspective of these forest area as follows:

> *The State Forests are but one part of the mix of public protected lands that make up the Brown County Hills. There is a main core of protected land that we refer to a Trending Towards Old Growth. It includes 44,600 acres of the Deam Wilderness Area, Brown County State Park and the lands owned by the Corps of Engineers around Lake Monroe. This area of land trending towards old growth is off limits to timber management. The only disturbance that will occur there is natural disturbance* [primarily wind, lighting, or individual tree fall] *or some limited prescribed burning.*

Figure 2. Map showing Sustainably Managed and Trending towards Old-growth by TNC.



Additional input was provided by TNC in a letter titled, *The Science of Healthy Forests*, presented by Mary McConnell, State Director and Anne Nobles, Chair, Board of Trustees The Nature Conservancy – Indiana Chapter. An excerpt of the letter is copied below (full letter in Appendix 8).

> *First, there are different kinds of state-owned properties, each having its own policy regarding timber harvests. Approximately 50 percent of our state and federally conserved forests, such as state parks and nature preserves, are off limits to harvesting except under very unusual circumstances. However, Indiana's state forests, such as Yellowwood, were established by the legislature with the intent of multiple uses, including timber harvesting.*
> *Secondly, forest management is a science, and one that must embrace the fact that healthy natural forests are dynamic ecosystems that include a diversity of tree species and an age mix from young to middle-aged to mature forest habitats. We believe that managing state forests under sustainable guidelines will produce the forest conditions needed to support the full range of species in Indiana, including many of the*

rarest animals in the state. Finding this balance should have been at the root of the conversation dominating the headlines over the last few weeks.
Some tree species require disturbances such as fire, tornadoes, or ice storms to create the ideal conditions for them to produce a new generation. In the absence of widespread, but relatively mild forest fires, which were common before European settlement, logging can provide a substitute for the disturbance that fire provided.
Oak trees are a good example. A disturbing trend over the past few decades is that the conditions for oak regeneration are disappearing and being replaced by conditions that favor maple and beech trees in forests across Indiana. If you visit almost any "good" forest you'll see large oak trees towering above you and you'll often see many oak seedlings as well. But the teenage trees that range from one to four inches in diameter and need significant sunlight to reach maturity will most likely be missing. Such a situation should be alarming to everyone. Sadly, this is exactly what has happened to our hardwood forests today. Responsible timber management can, in many ways, mimic the natural disturbances which oak forests need to advance a new generation of trees.

Allegations of IDNR "completely ignoring Ecoblitz" data was found to be inaccurate and without basis. Interviews with Division of Nature Preserves (Nature Preserves) staff were conducted, confirmation of implementation of Nature Preserves procedures, and a review of Nature Preserves data sources and evaluation processes was completed. Particularly relevant is evidence that multi-year Ecoblitz data was received and **were in fact reviewed** by Nature Preserves staff with relevant disciplinary training and qualifications*, independently of the DoF*. The Nature Preserves examined the Ecoblitz data in the same manner as the Nature Preserves staff evaluates **all** data sources provided to the Nature Preserves, with no exclusions. Because both misidentification of species and inaccurate location data occurs, the Nature Preserves has developed procedures and criteria to evaluate the *credibility* (verifiable expertise and credibility) and *verifiability* of submissions, but in most cases will still investigate. Data considered credible and verifiable was incorporated into DNR management activities per their routine and standard procedures for consideration of RTE species. Both the TNC and Nature Preserves independently provided input that the species identified in the Ecoblitz data sets **are found in surrounding areas**, not exclusive to the sale tracts or area specified in public targeting.

Allegations that IDNR ignores consideration and management of rare, threatened, and/or endangered was determined to be inaccurate. All timber sales visited this audit, see Site Notes, had routinely conducted and completed RTE related procedures as were documented in Management Guides, individual prescriptions, and operationally implemented via timber sale contract Conditions. No examples were found of RTE occurrences that were ignored or improperly handled by DoF staff. Several examples were provided of occurrences that prompted consultations with wildlife biologists, botanists, or other experts in the habitat requirements for species of interest.

5.3 Details for Stakeholder Responses

5.3.1 Prior year FSC Audit Report Sections Relevant to 2017 Stakeholder Responses.

2012
DoF has developed procedures to assess and identify Type 1 and Type 2 old growth on state forests. This guidance includes definitions of old growth classifications consistent with indicator 6.3.a.1, and a continuous assessment protocol to be incorporated this point forward in the routine development of tract management guides.

Additionally, DoF is currently completing an immediate assessment of sixteen (16) candidate tracts identified by the state forest Continuous Forest Inventory as tracts containing canopy trees >150 years old. State forest properties are completing a review of harvest history for each candidate tract, which is expected to be completed by the 2012 audit. If this immediate assessment identifies tracts where additional, field surveys for old growth characteristics are warranted, this will be completed either before any scheduled management activity occurs in the tract or within 6 months after the 2012 audit, whichever is sooner.

The following guidelines are currently being incorporated into the DoF state forest procedure manual, to be completed by 2012 audit:

Conservation of Old Growth Stands on State Forests

Old growth forest is defined as (1) the oldest seral stage in which a plant community is capable of existing on a site, given the frequency of natural disturbance events, or (2) a very old example of a stand dominated by long-lived early- or mid-seral species. The onset of old growth varies by forest community and region. In Indiana, remnant old growth forests are typically dominated by long-lived early- or mid-seral species, such as oaks. Depending on the frequency and intensity of past disturbances, and site conditions, old-growth forest will have different structures, species compositions, and age distributions, and functional capacities than younger forests.

Classifications

The DoF recognizes two types of old growth on state forests that are differentiated by the historic occurrence of logging.

- True Old Growth (a.k.a. “Type 1 Old Growth”): Three acres or more that have never been logged and display old growth characteristics (see list below). Additionally, a stand of true old growth has no evidence of human-caused understory disturbance (e.g., grazing).

- Developing Old Growth (a.k.a. “Type 2 Old Growth”): 20 acres of forest that that have been logged >80 years ago and retain significant old growth structure and functions. Additionally, developing old growth stands have had little or no human-caused understory or groundstory disturbance within previous 80-100 years, depending on site quality. Examples of understory/groundstory disturbance could include, but are not limited to, prescribed fire and grazing.

Characteristics of Old Growth Forests in the Central Hardwood Region

- Mean age of dominant canopy trees >150 years old on mesic sites; >175 years old on drier sites.
- All-age stand structure with multi-layered canopy.
- All-age canopy gaps; gaps >7% of forest area.
- 10:1 live to dead tree ratio by size class (>5” dbh).
- >20 canopy tree species.
- Most dead wood in advanced decay stages, rather than recent mortality with little decay; significant abundance of large diameter dead wood, much of it in advanced stage of decay.

Identification and Designation of Old Growth Areas

1. Candidate stands/sites for old growth designation will be evaluated by a committee appointed by the Chief of State Forests (using the best information available. If a site is found not to be suitable for designation, a recommendation for future management of the site will be made by the committee and/or the Chief of State Forests.

2. State forest tracts will be continuously assessed for the presence of old growth and stands with old growth characteristics during the regular tract management guide development process. Candidate stands or sites will be submitted to the DoF Property Specialist who will determine if further evaluation is needed by the old growth assessment committee.

3. The Division Biologist will annually query the Continuous Forest Inventory (CFI) database to identify plots sampled in stands that have canopy trees >150 years old. If a subsequent review of available records indicates the stand is a candidate for old growth designation, it will be submitted to the old growth assessment committee for further evaluation.

Old Growth Management Guidelines

1. State forest stands classified as either true or developing old growth shall be excluded from harvesting and other forms of forest management except when needed to maintain the values associated with the stand (e.g., remove exotic species, conduct prescribed burning, and thinning from below in forest types when and where restoration is appropriate).

2. Permanent forest clearing shall be avoided within 300 feet of a designated old growth area. No regeneration openings (or portions of openings) should occur within 100 feet of an old growth area. Regeneration openings (or portions of openings) >3 acres should be avoided 100-300 feet from old growth areas. All other forest management activities, including single-tree selection harvests, are permissible at any distance from old growth areas.

3. Construction of new roads shall be avoided in designated old growth areas; construction of new roads within 300 feet of old growth areas should also be avoided but if deemed necessary, requires the approval of the DoF Property Specialist. Maintenance of existing roads is permissible if old growth characteristics are maintained in the area. In general, trail development or maintenance is permissible if old growth characteristics are maintained. Consult with DoF Property Specialist on all trail projects in or adjacent to designated old growth areas.

2013

From the 2013 audit report: "The audit team investigated who has the authority over management of the BCA and whether or not timber harvesting is permitted. A Department Memorandum (1/24/1983) clarified that DoF local forestry staff retain the control over management decisions in the BCA. The fact that a Monroe County commissioners resolution called for permanent protection of the BCA from commercial extraction is in contrast with rules outlined in creating this BCA. The Memo clarified that timber harvesting is permitted as long as it is single tree selection of mature, damaged, or diseased trees and avoids slopes > 45 degrees. The allowance of timber harvesting in BCA's was also stated in an article, "New Backcountry Area at Morgan-Monroe State," for Outdoor Indiana (Dec 1981/Jan 1982 issue). SCS auditor verified that logging did not occur on slopes great than 45 degrees and that only single tree selection was used. See notes in section 2.1 of this report. In 2008, DoF developed a BCA policy that allows harvesting with a "goal to create a stand condition that appears more

unmanaged than typical tracts". Based on visits to two BCA timber sales, DoF is meeting their BCA policy. An Observation was issued to improve the BCA written guidance to ensure that large old trees are left to decline and dye naturally. Senescence and the subsequent development of dead wood are key components of late seral habitat, and management practices observed in the field should allow for it."

