

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

Ohio DNR Division of Forestry

Columbus, Ohio, USA

SCS-FM/COC-00130N

ODNR-Division of Forestry
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CERTIFIED	EXPIRATION
6 January 2011	5 January 2016

DATE OF FIELD AUDIT
21-23 October 2014
DATE OF LAST UPDATE
12 November 2014

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Foreword

Cycle in annual surveillance audits			
<input type="checkbox"/> 1 st annual audit	<input type="checkbox"/> 2 nd annual audit	<input type="checkbox"/> 3 rd annual audit	<input checked="" type="checkbox"/> 4 th annual audit
Name of Forest Management Enterprise (FME) and abbreviation used in this report:			
Ohio Department of Natural Resources, Division of Forestry (DOF)			

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:	Kyle Meister	Auditor role:	FSC Lead Auditor
Qualifications:	<p>Kyle Meister is a Certification Forester with SCS Global Services (SCS). He has been with SCS since 2008 and has conducted FSC FM pre-assessments, evaluations, and surveillance audits in Brazil, Panama, Mexico, Costa Rica, Bolivia, Indonesia, India, Japan, New Zealand, Spain, and all major forest producing regions of the United States. Mr. Meister has successfully completed CAR Lead Verifier, ISO 9001:2008 Lead Auditor, and SA8000 Social Systems Introduction and Basic Auditor Training Courses. He holds a B.S. in Natural Resource Ecology and Management and a B.A. in Spanish from the University of Michigan; and a Master of Forestry from the Yale School of Forestry and Environmental Studies.</p>		
Auditor Name:	Mike Ferrucci	Auditor role:	SFI Lead Auditor
Qualifications:	<p>Mike Ferrucci is the SFI Program Manager for NSF – International Strategic Registrations and is responsible for all aspects of the firm’s SFI Certification programs. He is qualified as a RAB-QSA Lead Auditor (ISO 14001 Environmental Management Systems), as an SFI Lead Auditor for Forest Management, Procurement, and Chain of Custody, as an FSC Lead Auditor Forest Management and Chain of Custody, as a Tree Farm Group Certification Lead Auditor, and as a GHG Lead Auditor. Mike has led Sustainable Forest Initiative (SFI) certification and precertification reviews throughout the United States. He has also led or participated in joint SFI and Forest Stewardship Council (FSC) certification projects in nearly one dozen states and a joint scoping or precertification gap-analysis project on tribal lands throughout the United States. He also co-led the pioneering pilot dual evaluation of the Lakeview Stewardship Unit on the Fremont-Winema National Forest.</p> <p>Mike Ferrucci has 33 years of forest management experience. His expertise is in sustainable forest management planning; in certification of forests as sustainably managed; in the application of easements for large-scale working forests, and in the ecology, silviculture, and management of mixed species forests, with an emphasis on regeneration and management of native hardwood species. Mike has conducted or participated in assessments of forest management operations throughout the United States, with field experience in 4 countries and 33 states. Mike has been a member of the Society of American Foresters for over thirty-five years. He is Past Chair of the SFI Auditor’s Forum. Mike is also a Lecturer at the Yale School of Forestry and Environmental Studies, where he has taught graduate courses and workshops in forest management, harvesting operations, professional forest ethics, private forestry, and financial analysis.</p>		

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:	2
C. Additional days spent on preparation, stakeholder consultation, and post-site follow-up:	1
D. Total number of person days used in evaluation:	7

1.3 Standards Employed

1.3.1. Applicable FSC-Accredited Standards

Title	Version	Date of Finalization
FSC US Forest Management Standard	1.0	July 2010
All standards employed are available on the websites of FSC International (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).		

2 Annual Audit Dates and Activities

2.1 Annual Audit Itinerary and Activities

21 – Oct – 2014	
FMU/Location/ sites visited	Activities/ notes
Dean S.F. (Meister)	<p>FSC opening Meeting: Introductions, client update, review audit scope, audit plan, intro/update to FSC and SCS standards and protocols, review of open CARs/OBS, final site selection</p> <p>Site 1: Road One slip and repair; and horse bridle trail: 2011 storm land slump; fixed in 2012. Review of road reconstruction, new drainage features, storm-proofing, project review process, and cost-sharing. Examination of horse trail conditions and discussion of maintenance/ invasive species control.</p> <p>Site 2: Road Two slip and repair and road system review: similar to first site and result of same storm, but with more drainage features installed, including large culvert and French drain. Examination of road system and property boundaries.</p> <p>Site 3: Main office/ garage: inspection of new and old equipment. Discussion of long-term maintenance.</p>
Pike S.F. (Meister)	<p>Site 4: Sale 1301: Oak-hickory shelterwood and thinning complex. Two thinning sites and one shelterwood preparation site. Focus on removal of larger, declining trees and thinning from below for retained trees within thinning areas. Shelterwood focus on removal of dominant overstory and retention of vigorous codominant class for next entry and removal of suppressed trees down to two-inches in diameter for securing regeneration. Retention in all areas consisted of several oak and hickory species, tulip-poplar, white ash, sugar maple, black cherry, and walnut/ butternut where present.</p>

	<p>Examination of sale boundaries, recreation trail buffers, and stream buffers on intermittent stream.</p> <p>Site 5: Green Ridge A-26 Fiber Supply: operator-select thinning from below in hardwood stand and standard thinning in planted white pine stand. Hardwood area included retention of tulip-poplar, oak and hickory species, walnut/ butternut, pitch pine, sugar maple, and black cherry. Noted some uncommon oak (Chinkapin oak) and butternut retained. Removal of suppressed tulip-poplar, white ash, and red maple. Archaeological site protected with buffer. Mostly removal of low-grade material to allow for development of stronger overstory trees.</p>
<p>Perry S.F. (Ferrucci)</p>	<p>Site 1 Perry State Forest All-purpose Vehicle (APV) Parking Lot and related infrastructure including newly-built latrine.</p> <p>Site 2 Perry State Forest ADA Hunting Area with associated trail access.</p> <p>Site 3 Perry State Forest APV Area. Trail system with significant investment in trail markers, signs, parking, and hardening of trail surface as needed.</p> <p>Site 4 Perry State Forest Compartment A-18, Sale# Block 1. Completed Patch Clear-cut on 2-acres of declining, storm-damaged pine plantation.</p> <p>Site 5 Perry State Forest Road #1. This all-season road is in excellent condition.</p> <p>Site 6 Perry State Forest Compartment A-18, Sale# Block 2. Completed Patch Clear-cut on 7-acres. Ample natural regeneration including oak, hickory, maple, sweet gum.</p> <p>Site 7 Perry State Forest Compartment A-7, Cutting Section #2. Hardwood clear-cut of 12 acres completed with 3 acres of retention.</p> <p>Site 8 Perry State Forest Compartment A-7, Cutting Section #1. 68-acre completed deferment harvest with several retention areas. Excellent post-harvest BMPs, good-visual quality, and many good-quality oak trees retained.</p> <p>Site 9 Perry State Forest Bridle Trail in Compartment A-7 within completed timber harvest. Trail is in good condition and minimally impacted by the timber harvest (Site 9 above).</p> <p>Site 10 Perry State Forest Compartment A-4. Completed 10-acre clear-cut with oak and hickory trees reserved for bat habitat needs. Minimal impacts to adjacent State Forest Bridle Trail.</p>