2014

From the 2014 audit report: "As stated in the DoF Strategic Plan – "State Forests are managed toward a long term balance in forest stand age and structure with 10% of forest acreage in or developing older forest conditions (nature preserves and high conservation forests) as well as 10% in early successional forests (0-20 years old)." This balance in stand age and structure was modeled after the bell shape curve. The FSC standard has no numeric targets for the percentage of "older forest conditions". Ten percent is similar to other public forests in the Lake States Central Hardwood Region. Other public land managers within the State of Indiana (e.g., State Fish and Wildlife lands, Hoosier National Forest) are effectively managing much higher percentages and acreages toward late seral/late successional because only minor amounts of timber is harvested on these lands. DoF also can effectively manage larger, more contiguous tracts under early to mid-successional stages, which is consistent with meeting certain species recovery goals and acts as surrogate for pre-European settlement disturbance regimes. The audit team finds conformance with Indicator 6.3.a.1 given that the FSC standard lacks a numeric requirement, that the 10% target is significant and framed within an overall goal of balanced age class, and that other public lands within the State are contributing to increasing late seral/successional forests."

2016

No non-conformance is warranted. The issue of 10% of forest set aside as late seral or reference forest, establishing *de facto* 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, http://www.in.gov/dnr/forestry/files/fo-State_Forest_CFI_Report_2010_2014.pdf, 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 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.

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 oak regeneration would be exacerbated by set-aside areas.

5.3.2 HEE Scientists, Letter to Editor, "Young Forests for Future Hoosier"

Public copy of this letter is available here,
http://www.jconline.com/story/news/opinion/letters/2017/10/13/letter-young-forests-future-hoosiers/762687001/

Text from the HEE Scientist's letter:
A recent letter ("Timber harvest not needed for forest health", Oct. 3) from the Indiana Forest Alliance made some claims with which we agree.
As scientists who work on the Hardwood Ecosystem Experiment, we agree that healthy forests are defined ecologically and provide numerous benefits for biodiversity, the environment and Hoosiers. We also agree that forests should be managed for multiple purposes.
We are passionate about forests in Indiana. Indeed, we have devoted our careers to the study and promotion of healthy forest ecosystems, both of which require a long-term perspective and recognition of the role that human disturbance has played in the history of our forests.
During the century following statehood, Hoosiers cleared forests to create farms, reducing forests from 19.4 million acres to 1.5 million acres. Much of the state forestland we walk through today was degraded farmland abandoned during the Great Depression. Fortunately, our ancestors understood that forests are resilient, and they had the vision to establish with these lands a system of managed state forests. Since then, the forests have regrown and the percent of forestland in Indiana has tripled, from less than 7 percent to over 21 percent.
Indiana Forest Alliance claims that our forests are a rich mosaic of different age classes, and that forest management is not needed to maintain forest health because natural disturbances are sufficient. We disagree, as do multiple data-driven, peer-reviewed studies. After decades of relying primarily on natural disturbance, young forests are badly under-represented. Nearly 60 percent of forestland in our region is 40 to 80 years old, but only 8 percent of forestland is 20 years or younger.
Young forests are needed as habitat for dozens of wildlife species and to reverse the ongoing shift in forest composition from oak to maple. Forest management, including prescribed fire and regeneration harvests, is critical to reliable creation of young forest, promotion of biodiversity, and the future health of Indiana forests.
For the past 11 years, scientists from seven universities have worked on the Hardwood Ecosystem Experiment to study the effects of timber harvests and prescribed fire on forest ecosystems in southern Indiana. Our goal is to maintain diverse forests for future generations by using science to inform forest management decisions. Hoosiers deserve healthy forests, which requires creation of young forests now and in the future.

Kamal Islam, Ball State University
Tim Carter, Ball State University
Keith Summerville, Drake University
Joy O'Keefe, Indiana State University
Joe Duchamp, Indiana University of Pennsylvania
Brian MacGowan, Purdue University
Charlotte Owings, Purdue University
Jeff Holland, Purdue University
Jeff Riegel, Purdue University
John B. Dunning, Purdue University
Mike Jenkins, Purdue University
Mike Saunders, Purdue University

Rob Swihart, Purdue University
Marc Milne, University of Indianapolis

5.3.3 Final TNC Healthy Forest Letter to the Editor, "The Science of Healthy Forests"

Final TNC Healthy Forest Letter to the

The Science of Healthy Forests

Over the last few weeks, there have been several prevailing opinions regarding timber harvests within Indiana's state forests. The Nature Conservancy sees the need for a more holistic science-based decision-making approach as it relates to forest management on public lands than what has been offered thus far in the media.

We believe all sides can come together around the goal of ensuring a healthy state forest system. At the same time, we must factor in the importance of habitat for all native animals and plants, and the need to find an appropriate balance that fosters the protection of our state's natural heritage. We believe there is room for mutual understanding of these dynamics, if conservation goals and forest management practices are considered as being complementary and not mutually exclusive.

First, there are different kinds of state-owned properties, each having its own policy regarding timber harvests. Approximately 50 percent of our state and federally conserved forests, such as state parks and nature preserves, are off limits to harvesting except under very unusual circumstances. However, Indiana's state forests, such as Yellowwood, were established by the legislature with the intent of multiple uses, including timber harvesting.

Secondly, forest management is a science, and one that must embrace the fact that healthy natural forests are dynamic ecosystems that include a diversity of tree species and an age mix from young to middle-aged to mature forest habitats. We believe that managing state forests under sustainable guidelines will produce the forest conditions needed to support the full range of species in Indiana, including many of the rarest animals in the state. Finding this balance should have been at the root of the conversation dominating the headlines over the last few weeks.

Some tree species require disturbances such as fire, tornadoes, or ice storms to create the ideal conditions for them to produce a new generation. In the absence of widespread, but relatively mild forest fires, which were common before European settlement, logging can provide a substitute for the disturbance that fire provided.

Oak trees are a good example. A disturbing trend over the past few decades is that the conditions for oak regeneration are disappearing and being replaced by conditions that favor maple and beech trees in forests across Indiana. If you visit almost any "good" forest you'll see large oak trees towering above you and you'll often see many oak seedlings as well. But the teenage trees that range from one to four inches in diameter and need significant sunlight to reach maturity will most likely be missing. Such a situation should be alarming to everyone. Sadly, this is exactly what has happened to our hardwood forests today. Responsible timber management can, in many ways, mimic the natural disturbances which oak forests need to advance a new generation of trees.

While it is important to carefully manage risks associated with forestry and timber management, we must also take a moment to consider the risks of doing nothing. The Yellowwood State Forest is part of a much larger landscape including Brown County State Park, the Deam Wilderness, and several other nature preserves comprising thousands of acres, which are almost completely off-limits to harvesting.

But some forest species benefit from the disturbances provided by timber harvesting. Although rare animals and plants occur in many habitat types, a number of the most rapidly-declining birds in Indiana require some type of disturbance to maintain the young forest habitat they need to survive. A lack of suitable habitat has played a role in the near disappearance of several birds in our state, such as the ruffed grouse and golden-winged warbler. Other young forest species, including the American woodcock and the yellow-billed cuckoo, have declined in Indiana by more than 80 percent since the late 1960s. Even species such as the cerulean warbler, which has seen a 73 percent decline since 1970 and need large blocks of mature forest to breed, appear to benefit from certain types of disturbance. Some types of sustainable timber harvests have been shown to increase breeding densities of these birds. These are all examples trained foresters must consider when implementing a holistic approach to managing our state-owned forests.

Lastly, while we understand the aversion to harvesting timber, effective management can result in benefits to wildlife and people. Our state forests have been certified by the Forest Stewardship Council (FSC) since 2006. Through regular, rigorous audits, FSC certification ensures that the forest is managed sustainably as environmentally appropriate, socially beneficial, and economically viable. We generally support the management of our state forests, but only under the terms of third-party certification by the Forest Stewardship Council.

Part of the FSC process is to identify the highest priority areas for conservation and manage them as "high conservation value" sites. To date, 23 such areas have been set aside in our state forest system as dedicated nature preserves. There are approximately 600 additional acres identified by the Indiana Natural Heritage Program as having high conservation value. We feel it is imperative that these acres be designated as state nature preserves to provide the full range of habitats within the state forest system. The harvesting of any trees, especially mature trees, can be a sensitive issue for many environmentally-conscious individuals. However, science-based practices can and should always be the basis for the management of Indiana's precious forests.