<p>Blue Rock S.F. (Ferrucci)</p>	<p>Site 11 Blue Rock Sale 1405, Compartment A-2. Large sale (741 mbf Int. and 2,000 tons pulp) on 164 acres. 5 of 7 cutting sections were assessed:</p> <ul style="list-style-type: none"> CS#1 Hardwood Shelterwood 29 acres CS#2 Hardwood Deferment 47 acres CS#3 Hardwood Thinning 19 acres, good job with BMPs including ephemeral stream CS#5 Hardwood Single-Tree Selection 12 acres CS#6 Hardwood Single-Tree Selection 29 acres, closed, good job with bridged crossing of intermittent stream, some concern that all large, decadent scarlet oak were cut, with slightly smaller residuals left outside cut section <p>Site 12 (not visited in field, but files reviewed thoroughly): Blue Rock Pine Sale #1311, Compartment A-21 Pine Sale. 64-acre salvage of storm-damaged pine plantations with some hardwood pulpwood included. Sale included 7 cutting sections. Harvested by L.A. Horn Logging and Land Clearing</p>
<p>22 – Oct – 2014</p>	
<p>FMU/Location/ sites visited*</p>	<p>Activities/ notes</p>
<p>Pike S.F. (Ferrucci and Meister)</p>	<p>Site 1 Pike State Forest Headquarters and Pesticide Storage Building. Warning signs, venting, and chemicals in sealed containers with labels.</p> <p>Site 2 Pike S.F. APV Area. A newly-purchased tract has allowed expansion of this popular area. Facilities observed include a new “novice rider” loop, a new, larger information kiosk, parking areas, a picnic shelter, a portion of the trail and a concrete bridge over two culverts for crossing a small stream.</p> <p>Site 3 Pike State Forest Compartment 5, Stand 178. Completed merchandizing sale implementing deferment harvest (shelterwood overstory removal with retention) leaving 20 square feet of basal area per acre of mostly oak and hickory species. Confirmed ample tree seedlings, most less than 1-foot tall, including tulip-poplar, Chestnut and White oak, Sycamore, Hickory, and Maple. Harvest was completed late March 2014 by Sisels Logging, contracted to cut, limb, yard, and truck log stringers for merchandizing by Ohio Division of Forestry. Documentation of frequent (at least weekly) harvest inspections confirmed review of utilization and BMP monitoring.</p> <p>Site 4 Pike State Forest Hollow Sale, Contract #1413. Active harvest conducted by Robert L. Bray Logging, Ohio Master Logging Company Certificate E13-14-0049. Owner was interviewed and logging operations observed. This high production crew had 6 skidders, two loaders, and more than one chain-saw feller present, although two skidders were parked. Three cutting sections comprise the sale.</p>

	<p>CS#1 is an active deferral harvest with CS#2 an active 10-acre clear-cut patch within it.</p> <p>CS#3 is a completed hardwood deferral closed out with well-built waterbars on the main access road that has also been mulched with straw, with some grass sprouting and leaves falling that will help stabilize. Retention had at least one low-value but larger tree, but most retention is smaller than trees removed, consistent with the prescription and with the intent of leaving the retention until the end of the next rotation.</p>
<p>Brush Creek S.F. (Ferrucci and Meister)</p>	<p>Site 5 Brush Creek State Forest. A partially-completed “Fiber Supply Agreement” sale to Glatfelter. Two of three cutting sections were inspected:</p> <p>CS#1 is a completed pine thinning on 21 acres. The residual stand consists of large, tall, well-spaced white pine trees with some very minor damage (softball-size missing bark) to the boles of about 10% of the stems from the cut-to-length logging equipment. White pine here has low value and is not likely to suffer much impact from these wounds.</p> <p>CS#3 is a 90% completed pulpwood thinning on 50 acres of oak and mixed hardwood pole-size trees. Efforts were made to favor single stems or thin multiple stem clusters and to space the trees. The target of 60-80 square feet of basal area per acre is being met, with considerable but acceptable variation due to operations issues (steep slopes and tight spacing). Less damage to bark of residual trees than CS#3 but still evident.</p> <p>Site 6 Brush Creek State Forest, Coffee Hollow Road culvert replacement project completed by Ohio Department of Transportation. Single 36” diameter round plastic culvert with riprap and other essential design elements implemented well.</p> <p>Site 7 Brush Creek State Forest, Coffee Hollow Road rebuilding project nearly complete. The portion of the road affected by a landslide has been rebuilt, with built-in tile drainage, rip-rap to be installed in the upslope ditch, and crown and surface to high specifications.</p> <p>Site 8 Brush Creek State Forest, Compartment A-37, Coffee Hollow Merchandizing Project SC#2 16 acre deferral treatment with leave-trees marked. The trees to remain meet the goals and specifications, except that provisions for leaving potential den trees (those with hollow portions) may not be adequate as 3 of the 4 such trees observed (each with hollow sections but not with active wildlife signs present) were not marked for retention.</p>

	<p>Site 9 Brush Creek State Forest, A-39 Stumpage sale; 68 acres, leave-tree marked deferment harvest with target of 10-25 BA retention. Last harvested in the 1970s. Observation of most dominant trees (mostly red, black, and scarlet oaks) to be removed, except for those that have already fallen naturally. A few living snags present that will be removed. Good form on retained trees. Discussion of retention of dominant and co-dominant trees, legacy trees, den trees, etc.</p> <p>Site 10 Brush Creek State Forest, Sale 1225. Dry Fork Creek Pine Clear-cuts on 14.5 acres in 11 small units. Removed white pine that had been planted 60+- years ago on former open agricultural land. The two units assessed have ample regeneration and retention of snags and other stand-level retention including course-woody debris.</p>
23 – Oct – 2014	
FMU/Location/ sites visited*	Activities/ notes
State Forest Offices	Stakeholder calls and document review
Tar Hollow	Site 1 Contract 1402, Compartment A-8. Active selection harvest with concerns regarding a rare plant and endangered animal, the timber rattlesnake. Examination of protection and mitigation measures to safeguard these species. Rare plant areas were expanded after review by two botanists (no-harvest and equipment exclusion zone). The timber rattlesnake area had some trees removed from harvest. Equipment disturbance of south-facing slope was limited and loggers instructed to avoid soil disturbance and disturbance of tipped up trees. Logged in summer, but at least a half mile away from sighting of individual animals.
State Forest Offices	Closing Meeting Preparation: Auditor(s) take time to consolidate notes and confirm audit findings
	Closing Meeting and Review of Findings: Convene with all relevant staff to summarize audit findings, potential non-conformities and next steps

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

There were no significant changes in the FME’s management system that affected conformance to FSC requirements.

4. Results of the Evaluation

4.1 Existing Corrective Action Requests and Observations

Finding Number: 2013.1	
Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	5.6.c
<p>Non-Conformity: Shawnee state forest suffered a large (3000 acre) fire in 2009. Mortality was uneven throughout the burned area. ODNR conducted a 300 acre salvage harvest post fire. The concern of the auditors is whether this harvested area is being monitored for regeneration to assess whether or not the stand is returning to desired stocking levels. The standard here requires that “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.” Currently no monitoring of the area is planned.</p>	
<p>Corrective Action Request: ODNR shall assess whether or not the logged area within the Shawnee fire is returning to desired stocking levels.</p>	
FME response <i>(including any evidence submitted)</i>	<p>A sampling protocol was prepared for the impacted fire areas and sampling was completed over the summer of 2014.</p> <p>DOF viewed aerial photos from the fire areas and looked at areas that looked bare. Regeneration plots were installed in a sample of these areas (0.1-0.2 acre-plots of areas with sparse regeneration). Data was run through the OAK SILVAH program to assess stocking of desirable and undesirable species. Regeneration is currently still sparse, but oak regeneration is present. DOF plans to consult a botanist on these areas before deciding whether or not it should intervene to establish more desirable regeneration in these areas.</p> <p>In the spring and summer of 2014, DOF did a spatial analysis of the 3000 acre burn area and stratified the areas of intensive wildfire where regen success was not known. DOF field staff conducted a field sample of the area to assess regen success. The results of the regeneration sample will be incorporated into our next</p>

	<p>annual work plan with any regeneration needs addressed at that time. Evidence provided includes the mapping and plot data from the survey. DOF policy is now that after catastrophic natural events occur (weather, fire), DOF will conduct regen surveys.</p>												
<p>SCS review</p>	<p>SCS confirmed that training has occurred on the new regeneration survey policy and protocol has occurred, in addition to the regeneration survey on the 2009 burn.</p> <p>DOF also provided further information upon request that provide more evidence to support closure of this finding:</p> <p><i>Phase 1 of the plan involved using remote sensing to identify areas of potentially sparse regeneration. This generated the attached map of areas to field check.</i></p> <p><i>The next step involved sending an individual to the field to install SILVAH plots in the areas. Plots were taken near the numbered points. Data were run through SILVAH, and had the following results:</i></p> <table border="1" data-bbox="451 835 1427 1024"> <thead> <tr> <th>Desirable Seedlings per Acre</th> <th>Woody Species Cover %</th> <th>Number of plots (of 25)</th> </tr> </thead> <tbody> <tr> <td>>400</td> <td>>50%</td> <td>18</td> </tr> <tr> <td>>0, <400</td> <td><50%</td> <td>5</td> </tr> <tr> <td>No desirables</td> <td><25%</td> <td>2</td> </tr> </tbody> </table> <p><i>Desirables included oaks, hickories, walnut, cherry, yellow poplar, and hard maple. Woody Species Cover was a visual assessment of the amount of vegetation cover (excluding Rubus, Rhus, and Smilax) in a 26 ft radius circle around the plot center.</i></p> <p><i>The 7 plots in the last 2 rows will be consulted on [with wildlife and forest ecology staff].</i></p> <p>The few areas with sparse desirable regeneration will be examined with wildlife and ecology staff to discuss the potential benefits of leaving them with the current established regeneration or doing some kind of intervention (e.g., supplemental planting).</p>	Desirable Seedlings per Acre	Woody Species Cover %	Number of plots (of 25)	>400	>50%	18	>0, <400	<50%	5	No desirables	<25%	2
Desirable Seedlings per Acre	Woody Species Cover %	Number of plots (of 25)											
>400	>50%	18											
>0, <400	<50%	5											
No desirables	<25%	2											
<p>Status of CAR:</p>	<p><input checked="" type="checkbox"/> Closed</p> <p><input type="checkbox"/> Upgraded to Major</p> <p><input type="checkbox"/> Other decision (refer to description above)</p>												

Finding Number: 2013.2	
Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	5.6.c
Background: Field reviews of marked areas in Shawnee state forest showed opportunities for improvement. The marking met specifications, but opportunities to remove undesirable seed sources and to release existing desirable oak seedlings were not taken, possibly because of confusion between thinning and selection treatments.	
Observation: ODNR could improve silvicultural prescriptions for partial harvesting and thinning in order to promote oak regeneration.	
FME response <i>(including any evidence submitted)</i>	DOF has updated its "Timber Marking Guidelines for State Forests" document to clarify species considered for retention. DOF has conducted training with staff and contractors on silvicultural methods and updated marking guidelines. Evidence provided includes the updated marking guidelines and the training records.
SCS review	SCS reviewed the guidelines and confirmed that training had occurred via interviews with various DOF staff. DOF has been able to conduct some earlier entries due to its fiber supply agreement with a local paper company and remove competing species (e.g., <i>Acer rubrum</i>) to achieve oak release. It should be noted that not all undesirable individuals are removed from a site, so values associated with those species (i.e., soft-mast production) are still maintained onsite.
Status of CAR:	<input checked="" type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> Other decision (refer to description above)

Finding Number: 2013.3	
Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	6.5.e.1.d (APP only) and 6.5.e.2
Non-Conformity: ODNR's streamside protection zones exist for perennial streams, defined as streams marked on 7.5-minute quad maps. This definition came from the previous Appalachia Regional standard. It is unclear whether standard protection measures exist for what ODNR classifies as ephemeral streams. In the current FSC-US national standard, this indicator requires protection zones for "Outer SMZs (Streamside Management Zones), in addition to inner SMZs are established for all intermittent, and perennial streams, as well as other waters." Specified protection zone widths are	

described in 6.5.e.1.a.	
<p>There is no definition in the standard for ephemeral, the term used by ODNR, but intermittent streams are defined as “mapped or unmapped streams that typically flows for less than twelve months of the year and/or that flows below ground for portions of its length.” Thus it appears there is a category of intermittent streams that are not receiving the SMZ protection measures.</p> <p>Minor variations from the stated minimum SMZ widths and layout for specific stream segments, wetlands and other water bodies are permitted in limited circumstances, provided the forest owner or manager demonstrates that the alternative configuration maintains the overall extent of the buffers and provides equivalent or greater environmental protection than FSC-US regional requirements for those stream segments, water quality, and aquatic species, based on site-specific conditions and the best available information. This would require that ODNR develop a written set of supporting information including a description of the riparian habitats and species addressed in the alternative configuration. SCS would have to verify that the variations meet these requirements, based on the input of an independent expert in aquatic ecology or closely related field.</p>	
<p>Corrective Action Request: ODNR shall revise its streamside protection zone measures to account for account intermittent streams as defined in the standard. Note that there is an option to depart from the rules in the standard provided under 6.5.e.2, which would require that ODNR develop a written set of supporting information per the requirements of this indicator.</p>	
<p>FME response <i>(including any evidence submitted)</i></p>	<p>See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).</p> <p>DOF has revised its SMZ policy and guidelines to capture un-mapped streams that were considered ephemeral but may actually be intermittent. DOF includes in the guidelines provisions to access the stream characteristics so that no intermittent streams are missed. Therefore, DOF is protecting mapped and unmapped intermittents. Definitions for stream types are located in the BMP manual. All field staff and marking contractors have been trained on the new guidelines. Evidence provided includes the updated SMZ policy, the training records, and the BMP manual.</p>
<p>SCS review</p>	<p>DOF’s SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. Solid blue lines represent perennial streams and intermittent streams are mapped as intermittent streams. Ephemeral streams are being protected and mapped as intermittent streams. Staff has had training on the new guidelines as confirmed through interviews.</p> <p>DOF still uses the definitions for perennial, intermittent, and ephemeral stem from the state’s BMP manual. See OBS 2014.3.</p>
<p>Status of CAR:</p>	<p><input checked="" type="checkbox"/> Closed</p> <p><input type="checkbox"/> Upgraded to Major</p> <p><input type="checkbox"/> <i>Other decision (refer to description above)</i></p>