Mary McConnell
State Director
The Nature Conservancy – Indiana Chapter
Anne Nobles
Chair, Board of Trustees
The Nature Conservancy – Indiana Chapter

5.3.4. Society of American Foresters

Letter to Govenor Holcomb

ISAF Letter to Holcomb.pdf

Executive Committee Members for 2018:
CHAIR Christian W. Neggers
CHAIR ELECT Mike Spalding
PAST CHAIR Scott Reckelhoff
TREASURER Dale Weigel
SECRETARY Thomas Gunn
AWARDS CHAIR Lee Huss
COMMUNICATIONS CHAIR Michael Denman

CONTINUING FORESTRY EDUCATION CONTACT Donna Rogler
EDUCATION CHAIR Ron Rathfon & Lenny Farlee
FORESTERS' FUND CHAIR Darrell Breedlove
NOMINATING/TELLER Teena Ligman
HISTORIAN/ARCHIVIST John Friedrich
MEMBERSHIP CHAIR John Stambaugh
NEWSLETTER EDITOR Janet Eger
POLICY CHAIR William F. Minter
SCIENCE/TECHNOLOGY CHAIR Jack Seifert
INVESTMENT CHAIR Dale Weigel
AUDIT CHAIR Jayson Waterman

In the News:

A recent timber sale at Yellowwood State Forest has sparked protests opposing the current strategies implemented by the Division of Forestry. Protests have spawned headlines and brought forth proposed legislation that undermine foresters' abilities and refutes our credentials to make quality scientific management decisions.

ISAF issued Governor Holcomb a letter expressing our continued support of the Division of Forestry and their use of science based forestry to manage the State Forest. We have also drafted previous position statements opposing legislation that restrict the use of forestry on any portion of the Indiana State Forest. I have attached the recent letter sent to the Governor's Office and an ISAF position statement opposing previous proposed legislation to allow each member to educate themselves on our current stance.

As a member of the Society of American Foresters we must make our voices heard.
National SAF "*Forest managers have a responsibility and a vested interest in educating the public and decision makers about the practice of forestry. SAF members pledge to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society. As leaders in SAF, you may be asked by the Government Affairs Team, local SAF policy leaders, and/or the Committee on Forest Policy to share your knowledge and experiences to educate and help influence policy. Don't be shy—advocacy is for everyone. As a constituent, you are the ideal grassroots advocate to convey to legislators how essential forests and forestry are to your community.*"
Each member has the ability to pass on our message to their local representatives and public around them. Success has been achieved in the past to avoid similar restrictive legislation. It can be done by contacting representatives, letting them know we have a voice, presenting them science, facts, they can lean on when casting a vote. Foresters and forest industry professionals are the best communicators to present this message because we are educated and passionate about the subject at hand. Now is the time to speak our side as the issue will continue to be at the forefront as the new session of the general assembly will convene in January. Current proposed legislation looks to restrict larger amounts of acreage than previous attempts, success of such bills could open the door for additional restrictions and eventual attempts to restrict harvesting on private lands.

Update Contact Information:

As you renew your membership please make sure all of your contact information is accurate and up to date. If you have coworkers that are members and are not receiving ISAF emails please have them check the following.

- Check to ensure the email listed is your primary address to ensure you receive all notices in a timely manner.
- Make sure Indiana is selected as your local chapter.

Scott Reckelhoff / ISAF Chair

sreckelhoff@ofsbrands.com / T 866-637-9328 x7030 / M 812-639-0664

SAF Position Statement

SAF Position sb420.pdf

6. Certification Decision

The certificate holder has demonstrated continued overall conformance to the applicable Forest Stewardship Council standards. The SCS annual audit team recommends that the certificate be sustained, subject to subsequent annual audits and the FME's response to any open CARs.	**Yes** [X] **No** [ ]

Comments:
The Indiana DNR is to be commended for the following:

- Responsiveness to extensive stakeholder input and public scrutiny of forest management practices. The DNR staff demonstrated high levels of professionalism under intense public scrutiny.
- The integration of wildlife into management planning through the compartment level Management Guides exceeds the requirements of the standard. Of particular note is the snag inventory system used for Compartment and stand level management.
- Dedicated staff that have been compensating for reductions in funding and other support up to and including occasionally conducting control of exotic invasives during lunch breaks and off-hours.

7. Changes in Certification Scope

Any changes in the scope of the certification since the previous audit are highlighted in yellow in the tables below.

Name and Contact Information

Organization name	Indiana DNR, Division of Forestry		
Contact person	Brenda Huter		
Address	Indiana Department of Natural Resources Division of Forestry 402 W. Washington, Room W-296	**Telephone**	317-232-0142
		Fax	317-233-3863
		e-mail	bhuter@dnr.in.gov
		Website	www.in.gov/dnr/forestry www.inforestryx.com

	Indianapolis, IN 46204 USA		

FSC Sales Information

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

Scope of Certificate

Certificate Type	☒ Single FMU	☐ Multiple FMU	
	☐ Group		
Forest zone	☐ Boreal	☒ Temperate	
	☐ Subtropical	☐ Tropical	
Total forest area in scope of certificate which is:	**Units: ☐ ha or ☒ ac**		
privately managed	0		
state managed	158,264		
community managed	0		
Number of FMUs in scope that are:			
less than 100 ha in area		100 - 1000 ha in area	
1000 - 10 000 ha in area		more than 10 000 ha in area	1
Total forest area in scope of certificate which is included in FMUs that:	**Units: ☐ ha or ☒ ac**		
are less than 100 ha in area	0		
are between 100 ha and 1000 ha in area	0		
meet the eligibility criteria as *low intensity* SLIMF FMUs	0		
Division of FMUs into manageable 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 are 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, inventory and modeling purposes.			

Production Forests

Timber Forest Products	**Units: ☐ ha or ☒ 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	1.5
Area of production forest regenerated primarily by natural regeneration, or by a combination of natural regeneration and coppicing of the naturally regenerated stems Note: Opening/Patchcuts for regeneration	308
Silvicultural system(s)	**Area under type of management**
Even-aged management	82
Clearcut (clearcut size range 10.7 a – 24.3 a)	82
Shelterwood	0
Other:	0
Uneven-aged management	3,945
Individual tree selection	0
Group selection	226
Other:	3,719
☐ 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)	(Target) 10MMBF
Non-timber Forest Products (NTFPs)	
Area of forest protected from commercial harvesting of timber and managed primarily for the production of NTFPs or services	0
Other areas managed for NTFPs or services	0
Approximate annual commercial production of non-timber forest products included in the scope of the certificate, by product type	0

Explanation of the assumptions and reference to the data source upon which AAH and NTFP harvest rates estimates are based:

The basis for determining harvest levels is a continuous forest inventory, where 1/5 of the land base is inventoried each year, which the Division of Forestry established in 2008. After the 5th year was completed, DOF started to re-measure the plots allowing for growth computation. We are in the 9th year of measurement. The system design is based on 10 years to develop reliable growth estimates (5 years of baseline and 5 years to re-measure all plots.

The current target of 10 million board feet, or about 50% of current estimated gross annual growth, is determined based on desire for a conservative harvest level until growth information is more-fully updated. The allocation of this harvest to the individual units is proportional. The general approach to timber harvest allocation by property is described on page 33 of the Environmental Assessment. Current estimate of gross growth is 22 MMBF annually.

Species in scope of joint FM/COC certificate: (*Scientific / Latin Name* and Common / Trade Name)

Acer spp	Maple: sugar, red, black,silver, boxelder
Aesculus spp	Ohio,yellow
Ailanthus altissima	tree of heaven
Asimina triloba	pawpaw

Betula nigra	river birch
Carya spp	Hickory:bitternut,mockernut,shagbark, red, pignut, shellbark, pecan
Carpinus carolininana	Hornbeam
Catalpa speciosa	catalpa
Celtis occidentalis	hackberry
Cercis canadensis	eastern redbud
Cladrastis kentukea	yellowwood
Cornus florida	flowering dogwood
Cratagus spp	hawthorns
Diospyros virginiana	persimmon
Fagus grandifolia	American beech
Fraxinus spp.	Ash: white, green, pumpkin, black, blue
Gleditsia triacanthos	honey locust
Gymnocladus dioica	Kentucky coffee-tree
Juglans spp	black walnut, butternut
Juniperus virginiana	red cedar
Larix laricina	tamarack
Liquidamber styraciflua	sweet gum
Liriodendron tulipifera	yellow-poplar
Maclura pomifera	Osage orange
Magnolia acuminata	cucumber magnolia
Morus spp	mulberry
Nyssa sylvatica	black gum
Ostrya virginiana	Eastern hophornbeam (ironwood)
Paulownia tomentosa	royal paulownia
Picea abies	Norway spruce
Pinus spp	Pine: white, red, Scotch, Virginia, shortleaf, jack, loblolly
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, overcup, northern pin
Robinia pseudoacacia	black locust
Salix nigra	black willow
Sassafras alfidum	sassafras
Taxodium distichum	bald cypress
Tilia Americana	basswoodA
Tsuga Canadensis	eastern hemlock

Ulmus spp	elms

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 particles	W3.1 Wood chips	All
Non-Timber Forest Products		
Product Level 1	**Product Level 2**	**Product Level 3 and Species**
None		

Conservation Areas

Total area of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation objectives:	2,761.02 ac Note: Conservation areas may not equal HCVF acres as some HCVF attributes require active management and some no harvest, protection zones may not necessarily be HCVF.