4.2 New Corrective Action Requests and Observations

Finding Number: 2014.1	
Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input type="checkbox"/> Next audit (surveillance or re-evaluation) <input checked="" type="checkbox"/> Other deadline (specify): no deadline
FSC Indicator:	FSC-US indicators 4.4.b and 4.4.d.
Non-Conformity (or Background/ Justification in the case of Observations): Through interviews with DOF staff, it was found that staff changes within DOF, DOW, and even stakeholder organizations have led to differing levels of contact with some of DOF’s stakeholders. While events such as open houses occur on a regular basis, DOF staff said that there they used to have more periodic contact with various stakeholder groups outside of these formal meetings. DOF is also considering a few significant updates and changes to management planning, which will require stakeholder consultation.	
Corrective Action Request (or Observation): DOF should ensure that the intensity of its stakeholder outreach efforts are scaled to new and/or changing conditions so that it can continue to seek and consider input in management planning from people who would likely be affected by management activities.	
FME response (including any evidence submitted)	
SCS review	
Status of CAR:	<input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> Other decision (refer to description above)

Finding Number: 2014.2	
Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	FSC-US indicators 6.3.f, 6.3.g.1.a (FSC APP) and 6.3.g.2.
<p>Non-Conformity (or Background/ Justification in the case of Observations):</p> <p>On deferment and other even-aged management operations, the auditors observed removal of most trees from dominant canopy classes of dominant species (e.g., Pike Sale 1301, and Brush Creek Sales A-37 and A-39).</p> <p>Indicator 6.3.f states that trees selected for retention are generally representative of the dominant species found on the site, in addition to describing other retention-tree requirements (e.g., legacy trees, snags, trees with declining health, course woody debris, etc.). While retention of vigorous co-dominants provides future recruitment for elements of 6.3.f, the removal of dominant canopy classes may result in the loss of trees that will be available sooner as den trees, snags, tip-ups, and other retention elements.</p> <p>While even-aged management indicators may offer some flexibility in retention requirements (see FSC APP 6.3.g.1.a and 6.3.g.2), it is expected that conformance be maintained to both 6.3.f and 6.3.g.1.a. Hence, there is an opportunity to identify trees from dominant canopy classes that meet one or more retention elements as described in 6.3.f while still meeting regeneration and operational objectives for even-aged management.</p> <p>It was noted on Pike Sale 1301 that the layout of the shelterwood preparation cut area may lead to a reduced need for within-harvest unit retention of dominant canopy classes; this area had an un-entered SMZ and hill-top harvest boundary with dominant canopy trees retained. Since the unit was long and relatively narrow, additional retention of dominant canopy classes of dominant species may yield little additional ecological benefit at the expense of increased operational inefficiency and safety risk.</p>	
<p>Corrective Action Request (or Observation):</p> <p>In consultation with DOW and other wildlife or ecology experts, DOF should analyze its retention guidelines for dominant canopy classes and species of trees that may meet multiple retention objectives within even-aged harvests while meeting objectives for regeneration.</p> <p>Variables to consider for these dominant canopy classes may include, but are not limited to, the short- and long-term recruitment of:</p> <ul style="list-style-type: none"> • Large live trees, live trees with decay or declining health, and snags; • Course and dead woody material; and • Wildlife habitat (e.g., den trees, tip-ups, loose-bark). <p>Variables that may influence meeting both regeneration and retention objectives:</p> <ul style="list-style-type: none"> • Dispersed or clumped retention; • Obligatory within stand retention (e.g., SMZs, vernal pools); • Position of retention elements in relation to skid trails, landings and other harvest infrastructure; 	

<ul style="list-style-type: none"> • Size and layout of harvest units; and • Habitat connectivity. 	
FME response <i>(including any evidence submitted)</i>	
SCS review	
Status of CAR:	<input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> <i>Other decision (refer to description above)</i>

Finding Number: 2014.3	
Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	FSC-US indicator 6.5.e.1.
Non-Conformity (or Background/ Justification in the case of Observations): DOF's response to Minor CAR 2014.3 includes updated guidelines for SMZ buffer widths. State foresters use the Division of Forestry Land Management Manual to guide most BMPs. Ephemeral and intermittent streams are defined in the State's separate BMP manual (Bulletin 916, 2004) and receive the same levels of protection per the Division of Forestry Land Management Manual. In certain areas, such as SMZ widths, the Division of Forestry Land Management Manual exceeds the State's BMP recommendations. In practice, foresters use both documents.	
Corrective Action Request (or Observation): DOF should consider citing definitions for perennial, intermittent, and ephemeral streams in its Division of Forestry Land Management Manual.	
FME response <i>(including any evidence submitted)</i>	
SCS review	
Status of CAR:	<input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> <i>Other decision (refer to description above)</i>

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

Logging contractors	Environmental stakeholders
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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

<input type="checkbox"/> <i>FME has not received any stakeholder comments from interested parties as a result of stakeholder outreach activities during this annual audit.</i>	
Stakeholder comments	SCS Response
Economic concerns	
None received.	
Social concerns	
None received.	
Environmental concerns	
SCS received comments from stakeholders on concern over the protection of timber rattlesnakes that were sighted near a timber sale in Tar Hollow State Forest.	Citizens voiced concerns that there are rocks located in a DOF timber sale (Contract 1402, Compartment A-8) that could be den site for the endangered timber rattlesnake, as well as in a few prescribed burn areas. Snake sightings