High Conservation Value Forest / Areas

High Conservation 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) Greenbrier Knob/River's Ledge, Harrison-Crawford SF, (144.2 A) Pleasant Grove Valley, Owen Putnam SF, (64.2 A)	703.8 ac
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.		
HCV3	Forests or areas that are in or contain rare, threatened or endangered ecosystems.	White Oak , Clark SF,(133.7 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) Countyline Glades, Harrison-Crawford SF, (84.6 A) Section 9 Seep Springs, Owen-Putnam SF, (46.72 A) Ravinia Seeps, Morgan-Monroe SF, (52.4 A)	2,057.22 ac
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 Forest / Area'			**2018 ac**

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

☐ *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.*	
☒ *Applicant wishes to excise portions of the FMU(s) under evaluation from the scope of certification.*	
Explanation for exclusion of FMUs and/or excision:	The Division of Forestry 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. Heat treatments and insecticides are used. Several of the most effective bedbug insecticides are not allowed under FSC. All applications occur within the cabins.
Control measures to prevent mixing of certified and non-certified product (C8.3):	The Division of Forestry 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.

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 Area, Jackson- Washington SF	Vallonia, IN, USA	11 acres
Deam Lake State Recreation Area, Clark SF	Borden, IN, USA	73 acres
Greene-Sullivan SF	Dugger, IN, USA	30 acres

8. Annual Data Update

8.1 Social Information

Number of forest workers (including contractors) working in forest within scope of certificate (differentiated by gender):		
# of male workers: 120	# of female workers: 24	
Number of accidents in forest work since last audit	**Serious:** # 3	**Fatal:** # 0

8.2 Annual Summary of Pesticide and Other Chemical Use

Commercial name of pesticide / herbicide	Active ingredient	Quantity applied annually (kg or lbs)	Size of area treated during previous year	Reason for use
AquaNeat	Glyphosate	.64 gallon	4.5 acres	Weed control
Aquathol K	Dipotassium salt	97.5 gallons	15 acres	Weed control
Buccaneer	Glyphosate	15.6 gallons	79.8	Invasives control
Crossbow	2,4-D, triclopyr	.88 gallon	5 acres	Planting maintenance
Cutrine Plus	Copper carbonate	50 gallons	10 acres	Algae, weed control

Cutrine Ultra	Copper carbonate	20 gallons	20 acres	Algae control
Element 4	Triclopyr	4.94 gallons	1.25acres	Invasives control
Fusion	Fluazifop-P-butyl, Fenoxaprop-P-ethyl	.033 gallon	3 acres	Invasives
Garlon	Triclopyr	1.5 gallons	9 acres	Invasives control, weed control
Garlon 3	Triclopyr	1.53 gallons		Invasives control
Garlon 4	Triclopyr	16.21 gallons	28.5 acres	Invasives control, woody brush control, timber stand improvement
Gly-Star +	Glyphosate	42.58 gallons	39.8 acres	Invasives control, weed control, timber stand improvement, understory control
Habitat	Imazapyr	.06 gallon	1 acre	Invasives control
Heliosate	Glyphosate	3.6 gallons	17.1 acres	Invasives control
Helosate Plus	Glyphosate	6.39 gallons	2.99 acres	Invasives control, weed control
Intensity	Clethodim	127 gallons		Invasives control
Mad Dog Plus	Glyphosate	45.6 gallons	156.2 acres	Invasives control, weed control, planting maintenance, understory control, timber stand improvement
Method 240SL	Aminocyclopyrachlor	.58 gallon		Utility ROW maintenance
Milestone	Triisopropanolammonium	.41 gallon		Utility ROW maintenance
Nufarm Credit Extra	Glyphosate	6.24 gallons	72.6 acres	Invasive control, timber stand improvement
Oust	Sulfometuron methyl	.45 pound	20	Tree planting
Pathway	Picloram (CAS # 6753-47-5); 2,4-D (CAS # 18584-79-7)	3.13 gallons	23 acres	Invasives control, timber stand improvement
Plateau	Imazapic	3.84 gallons	96.9 acres	Invasives control
Poast	Sethoxydim	2.5 gallons	19.4 acres	Invasives control
Razor	Glyphosate	18.79 gallons	28.2 acres	Invasives control, weed control
Rodeo	Glyphosate	1.92 gallon	7 acre	Timber stand improvement, brush control, invasives
Roundup	Glyphosate	.77 gallon	3	Invasives control, weed control, tree planting
Tahoe	Triclopyr	.22 gallon	2	Invasives control
Tordon	Glyphosate	.56 gallon	3 acres	Invasives control
Vastlan	Triclopyr	3.75 gallons		Utility ROW maintenance
	Picloram	4 gallons	161 acres	Timber stand improvement
	Triclopyr	.25 gallon	161 acres	Timber stand improvement

SECTION B – APPENDICES (CONFIDENTIAL)

Appendix 1 – List of FMUs Selected For Evaluation

[X] FME consists of a single FMU

[ ] FME consists of multiple FMUs or is a Group

Appendix 2 – List of Stakeholders Consulted

List of FME Staff Consulted

See Appendix 7, sign in sheets for FME staff during the audit.

List of other Stakeholders Consulted

Name	Organization	Contact Information	Consultation method	Requests Cert. Notf.
Allen Pursell	Director of Forest Conservation, The Nature Conservancy in Indiana	apursell@tnc.org	Email	Y
Anonymous Reviewer	Records maintained by SCS	Records maintained by SCS	Records maintained by SCS	Y
Anonymous Stakeholder	Records maintained by SCS	Records maintained by SCS	Records maintained by SCS	Y
Carolyn Pike, PhD	Regeneration Specialist, US Forest Service Northeastern Area, Forest Management Program	cpike@fs.fed.us	Interview, Email	N
Charlotte Owings, PhD	Project Coordinator, HEE	freemac@purdue.edu	Field interview, email	Y
Dan Shaver	Forest Bank Operations Manager, The Nature Conservancy in Indiana	dshaver@tnc.org	Field interview, email	Y
David LeBlanc, PhD	Dendrochronologist, Ball State University, Muncie IN	dleblanc@bsu.edu	Email, Phone	Y
Jeff Riegel	Field Technician Supervisor, HEE	jriegel@purdue.edu	Field interview	N
Justin Maxwell, PhD	Dendrochronologist, Indiana University, Bloomington IN	maxweljt@indiana.edu	Email, Phone	Y
Leslie Bishop	Professor Emerita of Biology (EcoBlitz participant)	765-277-1672	Email, Phone	Y

Appendix 3 – Additional Audit Techniques Employed

[X] None.

[ ] Additional techniques employed (*describe*):

Appendix 4 – Pesticide Derogations

[X] There are no active pesticide derogations for this FME.

Appendix 5 – Detailed Observations

Criteria required by FSC at every surveillance audit (*check all situations that apply*)	[ ] NA – all FMUs are exempt from these requirements. [ ] Plantations > 10,000 ha (24,710 ac): 2.3, 4.2, 4.4, 6.7, 6.9, 10.6, 10.7, and 10.8 [X] Natural forests > 50,000 ha (123,553 ac) ('low intensity' SLIMFs exempt): 1.5, 2.3, 3.2, 4.2, 4.4, 5.6, 6.2, 6.3, 8.2, and 9.4 [ ] FMUs containing High Conservation Values ('small forest' SLIMFs exempt): 6.2, 6.3, 6.9 and 9.4
Documents and records reviewed for FMUs/ sites sampled	[ ] All applicable documents and records as required in section 7 of audit plan were reviewed; or [ ] The following documents and records as required in section 7 of the audit plan were NOT reviewed (*provide explanation*):

Evaluation Year	FSC P&C Reviewed
2016	All – (Re)certification Evaluation
2017	P1, P5, 6.3, P9
20XX	
20XX	
20XX	

C= Conformance with Criterion or Indicator
NC= Nonconformance with Criterion or Indicator
NA = Not Applicable
NE = Not Evaluated

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

and tribal laws, and ***administrative requirements*** (e.g., regulations). Violations, outstanding complaints or investigations are provided to the ***Certifying Body*** (CB) during the annual audit.		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.
1.1.b To facilitate legal compliance, the ***forest owner*** or ***manager*** ensures that employees and contractors, commensurate with their responsibilities, are duly informed about applicable laws and regulations.	C	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.		
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.	C	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.
1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.		
1.3.a. Forest management plans and operations comply with relevant provisions of all applicable binding international agreements.	C	In the State of Indiana, there is one forest species covered under CITES, *Panax quinquefolius* 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 *Indiana Administrative Code, Title 312, Article 19 Research, Collection, Quotas, and Sales of Plants*, and *Indiana Code IC 14-31-3, Chapter 3. Ginseng*. 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 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 regulations conflicts with compliance with FSC Principles, Criteria or Indicators are documented and referred to the CB.	C	Confirmed in interviews with staff that DoF is aware of requirement to raise any conflicts between laws and FSC Principles to SCS.
1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.		
1.5.a. The forest owner or manager supports or implements measures intended to prevent illegal and unauthorized activities on the ***Forest Management Unit*** (FMU).	C	2017: 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. For example, every property visited at Martin State Forest sites had gates to limit unauthorized access. • ATV's are prohibited on State Forests, except for disabled hunters under permit. • 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. For example, the Martin State Forest Site 2-2/3 posted forest regulations at the access gate. Through interviews, document review, and field inspection the auditors confirmed all of the above occurring on the Jackson/Washington, Ferdinand/Pike, and Martin State Forests during the 2017 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 for every timber sale completed. 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, https://in.gov/dnr/forestry/files/fo-Stump_Audit_Report-2016.pdf. 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 2017 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), https://secure.in.gov/dnr/lawenfor, 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 2017 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.	C	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. For the 2017 audit the DNR reports Timber trespasses and illegal Off Road Vehicle (ORV) or all-terrain vehicle (ATV) use. The Division of Forestry has a process to deal with timber trespasses through the licensing forester: surveying lines, conducting timber appraisals, charging for lost timber. For illegal ATV use, gates are maintained and the Division of Forestry works with the Division of Law Enforcement. For example, in an ongoing case, the Jackson Road Encroachment at Clark State Forest, criminal charges were brought against a logging contractor for timber trespassed. Another criminal trespass is continued in

		Yellowwood State Forest. A third new case involves a landowner in Francis Slocum State Forest in timber trespass. Interviews with forestry staff indicate ATV violations are uncommon and likely less than 100 per year.
1.6. Forest managers shall demonstrate a long-term 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.	C	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, http://www.in.gov/dnr/forestry/files/fo-FSC_letter.pdf.
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.	C	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.	C	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 and forest resources shall be clearly defined, documented and legally established.		
2.1. Clear evidence of long-term forest use rights to the 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 ***long-term*** rights to use and manage the FMU for the purposes described in the management plan.	C	The first state forest was established in 1903. 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	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.	C	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 2017 audit with external boundaries were consistently marked.
2.2. Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies. *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 of ***tenure*** and ***use rights*** allowable by law or regulation.	C	Tenure 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 others exist, the forest owner or manager consults with groups that hold such rights so that management activities do not significantly impact the uses or benefits of such rights.	C	The primary mechanism for consulting with concerned and affected stakeholders is annual open houses. 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 2017 documents provided for sites visited during the audit. At sites where neighbors were adjacent to land with planned management, copies of good neighbor letters were in property folders. Interviews with staff in 2017 additionally confirm consistent knowledge of, and routine use of these letters. Considerable efforts are made to get attendance at the open houses, such as new releases, free educational sessions, hikes, food, free saplings, and education materials. 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 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 rights then the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If	C	DoF maintains an open door policy both at the level of the central office and each state forest. Confirmed open door policy is used at Jackson/Washington,

these good-faith efforts fail, then federal, state, and/or local laws are employed to resolve such disputes.		Ferdinand/Pike and Martin State Forests during the 2017 audit. DoF staff regularly check boundaries for timber sales that abut other ownerships. Additionally, they often apply a no-harvest buffer zone to these types of sales. There have been no new disputes since the last audit.
2.3.b The forest owner or manager documents any significant disputes over tenure and use rights.	C	DoF tracks legal ownership and boundary disputes through the State Land Office. Most issues deal with timber theft and unauthorized installation of septic lines or other utilities or residential uses (examples: gardens, yards, dog houses, sheds) into state lands. No existing or new tenure or rights disputes in the last year.
Principle #3: The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.		
3.1. Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.	NE	
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.	C	The DoF sends letters to both federally recognized and unrecognized tribes with ancestral connections to the State of Indiana during critical stages of planning and events. This was done in 2016 during the bicentennial celebration. See site notes for commemorative event. 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 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, http://in.gov/inaiac/files/INAIAC_IC_4-23-32.pdf.) Additional information regarding links to upcoming events, resources, news 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 organizations have found adequate opportunities to express concerns or interests to the DNR. The DNR has worked to develop a plant permitting process for collection of plant materials, *Native American Plant/Tree Material Collection For Medicinal Or Ceremonial Purpose On Indiana Department Of Natural Resources Property*, https://secure.in.gov/inaiac/files/Native_American_Plant_Tree_Collection_Process_Overview.pdf. An approved Collection Permit may allow collection of plant/tree material from any permittee-requested DNR property, e.g., State Forest, Fish and Wildlife Area, or State Park.
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	DoF continues to identify and protect archeological sites on DoF lands. In 2017, 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.	NE	
3.4. Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.	NE	
Principle #4: Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.		
4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.	NE	
4.2. Forest management should meet or exceed all 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).	C	During the 2017 audit: • 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 2017, 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 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. 2017: DNR reports 3 Work related accidents: 1 kidney laceration caused by rolling tree section while bucking tree on a blocked trail, 1 hand injury (fell & fractured finger), 1 chemical burn from wet concrete skin contact. Safety analysis and plans for avoiding same injuries included identifying harvesting around snags as potential hazards. Snag safety was then incorporated into 2017 forestry staff training and also added to the logger training program.
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	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. Timber harvest contracts were changed 1 January 2017, require a logger who has taken logger training (which includes safety) will have to be onsite during any logging operations on the state forest.
4.2.c The forest owner or manager hires well-qualified service providers to safely implement the management plan.	C	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). Auditors also confirmed these records are available in a database maintained and available online here, http://www.in.gov/dnr/forestry/9317.htm.
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 Labor Organization (ILO).	NE	
4.4. Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.		
4.4.a The forest owner or manager understands the likely social impacts of management activities, and incorporates this understanding into management planning and operations. Social impacts include effects on: • Archeological sites and sites of cultural, historical and community significance (on and off the FMU;	C	DoF uses the following approaches to understand social impacts and incorporate into management: 1. Ongoing archeological review of projects. 2. Open houses for public to review planned management. 3. Posting of management plans for public review on website.

• 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.		4. Timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control. 5. 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 2015-2019 Indiana Forestry Strategic Directions planning documents and process addresses social impacts. The DNR continues to hold State Forest open houses and online comment periods for management guides.
4.4.b The forest owner or manager seeks and considers input in management planning from people who would likely be affected by management activities.	C	State Forest planning documents and resource management plans are open to public comment for at least 30 days prior to finalization. Additionally, DoF holds several public meetings and open houses throughout the state each year to solicit and address public comments. The following were examined during the 2017 audit: 1. For the Indiana Division of Forestry Strategic Plan, http://www.in.gov/dnr/forestry/files/fo-State_Forest_Strategic_Plan_2015_2019.pdf, 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-Public_Input_Procedure.pdf that describes the stakeholder solicitation process. This document 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. DoF provided for review the schedule for 2017 State Forest Open Houses. For example, an open house was held in September 2017, for Ferdinand-Pike. Past, current, and projected projects. Provided recreation, sale areas, and forestry education/games for children, District Foresters provided an informational display for private landowner application by topic areas in private land management.

		Advertised on website, Facebook page, and radio stations. These schedules are posted online once approved. The 2017, 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, http://in.gov/dnr/forestry/6252.htm. 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, environmental groups, wildlife groups, state and 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, http://www.in.gov/dnr/forestry/6252.htm. 4. The Division of Forestry also has a place to ask questions or provide comment on our website: http://www.in.gov/dnr/forestry/2856.htm. When comments are received, they are forwarded to the appropriate staff member to respond. For example, during the 2017 audit of Pike State Forest, staff received notice/comments requesting permission to use pack goats on a recreational trail. 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, http://www.in.gov/dnr/forestry/4815.htm. Comments from management guides are reviewed and responses developed. Document is available on the DoF website. There were no allegations received that required investigation. During investigation of stakeholder comments auditors discovered responsive and public rationales to sometimes hostile, inaccurate, and unfair public statements from ENGO's. Auditors determined DNR addressed public concerns thoroughly and professionally. See Comments under Certification Decision section of this report.
4.4.c People who are subject to direct adverse effects of management operations are apprised of relevant activities in advance of the action so that they may express concern.	C	There are two principal ways that people are apprised of relevant activities: 1) timber sales & state forest management guides are on the website and stakeholders can provide comments; and 2) Open houses (at open house will have list of planned