<p>Key points include:</p> <ul style="list-style-type: none"> • There did not appear to be any direct modification of the plan based on the sighting, not clear how DOF is reducing mortality based on operating in the summer months. • Lack of environmental review prior to timber harvest to detect RTE species on several recent and upcoming harvests and prescribed burns. • DOF has proposed burning 10% of Tar Hallow in 100-500 ac blocks. We are concerned about how prescribed burning is affecting snakes. • Another situation where DOF received new information about endangered species close to burn areas, but did not modify the area. • Pattern seems to be that reviews are only done in Shawnee and Vinton Furnace State forests. • DNR does not seem to be listening. • Logging along a portion of a hiking trail – the most popular trail in Tar Hallow SF. Cut is right along a lake, close to resident camping area. As far as they know there is no buffer involved for the hiking trail. Park employees are enraged over it and lack of concerns for aesthetics. They have re-routed the trail along a paved road to accommodate. Just another issue about buffers and how they are taking these into account. Found a state listed plant species along the trail. Forestry got a recommendation from the state botanist for a 75’ buffer for the endangered plant which they implemented. Why would they do it for the plant and not the potential den habitat? • DOF has an issue that they only want to deal with known den sites as opposed to potential dens. Establishing a known den site is extremely labor intensive. Only relying on known den sites is like looking for a needle in a haystack. Have been working on Tar Hallow for 6 years and only come up with 4 known sites. • DOF wants to have late season burns – DOF thinks that snakes can escape fire, has been an ongoing debate. • Proposed logging around Cantwell cliff areas in Hocking State Forest, (designated as High conservation value 1 & 4) 	<p>occurred at least a half mile away from harvest site. There is some overlap with transmitter data that the stakeholder sent and the proposed burn area. Key findings from SCS’ interviews with other stakeholders and a review of DOF’s harvest plan include:</p> <ul style="list-style-type: none"> • DOF staff do not assume that timber rattlesnakes can outmaneuver fire and do recognize that it has the potential to negatively affect snakes, but mostly it can benefit snake habitat. DOW was involved in establishing DOF’s prescribed fire season dates in part to avoid negative impacts to hibernating timber rattlesnakes. The fire season is from late fall to early spring in order to avoid potential damage to snakes. Timber rattlesnakes are not present on all state forests, so the prescribed fire season is only limited by suitable weather and staff resources. Furthermore, on these state forests that do not have timber rattlesnakes, DOW/DOF may still have burning guidelines in place for other wildlife such as bats. • There are no recorded or confirmed dens within the harvest site. The listed plants, while difficult to identify during certain seasons, are not mobile like snakes. • Individual timber rattlesnakes have been sighted within a 1/2 mile of the harvest site during the summer months. These animals move around a lot; so there is no evidence currently that those particular individuals use those particular rocks for hibernacula. • Prior to harvesting, the timber sale administrator and district manager were onsite with the Division of Wildlife (DOW) during a field review and determined that the rocks looked like <u>potential</u> habitat. • <u>Mitigation</u>: DOF committed to avoid constructing skid roads through the large rocks, would also avoid disturbing uprooted tree root wad holes, and also educated the logger on the animal’s habitat. DOW felt this was an appropriate response. The audit team verified that the field-level measures were implemented during a visit to the site. • These questions arose two years after the
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	<p>sale had been in a public open house, and after DOF painted-out trees (not to be harvested) that were near a newly found listed plant. The listed plant was entered into the heritage database after harvest planning had been completed. DOF in fact expanded the no-harvest/no-equipment zone after review by botanists confirmed more locations.</p> <ul style="list-style-type: none"> • DOF did a field review on the other side of the park over a year ago (A-4) with DOW and their contract wildlife biologist. DOF flagged a couple of areas for equipment avoidance due to having potential hibernacula. • The entire Appalachian region of the state is former timber rattlesnake habitat because it contains rocky formations that may have been dens in 1900. DOF does not as a practice assume that all loose rocks currently serve as hibernacula and require large buffers; treating every occurrence of exposed rock as potential snake den and subsequently limiting the use of harvests, prescribed fire, and other management techniques may not result in recovery of the timber rattlesnake population. DOF also does not generally designate constructed skid roads through areas with large exposed rocks if they can be avoided. • According to DOW, the loss of suitable habitat is a major concern for timber rattlesnakes. Prescribed fires and fire surrogates may be used to maintain or create suitable habitat. On a regional basis, prescribed fire studies have shown that burns can kill snakes if timed improperly, but burns can provide habitat for snakes, such as new habitat around den sites, basking sites, and forage areas. The idea is to avoid burning when snakes are active. There are a number of areas, though, where BMPs for timber rattlesnakes are not a concern due to there being no known occurrence of rattlesnakes. • According to DOW, DOF has mostly been using late fall-early spring prescribed fires in these areas (dormant season for snakes). Outside of the dormant season, fires are of lower intensity compared with dormant
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	<p>season fires and these early growing season fires are highly patchy, snakes and other animals should be able to find refuge on the forest floor (e.g. rock piles, down logs, etc.) and below ground.</p> <ul style="list-style-type: none"> • Patchiness means that fires do not directly impact every inch of ground during a prescribed burn, which may allow certain plants and animals refuge and increase landscape complexity. • There are several factors that affect the timber rattlesnake’s recovery, including loss of habitat, condition of habitat, and illegal collection of timber rattlesnakes. • There have been staff changes in both DOF and DOW. DOW is hoping to hire staff with expertise in timber rattlesnakes and develop more expertise in timber rattlesnake management. Other stakeholders interviewed are also involved in timber rattlesnake research projects. • DOF communicated to the audit team that it has had difficulties with obtaining information from this particular stakeholder group on known den sites due to a number of reasons, including the issue of maintaining the confidentiality of known den sites. Due to staff and structural changes, there is an opportunity for DOF to consider intensifying or modifying its communication with stakeholders. See OBS 2014.1. <p>Other issues brought up during this stakeholder consultation:</p> <ul style="list-style-type: none"> • <u>Trail on Tar Hollow</u>: The audit team visited this timber sale (Tar Hollow, 1402). There is a backpack trail that is temporarily closed while the sale is active. The park staff were unwilling to provide a detour onto another trail system due to user group conflicts. DOF decided together that the only other option was to route hikers onto the road. This is a temporary situation and the trail will be restored once the sale is closed out. The sale does not actually touch the group camp by the lake at all. The backpack trail in question has a parking lot on the park and 3 backpack
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	<p>camps are located on the park, but most of the trail is located on the state forest.</p> <ul style="list-style-type: none"> • DOF handles each trail on a case-by-case basis and does not have any blanket buffer requirements. DOF considers recreational use compatible with long-term forest management and an opportunity to educate recreational users with other aspects of its mission. The sale in question was a singletree selection, which is a low intensity harvest. Therefore it should not have any significant conflict with future recreational use or aesthetics. • The FSC-US standard does not require buffers for recreation trails, but does require buffers around water courses and water bodies where management activities are limited. The harvest area does not approach the lake camp sites. • <u>Cantwell Cliff</u>: This sale is listed on page 5 and page 30 (map) of the proposed Southern District FY 2015 work plan. It is an 81 acre sale consisting of thinning, singletree selection, and clearcut that is adjacent to Cantwell Cliffs State Park. The thinning treatments are thinnings-from-below in small diameter stands, which are intended to promote growth of hard-mast species (e.g., oak, hickory, walnut). The audit team saw several examples of these thinnings from below, which release hard-mast species from competition with more mesic-site species, such as maples and beeches. These also serve as a low-intensity fire surrogate, which in pre-European and early European settlement would have maintained an oak-hickory complex with unaffected patches where fire-sensitive species may persist. The singletree selection treatments are in more mature stands and are allowed under DOF's 3B aesthetic zoning. The one clearcut area is 5 acres and more removed from the park area. Per FSC-US regional guidelines for even-aged management in the Appalachian region (FSC APP 6.3.g.1.a), harvest openings with no retention are limited to 10 acres. This area remains within the size limit for no
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	<p>retention. These opening size limits were determined through broad stakeholder consultation during the preparation of the FSC-US standard.</p> <ul style="list-style-type: none"> • The harvests are removed from the recreational use area of the park as all trails are below the cliff-line and the harvests are above the cliff line. The HCVF values in the area center around the hemlock-hardwood forest structure that is important for songbirds, the aesthetic beauty of the cliffs and gorges, and the herbaceous community that can be associated with it. DOF does not expect this sale to impact those features. • DOF has done more aggressive harvesting around similar HCVF types in the past. The feedback that DOF has received from subject matter experts is that having a close association with young forest is beneficial to many breeding songbirds as it improves foraging habitat. The common landscape in this area is agricultural use abutting old forest. The young forest component is a mostly missing element. • According to DOF, the sale, being part of the work plan for the upcoming fiscal year, probably does not have a complete review documented yet.
<p>Ohio Department of Wildlife provided the following comments when interviewed about wildlife concerns on DOF-managed lands:</p> <p><i>Mike Reynolds, Wildlife Research Administrator for the Ohio Division of Wildlife – DOW comments on state forests – over past several years since certification, DOF provides DOW with shape files for upcoming fiscal year of planned activities – provides us with a three year window of what they are going to harvest. We use the GIS data to look at spatial arrangement of habitat and get a sense of what is going on at a landscape scale. Lots of contiguous land. We look at early-successional, late-successional, and make comments, if appropriate. We are generally pleased with their work. The Division of Wildlife has funded work on forest birds and different habitat types, including habitat guidelines for specific bird species. See link: http://www.obcinet.org/committees/ForestManag</i></p>	<p>DOW’s comments confirm its involvement and collaboration with DOF on DOF-managed lands, including concerns over timber rattler snake populations and potential habitat. While in-house expertise specific to timber rattlers is in need of improvement according to DOW, DOW and DOF staff currently seek appropriate expertise outside of state agencies when available to guide RTE species management.</p>

[ement_web.pdf](#)

Early successional habitat – 2011 Ohio Forest Document from USDA FS (http://www.fs.fed.us/nrs/pubs/rb/rb_nrs90.pdf) – there is a lack of young forest in terms of what we had 40-50 years ago – but that amount of habitat was based on large scale land use changes and was unsustainable. We do see a decline of young forest across the state and recognize the importance of this habitat for many species of wildlife on public lands, and at the state, regional, and national scales. Many wildlife species that require young forest habitats for all or part of their life cycles are species of greatest conservation need. We sometimes get comments from public that we should only put young forest on private land. However, early successional habitats are ephemeral in nature and planning needs to go into the size, shape, and placement of these habitats in time and space. Public land managers - both foresters and wildlife biologists - are working together on state forests and wildlife areas to address these habitat needs in a sustainable way. We do not know what the right amount of young forest is and the optimal design/distribution within our forest landscapes, but the Division of Wildlife is funding forest conservation design research through the Terrestrial Wildlife Ecology Laboratory at The Ohio State University to come up with guidance for how much early successional forest there should be in the landscape.