		activities). DoF also attempts to prepare news releases to advertise events. For adjacent landowners, a notification letter or other communication on upcoming timber sales is a common practice.
4.4.d For ***public forests,*** consultation shall include the following components: 1. Clearly defined and accessible methods for public participation are provided in both long and short-term planning processes, including harvest plans and operational plans; 2. Public notification is sufficient to allow interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management; 3. An accessible and affordable appeals process to planning decisions is available. Planning decisions incorporate the results of public consultation. All draft and final planning documents, and their supporting data, are made readily available to the public.	C	In 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. 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, https://secure.in.gov/dnr/forestry/3644.htm.
4.5. Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.	NE	
Principle #5: Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.		
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 maintain the ecological productivity of the forest.		
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.	C	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 2016 DoF annual report, http://www.in.gov/dnr/forestry/files/fo-DNR_DoF_2016_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 2016 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.	C	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 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.	C	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.
5.2.b The forest owner or manager takes measures to optimize the use of harvested forest products and explores product diversification where appropriate and consistent with management objectives.	C	Observed acceptable utilization at harvest sites during 2017 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	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.		
5.3.a Management practices are employed to minimize the loss and/or waste of harvested forest products.	C	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 residual trees and other forest resources, including: • soil compaction, ***rutting*** and erosion are minimized; • residual trees are not significantly damaged to the extent that health, growth, or values are noticeably affected; • damage to NTFPs is minimized during management activities; and • techniques and equipment that minimize impacts to vegetation, soil, and water are used whenever feasible.	C	See section 2.1. Audit team observed good protection of residual trees. In the case of rare exceptions, DoF issues penalties to the logger for stand damages. Rutting concerns were only detected on one selected harvest (Compartment 1, Tracts 1, 11, 1) that had to be logged in wetter conditions than desired because of Indiana bat restrictions. BMPs, contract terms, and timber sale oversight by field personnel collectively result in operations taking place well within reasonable limits for residual stand damage. Because many high value trees are utilized as veneer, foresters are sensitive to harvesting damage that would preclude this use if it occurred.
5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.		
5.4.a The forest owner or manager demonstrates knowledge of their operation's effect on the local economy as it relates to existing and potential markets for a wide variety of timber and non-timber forest products and services.	C	Considering DoF's efforts to manage for outdoor recreation, the production of timber products, wildlife habitat, watershed health, and biodiversity, there is excellent conformance with this indicator. Specific observations include: • All areas visited sold a broad range of products including posts, veneer, sawtimber, pallets, and furniture grade; • 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 the economic use of the forest according to Indicator 5.4.a.	C	Recreation of all kinds is available. The forest products industry in the state has been responsive to the State's COC group certificates.
5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.		
5.5.a In developing and implementing activities on the FMU, the forest owner or manager identifies, defines and implements appropriate measures for maintaining and/or enhancing forest services and resources that serve public values, including municipal watersheds, fisheries, carbon storage and sequestration, recreation and tourism.	C	DoF policies are clearly oriented towards maintaining and enhancing the full suite of forest services and resources such as watersheds and fisheries. The careful attention to BMP's is an example of efforts to maintain forest services. See HEE report (8B HEE_Annual_report_2006-2010) for an analysis of forest services, which include recreation, ecosystem services, etc.
5.5.b The forest owner or manager uses the information from Indicator 5.5.a to implement appropriate measures for maintaining and/or enhancing these services and resources.	C	The designation and respect of protected areas and the implementation of BMPs is consistent with maintaining or enhancing watersheds, fisheries, carbon, recreation, and tourism.
5.6. The rate of harvest of forest products shall not exceed levels which can be permanently sustained.		
5.6.a In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the planning unit. The sustained yield harvest level calculation is documented in the Management Plan. The sustained yield harvest level calculation for each planning unit is based on: • documented growth rates for particular sites, and/or acreage of forest types, age-classes and species distributions; • mortality and decay and other factors that affect net growth; • areas reserved from harvest or subject to harvest restrictions to meet other management goals; • silvicultural practices that will be employed on the FMU; • management objectives and desired future conditions. The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.	C	DoF current harvest target is 10 mmbf, which is approximately 50% of gross growth. The current grow estimate is based on the current State Forest CFI program implemented in 2008. Annual gross growth is estimated at 22 million board feet; The overall harvest goal for the system (10 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 most current 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). The Indiana Division of Forestry has developed a robust forest inventory system. A continuous forest inventory where 1/5 of the land base is inventoried each year is in the 8th year. After the 5th year was completed, DoF started to re-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.

		State Forest harvest target is 10,000 MBF. Actual harvest 2016/2017: 10,298 MBF which includes 7,657 MBF of saw logs plus 5,283 cords converted to BF.
5.6.b Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.	C	2017: Timber Sale Volumes Sold in the Past Ten Years: 2016-2017 10.3 mmbf 2015-2016 7.1 mmbf 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. 2015/2016 harvest target was 14,000MBF. For 2016/2017, this was reduced to 10,000 MBF.
5.6.c Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that have been depleted or rendered to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.	C	The combination of even- and uneven-aged management is used to produce mixed age classes and species. Regeneration harvests are used to generate young age classes of oak-hickory type. The goal of maintaining 10% of the FMU in late seral conditions in consistent with some site characteristics, particularly on more mesic to wet-mesic sites with few oak-hickory species and associates. Because DoF is harvesting less than 50% of estimated gross growth, there is room to allow additional salvage operations without cutting beyond sustainable levels. Actual harvesting levels will be monitored and 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.
5.6.d For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary use rights may be impacted by such harvests. In other situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result	C	DoF does not have any significant commercially harvested NTFPs.

in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.		
Principle #6: Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.		
6.1. Assessments of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources -- and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.	NE	
6.2 Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping, and collecting shall be controlled.		
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	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 when a forester has a question or experiences an unusual wildlife issue. 2017: Hardwood Ecosystem Experiment (HEE), a 100-year research project, continued including research on Indiana bats. Surveys for various State and federal listed species conducted by researchers working with Hardwood Ecological Experiment, surveyors working on MM-YW Backcountry Area Ecoblitz, and routine surveys conducted by Ecologists and Biologists with Indiana DNR. One Indiana bat seasonal harvest restriction zone was reduced in size at Yellowwood SF due to the acquisition of new occupancy data in 2017.
6.2.b When RTE species are present or assumed to be present, modifications in management are made in order to maintain, restore or enhance the extent, quality and viability of the species and their habitats. ***Conservation zones*** and/or ***protected areas*** are established for RTE species, including those S3 species that are considered rare, where they are necessary to maintain or improve the short and long-term viability of the species. Conservation measures are based on relevant science, guidelines and/or consultation with relevant, independent experts as necessary to achieve the conservation goal of the Indicator.	C	When RTE species are known to occur (by querying the Natural Heritage Database), staff will determine appropriate steps to protect the species. These steps may include a consultation with the biologist or ecologist or written species- specific management plans to accommodate individual species requirements. Staff consult species accounts in the State Forest Environmental Assessment, consultation with DNR biologists/ecologists, and any special guidance developed for State Forests (e.g., DoF's management guidance for federally listed bats). NatureServe may serve as another source to search for additional management guidelines for T and E species. Various routine forest management activities occurred within (where allowable) or near protected areas and conservation zones. In general, when activities occur near, foresters avoid area and establish buffers around protected areas/features for extra protection. Activities occurring within protected conservation areas were compatible with the protected resources and followed all established and applicable management guidelines.
6.2.c For medium and large public forests (e.g. state forests), forest management plans and operations are designed to meet species' recovery goals, as well as landscape level biodiversity conservation goals.	C	DoF follows its guidelines on the conservation of the federally listed bats. These guidelines were developed 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 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. Three Back Country areas, totaling over 6,000 acres across the State, are managed to develop late seral conditions.
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	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. All wildlife research collection must be permitted by DNR-Fish & Wildlife and/or US Fish & Wildlife Service. Collection activities occurring on dedicated nature preserves located in State Forests are also authorized by the Division of Nature Preserves.

6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem.		
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	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 In 2017, DoF reports 308 acres of openings for early successional habitat (2016/2017). Made 1.5-acre tree planting containing oak in old field to enhance the oak composition. See Stakeholder Comments section for additional detail.
6.3.a.2 When a ***rare ecological community*** 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, ***conservation zones*** and/or ***protected areas*** are established where warranted.	C	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.
6.3.a.3 When they are present, management maintains the area, structure, composition, and 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	C	DoF has developed procedures to assess and identify Type 1 and Type 2 old growth on state forests. This 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. DoF has no identified old growth, however DNR does annual checks for old growth based on Forest Inventory

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. 5. Conservation zones representative of old growth stands are established. 6. Landscape level considerations are addressed. 7. Rare species are protected.		and Analysis (FIA), Continuous Forest Inventory (CFI) data, and historical tract records.
6.3.b To the extent feasible within the size of the ownership, particularly on larger ownerships (generally tens of thousands or more acres), management maintains, enhances, or restores habitat conditions suitable for well-distributed populations of animal species that are characteristic of forest ecosystems within the landscape.	C	*IDNR DIVISION OF FORESTRY STRATEGIC DIRECTION 2015-2019* includes the following goals: - 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) - Conserve and manage wildlife habitats, cultural resources and high conservation value forests In 2017, the following projects were reported in alignment with the strategic goals above: 1) Afforestation project at Morgan-Monroe 2) Openings creating early successional habitat 3) Snag retention & cavity tree retention 4) Invasive species control 5) Prescribed burning

6.3.c Management maintains, enhances and/or restores the plant and wildlife habitat of ***Riparian Management Zones (RMZs)*** to provide: a) habitat for aquatic species that breed in surrounding uplands; b) habitat for predominantly terrestrial species that 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.	C	Indiana Logging and Forestry Best Management Practices: BMP Field Guide (BMP Field Guide) is used by field foresters to guide the protection of RMZs. The buffer zones established in RMZs ensure upland-lowland connectivity (a, b, and c) and maintenance of riparian vegetation and soils (d and e). Management activities done near riparian areas include timber harvest with stream crossing and tree planting. All activities done in consideration of the BMP and Indiana bat guidelines. See site notes.
Stand-scale Indicators **6.3.d** Management practices maintain or enhance plant species composition, distribution and frequency of occurrence similar to those that would naturally occur on the site.	C	Indiana DoF has an increased emphasis on management and sustainability of oak-hickory communities due to their decline on the landscape (Indiana State Forests Environmental Assessment 2008-2027). 2017: Openings and small clearcuts (>10 acres) DoF was in conformance retention indicators.
6.3.e When planting is required, a local source of known provenance is used when available and when the local source is equivalent in terms of quality, price and productivity. The use of non-local sources shall be justified, such as in situations where other management objectives (e.g. disease resistance or adapting to climate change) are best served by non-local sources. ***Native species*** suited to the site are normally selected for regeneration.	C	Midwest with Indiana sources are utilized. During the 2017 audit the Vallonia State Tree Nursery was visited.
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, ***snags***, and well-distributed coarse down and dead woody material. ***Legacy trees*** where present are not harvested; and b) vertical and horizontal complexity. Trees selected for ***retention*** are generally representative of the dominant species found on the site.	C	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 2017 audit, confirmed guidelines are being followed.
6.3.g.1 In the Southeast, Appalachia, Ozark-Ouachita, Mississippi Alluvial Valley, and Pacific Coast Regions, when ***even-aged systems*** 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	C	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:

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.		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 ***best available information*** including peer-reviewed science regarding natural disturbance regimes for the FMU. 3. Is spatially and temporally explicit and includes maps of proposed openings or 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.	C	There are no even-aged management restrictions in the Lake States/ Central Hardwood region or otherwise imposed by state/ local law or regulation.
6.3.h The forest owner or manager assesses the risk of, prioritizes, and, as warranted, develops and implements a strategy to prevent or control ***invasive species***, including: 1. a method to determine the extent of invasive species and the degree of threat to native species and ecosystems; 2. implementation of management practices that minimize the risk of invasive establishment, growth, and spread; 3. eradication or control of established invasive populations when feasible: and, 4. monitoring of control measures and management practices to assess their effectiveness in preventing or controlling invasive species.	C	During the development of the management guide for a tract the Ecological Resource Review form is filled out which includes Section #5 Non-native Invasive Species where such species are listed including management actions. These species, along with management and monitoring actions, are most often also included in the management guide. In addition to the regular efforts, in Jackson/Washington, Ferdinand-Pike, and Martin State Forests hired interns to conduct invasive species control projects. The Division received a federal Joint Chiefs grant along with NRCS and Hoosier National Forest with the overarching goal of oak restoration. DoF will be using its portion for invasive species control to enhance oak regeneration. In 2017, auditors visited an area where the forester had sprayed stilt grass and was experimenting to find the most effective way to eradicate it. DoF participates in the Southern IN Cooperative Weed Management Area.

		Treatment of multiflora rose, bush honeysuckle, Japanese honeysuckle, kudzu, wisteria and stiltgrass. For prevention, DoF has been doing education for users at trailheads, campgrounds and offices. In addition, timber sale in backcountry area of Yellowwood/Morgan-Monroe SF requires equipment cleaning.
6.3.i In applicable situations, the forest owner or manager identifies and applies site-specific fuels management practices, based on: (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, (4) public safety, and (5) applicable laws and regulations.	C	When applicable, DoF maintains site-level fire plans that are primarily conducted in oak-hickory understories to control competing species. This regime mimics natural periodic ground fires that historically occurred in this habitat type. In 2017 a site visit with HEE science staff (no DNR staff included) occurred at an experimental prescribed burn site of the HEE management experiments in openings and closed forests as part of wildlife and plant population dynamics research.
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.	NE	
6.5 Written guidelines shall be prepared and implemented to control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and to protect water resources.	NE	
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.	NE	
6.7. Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.	NE	
6.8. Use of biological control agents shall be documented, minimized, monitored, and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.	NE	
6.9. The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.		

6.9.a The use of ***exotic species*** is contingent on the availability of credible scientific data indicating that any such species is non-invasive and its application does not pose a risk to native biodiversity.	C	DOF has use of seed mixes detailed in its procedures manual and application in the BMP manual. DOF generally uses winter wheat or oats depending on the season (coldness) for closeouts. However, with the increased incidence of Japanese Stiltgrass (exotic) on some State Forests, DOF has started using fescues (exotic), especially the shorter varieties as they are more competitive with the Stiltgrass. There has been some research to show that Kentucky 31 fescue can crowd out stiltgrass. Winter wheat and oats 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.2017: Log yard seeding periodically monitored for effectiveness. No control measures were required.
6.9.b If exotic species are used, their provenance and the location of their use are documented, and their ecological effects are actively monitored.	C	State Forest Procedure Manual Section W: Pest and 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	C	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. Treatment of multiflora rose, bush honeysuckle, Japanese honeysuckle, kudzu, wisteria and stiltgrass. For prevention, DoF has been doing education for users at trailheads, campgrounds and offices. Monitoring during post-harvest inspections.
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.	NE	
Principle #7: A management plan -- appropriate to the scale and intensity of the operations -- shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.		
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.		
8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations, as well as, the relative complexity and fragility of	NE	

the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.		
8.2. Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators: a) yield of all forest products harvested, b) growth rates, regeneration, and condition of the forest, c) composition and observed changes in the flora and fauna, d) environmental and social impacts of harvesting and other operations, and e) cost, productivity, and efficiency of forest management.		
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.	C	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. Actual harvest 2016/2017: 10,298 MBF which includes 7,657 MBF of saw logs plus 5,283 cords converted to BF. CFI and FIA continued on the state forests this year.
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	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	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 ***habitats***; 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; 5) High Conservation Value Forests (see Criterion 9.4).	C	• Indiana DoF properties section wildlife biologist completes annual monitoring snag and cavity trees, bat populations 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. Bat surveys have been of highest priority to support development of bat Habitat Conservation Plan

		which is anticipated to be submitted to the USFWS in 2019, at the earliest. 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 Indiana Invasive Species Council on monitoring and prevention. • Hardwood Ecosystem Experiment (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. EcoBlitz is occurring in the backcountry area of the Morgan-Monroe and Yellowwood 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 accepted in peer reviewed scientific journals. Hardwood Ecosystem Experiment (HEE), a 100-year research project, continued including research on Indiana bats. An NGO EcoBlitz occurred and submitted data is being processed by Nature Preserves through their standard data review process.
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	C	Evidence of monitoring includes the following reports and records: • Timber sale inspection reports

harvest prescriptions and guidelines are effective.		• 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, http://www.in.gov/dnr/forestry/7532.htm
8.2.d.2 A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	C	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 economic opportunities (see Indicator 4.1.g), the creation and/or maintenance of quality job opportunities (see Indicator 4.1.b), and local purchasing opportunities (see Indicator 4.1.e).	C	Summary and Monitoring of Social Impacts of State Forest Management Activities (CAR 2011.3 and 2011.11 Summary and Monitoring of Social Impacts.doc) State Forest Environmental Assessment: (http://www.in.gov/dnr/forestry/files/fo-StateForests_EA.pdf). State Forest open houses and online comment periods for management guides, BMP monitoring on all state forest timber sales.
8.2.d.4 Stakeholder responses to management activities are monitored and recorded as necessary.	C	Strategic Plan and EA 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 were summarized and responses prepared as part of the planning process.
8.2.d.5 Where sites of cultural significance exist, the opportunity to jointly monitor sites of cultural significance is offered to tribal representatives (see Principle 3).	C	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.
8.2.e The forest owner or manager monitors the costs and revenues of management in order to assess productivity and efficiency.	C	Costs of arranging each timber sale is 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.
8.3 Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody."	NE	
8.4 The results of monitoring shall be incorporated into the implementation and revision of the management plan.	NE	

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.	NE	
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)** **d) Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).**		
9.1 Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.		
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 requirements for legacy trees in Indicator 6.3.f.	C	Currently, all HCVs are Nature Preserves. All Nature Preserves are mapped in GIS which was confirmed by GIS review. The following HCVFs were visited during the 2017 audit: Cucumber Magnolia; Knobstone Glade Nature Preserve. Maps of the HCVs are also included in the Tract folders. Maps of most of the Nature Preserves that are HCVs can be found online at 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.	C	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 Nature Preserve purposes. For example, local land trusts and The Nature Conservancy have collaborated with Nature Preserves on classification and management of identified HCVs. See Stakeholder Comments section for additional detail.
9.1.c A summary of the assessment results and management	C	The web document "Indiana Division Of Forestry

strategies (see Criterion 9.3) is included in the management plan summary that is made available to the public.		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 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.	C	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.
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.	C	DoF utilizes experts in the Division of Nature Preserves, Indiana Heritage Trust, Division of Fish & Wildlife, Division of Historic Preservation and Archaeology, Purdue University, and NGOs like The Nature Conservancy regarding HCV identification and management strategies. In late 2016, 12 new areas were placed under consideration for HCV or Nature Preserve designation. Of these 9 were been advanced in 2017 for designation and 3 are pending further review. 8 of the 9 advanced were accepted into the State Nature Preserve system in 2017. Projects were open for public comment via State Forest open house, Division of Forestry web postings (http://www.in.gov/dnr/forestry/3635.htm) and/or the public meetings of the Indiana Natural Resources Commission.
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.		
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.	C	The web document "Indiana Division Of Forestry High Conservation Value Forests" summarizes management activities in HCVFs https://www.in.gov/dnr/forestry/files/fo-HighConservationValueForests.pdf. 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 maintain or enhance the high conservation values and the extent of the HCVF.	C	The web document "Indiana Division Of Forestry High Conservation Value Forests" summarizes management activities in HCFVs. During the 2016 audit a site was visited that included HCVF tract where monitoring had determined the management activities (none) were not accomplishing the desired outcome for the HCVF attribute -- State threatened Yellowwood tree (Cladastis lutea). This tree requires openings to succeed in regeneration. The current management was not providing those openings and the Yellowwood seedlings were being shaded out. A project to create openings is in process. The DoF has also proposed to greatly expanding the HCVF 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. This HCVF proposal is pending and further action is expected in 2018.
9.3.c If HCVF attributes cross ownership boundaries and where maintenance of the HCV attributes would be improved by coordinated management, then the forest owner or manager attempts to coordinate conservation efforts with adjacent landowners.	C	DOF has not yet identified any HCV attributes that cross ownership boundaries. However, Nature Preserves manages some HCVs in cooperation with other adjacent public and private reserves. Though DOF focus is on state-owned HCV some of the collaborative projects are not on DOF-managed properties.
9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.		
9.4.a The forest owner or manager monitors, or participates in a program to annually monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of Principle 8.	C	Division of Nature Preserves undertakes monitoring of HCVF. DoF's updated HCVF documents address Indicator 9.4.a. Monitoring is the responsibility of Nature Preserves. See State HCVF description in Appendix 7 of this Audit Report for detail. The Division of Nature Preserves monitors each HCV either annually or biennially. The monitoring includes threats to the preserve including invasive species, primary natural communities, and assessment of the health of the community. The ecologist will then share the information with the property owner (DoF in the case of the HCVs) and discuss any problems and potential solutions.
9.4.b When monitoring results indicate increasing risk to a specific HCV attribute, the forest owner/manager re-evaluates the measures taken to maintain or enhance that attribute, and	C	DoF has been working on an Indiana Bat HCP for some time. In the meantime, DoF applies its interim guidelines for lfederally listed bats, including the Indiana bat. DoF

adjusts the management measures in an effort to reverse the trend.		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 federal approval of its submitted HCP and Environmental Impact Statement. The Division of Nature Preserves monitors each HCV either annually or biennially and meets with DoF regarding the results. Adaptive management is currently being implemented to enhance the success of the Yellowwood tree (Cladastis lutea) on the proposed HCVF.
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. Principle 10 is determined by the audit team to be not applicable to the evaluation of the FME as the type of silviculture practiced on the state forestlands, and the forest conditions that result from these practices, do not meet the FSC definition of "plantation forest management."		