Importance of hollow trees over time – cavity nesters – not good info on how many should be per acre, but would point people to 2011 document cited above about snag and relative availability of possible den trees – snags, defect trees. Certain types of trees may be more valuable than other like Beech – that can provide both mast and cavities. Legacy trees also may help provide larger trees with cavities. Large cavities – black bears hibernate, flying squirrels, etc. Fishers are colonizing the State and do use cavities too. VT Tech research – <http://scholar.lib.vt.edu/theses/available/etd-06132002-174326/unrestricted/Thesis1.pdf> show that cavities were available for black bears on both National Forest and Industrial forest lands in VA.

<p><i>Timber rattlesnakes – no current research of the effects of fire on timber rattlesnakes in Ohio. Surrogate studies using northern copperheads and other snakes were initiated on the Wayne National Forest, but I am not sure of the status or results from those studies – still ongoing? Since Feb 2014, our terrestrial wildlife diversity/endangered species program administrator position has been vacant. Our TE program administrator has worked with contract herpetologists to establish BMPs on timing of burning to avoid impacts on emergence of snakes (soil temp < 60 F and air temp < 50 F for the 5 days prior to the burn in areas with known dens). On a regional basis, prescribed fire studies have shown that burns can kill snakes if timed improperly, but appropriately timed burns also provide habitat for snakes – new habitat around den sites - basking sites, foraging areas. DOW guidance has been to avoid burning when snakes are active. We have a number of State Forests, though, where burning BMPs for timber rattlesnakes are less of a concern due to no known occurrence of rattlesnakes – but we still have burning guidelines in place to minimize impacts on Indiana bats.</i></p> <p><i>We would like to do more field reviews and make wildlife habitat recommendations with DOF, but do not have adequate field staff to do so. We have been pleased with how DOF has been willing to work with DOW on cerulean warbler habitat and regenerating oak for other wildlife and habitat. In general, DOW does not have a lot of field staff to provide forest wildlife habitat management recommendations on public or private lands. We are below peak-capacity so do not do lot of field-level reviews. Since certification, we try to provide feedback on forests where timber rattlesnakes and other species occur by reviewing sales that are provided to us in DOF shapefiles. Den sites are confidential information. We have had species experts in the past that recommend avoidance measures. We recognize the need to have species experts for rattlesnake. Trying to develop in-house expertise and knowledge; want to do contract training for field staff on timber rattlesnakes.</i></p>	
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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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments:	

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	Ohio Department of Natural Resources (ODNR)-Division of Forestry		
Contact person	Chad Sanders		
Address	ODNR-Division of Forestry 945 ODNR Mohican Rd., 60 Perrysville, OH 44864	Telephone	419.938.6222 ext 13
		Fax	419.938.3104
		e-mail	Chad.Sanders@dnr.state.oh.us
		Website	http://www.dnr.state.oh.us

FSC Sales Information

FSC salesperson	Same as above.		
Address		Telephone	
		Fax	
		e-mail	
		Website	

Scope of Certificate

Certificate Type	<input checked="" type="checkbox"/> Single FMU	<input type="checkbox"/> Multiple FMU
	<input type="checkbox"/> Group	
SLIMF (if applicable)	<input type="checkbox"/> Small SLIMF certificate	<input type="checkbox"/> Low intensity SLIMF certificate
	<input type="checkbox"/> Group SLIMF certificate	
	# Group Members (if applicable) n/a	
Number of FMU's in scope of certificate	1 FMU, divided into 21 "state forest" units totaling 200,056 acres.	
Geographic location of non-SLIMF FMU(s)	Latitude: 82deg 57' 55.45" West Longitude: 40deg 03' 33.61" North	
Forest zone	<input type="checkbox"/> Boreal	<input checked="" type="checkbox"/> Temperate
	<input type="checkbox"/> Subtropical	<input type="checkbox"/> Tropical

Total forest area in scope of certificate which is:				Units: <input type="checkbox"/> ha or <input type="checkbox"/> ac
privately managed	0			
state managed	200,056 acres			
community managed	0			
Number of FMUs in scope that are:				
less than 100 ha in area	0	100 - 1000 ha in area	0	
1000 - 10 000 ha in area	0	more than 10 000 ha in area	1	
Total forest area in scope of certificate which is included in FMUs that:				Units: <input type="checkbox"/> ha or <input type="checkbox"/> ac
are less than 100 ha in area	0			
are between 100 ha and 1000 ha in area	0			
meet the eligibility criteria as <i>low intensity</i> SLIMF FMUs	0			
Division of FMUs into manageable units:				
State Forest Units	District	Administrative Office	Acreage	
BEAVER CREEK STATE FOREST Total	North		1,107	
BLUE ROCK STATE FOREST Total	South	X	4,535	
BLUE ROCK WEST Total	South		689	
BRUSH CREEK STATE FOREST Total	South		13,634	
CHAPIN FOREST RESERVATION Total	North		369	
DEAN STATE FOREST Total	South	X	2,828	
FERNWOOD STATE FOREST Total	North	X	3,035	
GIFFORD STATE FOREST Total	South		314	
GREEN SPRINGS STATE NURSERY Total	North		119	
HARRISON STATE FOREST Total	North		1,363	
HOCKING STATE FOREST Total	South	X	9,277	
MARIETTA STATE NURSERY Total	South		98	
MAUMEE STATE FOREST Total	North	X	3,118	
MOHICAN-MEMORIAL STATE FOREST Total	North	X	4,633	
PERRY STATE FOREST Total	South		4,639	
PIKE STATE FOREST Total	South		11,980	
RICHLAND FURNACE STATE FOREST Total	South		2,504	
SCIOTO TRAIL STATE FOREST Total	South	X	9,546	
SHADE RIVER STATE FOREST Total	South		2,973	
SHAWNEE STATE FOREST Total	South	X	64,427	
SUNFISH CREEK STATE FOREST Total	South		657	
TAR HOLLOW STATE FOREST Total	South		16,318	
VINTON FURNACE EXPERIMENTAL STATE FOREST Total	South	X	12,332	
YELLOW CREEK STATE FOREST Total	North		749	
ZALESKI STATE FOREST Total	South	X	28,614	
ZANESVILLE STATE NURSERY Total	South		198	
Grand Total			200,056	
21 State Forests, 3 Nursery Properties, 1 Forest Reservation managed by 3rd party				

Production Forests

Timber Forest Products		Units: <input type="checkbox"/> ha or <input type="checkbox"/> ac
Total area of production forest (i.e. forest from which timber may be harvested)	164,556 acres	
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	0	
Area of production forest regenerated primarily by natural regeneration, or by a combination of natural regeneration and coppicing of the naturally regenerated stems	164,556 acres	
Silvicultural system(s)	Area under type of management	
Even-aged management	2420 acres	
Clearcut (clearcut size range)	1216 acres per year	
Shelterwood	566 acres	
Other:	638 acres of intermediate treatments (thinning, or improvement harvests) per year average.	
Uneven-aged management	128 acres	
Individual tree selection	109 acres	
Group selection	19 acres	
Other:	0	
<input type="checkbox"/> Other (e.g. nursery, recreation area, windbreak, bamboo, silvo-pastoral system, agro-forestry system, etc.)	0	
The sustainable rate of harvest (usually Annual Allowable Harvest or AAH where available) of commercial timber (m3 of round wood)	0	
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:		
Species in scope of joint FM/COC certificate: <i>Scientific/ Latin Name (Common/ Trade Name)</i>		

FSC Product Classification

Timber products		
Product Level 1	Product Level 2	Species
W1	W1.1 Roundwood	All

Non-Timber Forest Products		
Product Level 1	Product Level 2	Product Level 3 and Species

Conservation Areas

Total area of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation objectives		16,156 ac		
High Conservation Value Forest/ Areas				
High Conservation Values present and respective areas:			Units: <input type="checkbox"/> ha or <input checked="" type="checkbox"/> ac	
	Code	HCV Type	Description & Location	Area
<input checked="" type="checkbox"/>	HCV1	Forests or areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).	Cantwell Cliffs area Pine Cr / Conkles Hollow / Crane Hollow Muck Farm prairie remnant Raccoon Creek Bottom Shawnee Wilderness Area Snake Hollow Rock Run	5130 ac
<input checked="" type="checkbox"/>	HCV2	Forests or areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.	Raccoon Creek Bottom Muck Farm prairie remnant Shawnee Wilderness Area Oak Openings Restoration	2809 ac
<input checked="" type="checkbox"/>	HCV3	Forests or areas that are in or contain rare, threatened or endangered ecosystems.	Shawnee Wilderness Area Oak Openings Restoration Mohican zone A - Old Growth Mgmt Mohican zone B- Old Growth Mgmt Mohican zone B - Future Old Growth Mgmt	6639 ac
<input checked="" type="checkbox"/>	HCV4	Forests or areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).	Beaver Creek watershed Cantwell Cliffs area Pine Cr / Conkles Hollow / Crane Hollow Raccoon Creek Bottom	1571 ac
<input checked="" type="checkbox"/>	HCV5	Forests or areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).	Cultural area	7 ac

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

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

<input checked="" type="checkbox"/> N/A – All forestland owned or managed by the applicant is included in the scope.		
<input type="checkbox"/> Applicant owns and/or manages other FMUs not under evaluation.		
<input type="checkbox"/> Applicant wishes to excise portions of the FMU(s) under evaluation from the scope of certification.		
Explanation for exclusion of FMUs and/or excision:		
Control measures to prevent mixing of certified and non-certified product (C8.3):		
Description of FMUs excluded from or forested area excised from the scope of certification:		
Name of FMU or Stand	Location (city, state, country)	Size (<input type="checkbox"/> ha or <input type="checkbox"/> ac)

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 85	# of female workers 17	
Number of accidents in forest work since last audit	Serious: # 3	Fatal: #

8.2 Annual Summary of Pesticide and Other Chemical Use

<input type="checkbox"/> FME does not use pesticides.				
Commercial name of pesticide / herbicide	Active ingredient	Quantity applied annually (kg or lbs)	Size of area treated during previous year	Reason for use
Arsenal	Imazapyr	10 gallons	42 acres	Invasive and brush control
Garlon	Triclopyr	20 gallons	63 acres	Invasive and brush control
Glyphosate	Glyphosate	27 gallons	135 acres	Herbaceous weed control
Escort	Metsulfuron methyl	6 ounces	2 acres	Weed and brush control

SECTION B – APPENDICES (CONFIDENTIAL)

Appendix 1 – List of FMUs Selected For Evaluation

- 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

Name	Title	Contact Information	Consultation method
Nathan Jester	District manager		Field/ meeting
Jared Craig	District land management administrator		Field/ meeting
Tim Boggs	Equipment operator		Field/ meeting
Ben Kelley	Forester		Field
John Bauerbach	Forester		Field
Dale Egbert	Forest manager, Brush Creek State Forest		Field
Dan Balser	Assistant Chief		Field
Tom Shue	Southern District fire manager		Meeting
Greg Guess	Deputy Chief, Chillicothe office		Field/ meeting
Gregg Maxfield	District Forest Manager, North District		Field/ meeting
Cotton Randall			Field/ meeting
Ben Kelley	Forester		Field/ meeting

List of other Stakeholders Consulted

Name	Organization	Contact Information	Consultation method	Requests Cert. Notf.
Anonymous stakeholders				
Mike Reynolds	DNR, Department of Wildlife	mike.reynolds@dnr.state.oh.us	Phone	Y
Joanne Rebbeck	USDA, Forest Service	jrebbeck@fs.fed.us	Phone	Y
Rocco Saracina	Observer, SFI Inc.	Rocco.Saracina@sfi-program.org	Field	Y
Rob Bray	Rob Bray Logging	740-626-7188	Field	N

Appendix 3 – Additional Audit Techniques Employed

No additional audit techniques were employed.

Appendix 4 – Pesticide Derogations

There are no active pesticide derogations for this FME.

Appendix 5 – Detailed Observations

Evaluation Year	FSC P&C Reviewed
2010	All – Certification Evaluation
2011	1.5, 2.3, 3.2, 4.2, 4.4, 4.5, 5.6, 6.1, 6.2, 6.3, 6.5, 6.9, 7.1, 7.2, 7.3, 7.4, 8.1, 8.2, 8.3, 9.1, and 9.4
2012	P1, P2, 3.2, 4.2, 4.4, 5.6, 6.2, 6.3, 6.9, 8.2, 9.4
2013	1.5, 2.3, 3.2, 4.2, 4.4, 5.6, P6, 8.2, P9
2014	1.5, 2.3, P3, 4.1, 4.2, 4.3, 4.4, P5, 6.2, 6.3, 6.9, 8.1, 8.2, 8.4, 8.5 and 9.4

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.	NE	
1.2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.	NE	
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.	NE	
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.	NE	

<p>1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.</p>	<p>C</p>	
<p>1.5.a. The forest owner or manager supports or implements measures intended to prevent illegal and unauthorized activities on the <i>Forest Management Unit</i> (FMU).</p>	<p>C</p>	<p>Ohio Administrative Code 1501:3 sets forest rules and visitation policy. State Forest Boundary Marking policy ensures that DOF is actively marking boundaries. Boundary marking is a regular scheduled duty of each unit. Timber harvest prep chapter of LM manual includes language on marking of timber harvest boundaries. Law Enforcement coverage ensures the protection of forest resources. Law Enforcement occasionally conducts special projects. Each district issues special use permits. These permits are available at the district offices.</p> <p>All state forests are covered by law enforcement officers from the Division of Parks who enforce forest rules and Ohio laws on state forest lands.</p>
<p>1.5.b. If illegal or unauthorized activities occur, the forest owner or manager implements actions designed to curtail such activities and correct the situation to the extent possible for meeting all land management objectives with consideration of available resources.</p>	<p>C</p>	<p>All state forests are covered by law enforcement officers from the Division of Parks who enforce forest rules and Ohio laws on state forest lands. In 2014, DOF documented a timber theft issue on Pike State Forest. Information was gathered and sent to Law Enforcement, which subsequently sent information to the prosecutor that issued a fine (restitution) and court costs for the stolen trees.</p>
<p>1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.</p>	<p>NE</p>	
<p>Principle #2: Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.</p>		
<p>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.</p>	<p>NE</p>	
<p>2.2. Local communities with legal or</p>	<p>NE</p>	