Appendix 6 – Chain of Custody Indicators for FMEs

☐ Chain of Custody indicators were not evaluated during this annual audit.

SCS FSC Chain of Custody Indicators for Forest Management Enterprises
Version 6-0

REQUIREMENT	C/ 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.	C	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.	C	Indiana State Records Retention 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.*	C	☐ **Stump** *Stumpage sale or sales of standing timber; transfer of ownership of certified-forest product occurs upon harvest.* ☐ **On-site concentration yard** *Transfer of ownership of certified-product occurs at concentration yard under control of FME.* ☐ **Off-site Mill/Log Yard** *Transfer of ownership occurs when certified-product is unloaded at 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** *A timber sale in which the buyer and seller agree on a total price for marked standing trees or for trees within a defined area before the wood is removed — the timber is usually paid for before harvesting begins. Similar to a per-unit sale.* ☐ **Log landing** *Transfer of ownership of certified-product occurs at landing/yarding areas.* ☐ **Other** *(Please describe):*
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.	C	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. *NOTE: This does not apply to log cutting or de-barking units, small portable sawmills or on-site processing of chips/biomass originating from the FMU under evaluation.*	C	No processing occurs prior to the transfer of ownership, as confirmed in interviews with staff and field observation.
2. Product Control, Sales and Delivery		
2.1. Products from the certified forest area shall be identifiable as certified at the forest gate(s).	C	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).	C	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 product groups. h) If separate transport documents are issued, information sufficient to link the sales document and related transport documentation to each other.	C	Sales Contracts for 2017 audit sites were examined and found to be conformant. DNR uses an 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 Selmier, Jackson Washington, Martin, Ferdinand and Pike State Forest timber sales inspected.
2.4 The FME shall include the same information as 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**	NA	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 FSC certified in the document; 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*	NA	No delivery documents used.
3. Labeling and Promotion		**N/A, FME does not use/ intend to use trademarks**
		N/A, CW/FM certificates are not allowed to use FSC trademarks (*Note: it is a Major nonconformity to 3.1 if CW/FM certificates are found to be using trademarks)*
3.1 The FME shall adhere to relevant trademark use requirements of FSC-STD-50-001 V1-2 described in the *SCS Trademark Annex for FMEs*.		See Annex below.
4. Outsourcing	X	**N/A, FME does not outsource any COC-related activities.**
		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.	NA	

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 outsourcing agreement; 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.	NA	
5. Training and/or Communication Strategies		
5.1 All relevant FME staff and outsourcers shall be trained in the FME's COC control system commensurate with the scale and intensity of operations and shall demonstrate competence in implementing the FME's COC control system.	C	All FME staff involved in timber sale administration have been trained in contract administration and the use of timber sale templates that contain FME's FSC code and claim. Auditor viewed staff training records at Jackson-Washington 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 trainings, the intended frequency of COC training (i.e. training plan), and related program materials (e.g., presentations, memos, contracts, employee handbooks, etc.).	C	FME staff receive COC-related training. Foresters demonstrated how training records are logged in an online database administered by the central office.

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 currently uses, or intends to use, FSC trademarks and/or labels, including but not limited to printed materials, Internet	FME uses FSC trademarks on public Internet pages and in educational publications and news releases.

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**.	[X] C [ ] NC [ ] C w/Obs
Evidence: Refer to the PGL included in Section A of this report.	
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**: 1. 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	[X] C [ ] NC [ ] C w/Obs [ ] N/A, one or more of the noted exceptions apply

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". 2. In January 2014, in Hong Kong, FSC changed the trademark symbol from ® back to ™. 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 ™ trademark symbol. 3. 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 F), or the bottom right corner (alongside C) as preferred. In this instance, mark "C".	
FSC-STD-50-001 V1-2, 1.16 All FSC **trademark uses** have been submitted to SCS for **approval**.	[X] C [ ] NC [ ] C w/Obs
Sections 1.11, 1.15 and 1.16 Evidence: Certification Coordinator provided trademark approval log from SCS confirmed by auditors.	
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 ap 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 ap 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 *intend* 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 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 [ ] NC [ ] 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, appro granted pri July 1, 201
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 [X] N/A, no FS on promot 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 [X] N/A, no FSC trademarks for promot 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 [X] 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, http://www.in.gov/dnr/forestry/7532.htm and uses the correct trademark symbol.

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 *intend* 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. *NOTE: For FM/COC certificates, the FSC label and claim is FSC 100%.*	☐ 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/sten ☐ N/A, brand 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 List of FME Staff Attendees

Company Name: INDIANA DNR NOV. 6, 2017
Location: Indianapolis, IN
Type of Audit: Reevaluation
Opening Meeting Date: NOV. 6, 2017 Closing Meeting Date: NOV. 9, 2017

NAME (Printed)	TITLE/POSITION	OPENING MEETING (Initials)	CLOSING MEETING (Initials)
Dan Ernst	Assistant State Forester	DE	
Brenda Huter	Forest Stewardship Coordinator	BAH	
John Seifert	State Forester	JRS	
Norman Boatwright	[illegible]	NB	
John Friedrich	Property Program Specialist	[signature]	
Zachary Smith	Forest Programs Coordinator	ZAS not at opening	
Rob McGriff	District Forester Selmier		
Maddie Westbrook	District Forester Clark		
Scott Haulton	Wildlife Specialist	SH	
Ruthann Schulte	SFI Auditor	RMS	

Company Name: Indiana DNR NOV. 7, 2017
Location: Jackson-Washington State Forest
Type of Audit: Re-evaluation
Opening Meeting Date: NOV. 6, 2017 Closing Meeting Date: NOV. 9, 2017

NAME (Printed)	TITLE/POSITION	OPENING MEETING (Initials)	CLOSING MEETING (Initials)
Quentin Beahrs	Forester 3	QB	
Ross Carlson	Forester 3	RC	
Brad Schneck	Property Manager	BS	
Dan Ernst	Ass't State Forester	DE	
John Seifert	State Forester	JS	
Al Arens	Forest Archaeologist	AHA	
John Friedrich	Property Program Specialist	[signature]	
Brenda Huter	Stewardship Coordinator		
Scott Haulton	Wildlife Specialist	SH	
Ruthann Schulte	SFI Auditor	RMS	

Company Name INDIANA DNR Nov. 8, 2017
Location Ferdinand SF. w/ Pike
Type of Audit Re-evaluation
Opening Meeting Date Nov. 6, 2017 Closing Meeting Date Nov. 9, 2017

NAME (Printed)	TITLE/POSITION	OPENING MEETING (Initials)	CLOSING MEETING (Initials)
John Friedrich	Property Program Specialist		
Evan McDivitt	Resource Specialist	EM	
Scott Hamilton	Wildlife specialist	SH	
Beth Jacobson	SCS Cert. foresters		
Jamie Winner	Property Manager		
[illegible]	NSF Team Aud. Tor	NB	
Dan Ernst	Ass't State Forester		
AJ Ariens	Forest Archeologist	AJHA	
Brenda Hunter	Stewardship Coordinator		
Jack Seifert	State Forester		
Ruthann Schulte	SFI Auditor	RMS	

Company Name IN DNR Nov. 9, 2017
Location Martin S.F.
Type of Audit Re-evaluation
Opening Meeting Date Nov. 6, 2017 Closing Meeting Date Nov. 9, 2017

NAME (Printed)	TITLE/POSITION	OPENING MEETING (Initials)	CLOSING MEETING (Initials)
Beth Jacobson	SCS Cert. Forester		
AJ Ariens	Forest Archaeologist	AJHA	AJHA
[illegible]	NSF Team Aud. Tor	NB	NB
Scott Hamilton	Wildlife Specialist	SH	SH
John Friedrich	Property Program Specialist		
Joshua Kush	Resource Specialist	JK	JK
Jim Lauer	Property Manager	dL	dL
Dan Ernst	Ass't State Forester	DE	DE
Brenda Hunter	Stewardship Coordinator		BHH
~~John Seifert~~	~~State Forester~~		
John Seifert	State Forester	–	JS
Ruthann Schulte	SFI Auditor	RMS	RMS

Appendix 8 –