<p>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.</p>		
<p>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.</p>	<p>C</p>	
<p>2.3.a If <i>disputes</i> arise regarding tenure claims or use rights then the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If these good-faith efforts fail, then federal, state, and/or local laws are employed to resolve such disputes.</p>	<p>C</p>	<p>The Department’s title review process ensures that outstanding rights are extinguished prior to transactions. There are no outstanding tenure or use rights claims. DOF also has a dispute resolution process that can be used to begin the process of address tenure or use rights claims. Beyond that Ohio has an administrative process and court system. Dispute Resolution process has been moved to a higher location on the division website and managers are encouraged to offer the process to stakeholders as needed.</p> <p>Boundaries on the FMU are on a 4-5 year check-cycle during which all state forest boundaries are walked and remarked. This helps to prevent disputes.</p> <p>DOF is committed to open relationships with stakeholders. DOF has a dispute resolution process that can be used to help guide a dispute to resolution. DOF employees are trained in dispute resolution. DOF can cite specific disputes where negotiations were held in good faith.</p>
<p>2.3.b The forest owner or manager documents any significant disputes over</p>		<p>Occasional disputes arise regarding proper recreational capacity on state forests and also</p>

tenure and use rights.		programmatic or philosophical disputes regarding the management of state forests. DOF can provide evidence of specific examples and resolutions offered. Further, DOF maintains a catalog of disputes and resolutions.
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.	NA	
3.1.a Tribal forest management planning and implementation are carried out by authorized tribal representatives in accordance with tribal laws and customs and relevant federal laws.	NA	ODNR does not manage any tribal FMUs.
3.1.b The manager of a tribal forest secures, in writing, informed consent regarding forest management activities from the tribe or individual forest owner prior to commencement of those activities.	NA	ODNR does not manage any tribal FMUs.
3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.	C	
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	There are no tribes that have current legal rights or other binding agreements on state forests. DOF has a consultation mechanism with OHPO. DOF engaged in past efforts engage tribal experts to provide review and consultation on indigenous people’s issues. DOF attempted multiple efforts to work with a variety of organizations, but, due to many factors, these groups have not engaged with DOF.
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	C	DOF provides training to state forest staff on the identification and protection of cultural resources. Staff attended a training session administered by the Hopewell National Historic Park archeologists on the history,

management plan.		identification, and protection of Indian mounds in 2010. DOF is engaged with the Newark Earthworks Center on future training sessions and their cooperation on identifying tribal contacts and the organizing of an advisory committee.
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.	C	
3.3.a. The forest owner or manager invites consultation with tribal representatives in identifying sites of current or traditional cultural, archeological, ecological, economic or religious significance.	C	DOF uses a special sites layer in GIS for planning of activities. A Special Sites layer was developed with foresters, OHPO, and other consultations. DOF has a subscription service to the OHPO database and checks this data during its pre-activity assessments. The risk of threats to sites of importance is low given that Indian mound sites are mostly known and buffered.
3.3.b In consultation with tribal representatives, the forest owner or manager develops measures to protect or enhance areas of special significance (see also Criterion 9.1).	C	In Ohio, the vast majority of indigenous sites are Indian mounds built in pre-historic times. These locations are mostly known from the OHPO database. DOF reviews this data during pre-activity assessments. These sites are protected from soil disturbance.
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.	NA	
3.4.a The forest owner or manager identifies whether <i>traditional knowledge</i> in forest management is being used.	NA	ODNR does not use any protected traditional knowledge in its forest management or commercial operations.
3.4.b When traditional knowledge is used, written protocols are jointly developed prior to such use and signed by local tribes or tribal members to protect and fairly compensate them for such use.	NA	ODNR does not use any protected traditional knowledge in its forest management or commercial operations.

<p>3.4.c The forest owner or manager respects the confidentiality of tribal traditional knowledge and assists in the protection of such knowledge.</p>	<p>NA</p>	<p>ODNR does not use any protected traditional knowledge in its forest management or commercial operations.</p>
<p>Principle #4: Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.</p>		
<p>4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.</p>	<p>C</p>	
<p>4.1.a Employee compensation and hiring practices meet or exceed the prevailing <i>local</i> norms within the forestry industry.</p>	<p>C</p>	<p>DOF is guided by state policies on compensation and hiring. Non-exempt state employees are hired and promoted on a public, competitive, union-contract agreed upon method.</p>
<p>4.1.b Forest work is offered in ways that create high quality job opportunities for employees.</p>	<p>C</p>	<p>Employment with DOF is governed by state HR policies. Services are procured through a state mandated competitive bid process.</p>
<p>4.1.c Forest workers are provided with fair wages.</p>	<p>C</p>	<p>The state’s HR policies are used to determine wages or salaries for state employees. Workers of contractors must be paid at least the federal or state minimum wage, whichever is greater. In practice, most workers receive higher than the minimum wage due to skill levels required.</p>
<p>4.1.d Hiring practices and conditions of employment are non-discriminatory and follow applicable federal, state and local regulations.</p>	<p>C</p>	<p>The government of the State of Ohio and DOF have non-discrimination policies that govern DOF hiring practices.</p>
<p>4.1.e The forest owner or manager provides work opportunities to qualified local applicants and seeks opportunities for purchasing local goods and services of equal price and quality.</p>	<p>C</p>	<p>The state has procurement incentive programs. Programs such as Minority Business Enterprise promote small business and minority business opportunities. All of these programs are designed for local and minority opportunities with the state of Ohio. DOF timber sales are advertised to over 100 local businesses. Purchasers of timber are local sawmills. Logging contractors are local.</p>
<p>4.1.f Commensurate with the size and scale of operation, the forest owner or manager provides and/or supports learning opportunities to improve public understanding of forests and forest</p>	<p>C</p>	<p>DOF has a landowner assistance program, an urban forestry program, and an information/education program. There are many interpretive sites located on state forests including driving tours and various signs and are catalogued for review. DOF has</p>

management.		a public website that displays materials ranging from state forest management to outreach. DOF is a supporter of Project Learning Tree with one part-time position on staff. DOF also supports logger training by providing BMP sites and DOF staff instructors.
4.1.g The forest owner or manager participates in local economic development and/or civic activities, based on scale of operation and where such opportunities are available.	C	DOF supports the services of ohio state university (osu) through which information such as the Ohio Timber Price Report, directories of various wood industries, and the Timber Products Output Report are generated. A war memorial shrine exists on Mohican SF that commemorates war veterans and DOF has cooperative agreement to maintain that special site. There are several other examples that could be listed.
4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.	C	
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	Health and Safety are mandated by the Ohio Revised Code (ORC), Ohio DNR, and DOF. Department level trainings for all supervisors on topics such as workplace violence, harassment, defensive driving, etc.
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 has a culture of safety with regular meetings and a safety committee. DOF has contract language requiring PPE from contractors. DOF is governed by OSHA requirements and is responsive to annual OSHA inspections at state forest facilities. The harvest contract reviewed for Sale 1301, which stems from a template used for all timber sales, includes safety provisions principally under items 7 and 9.
4.2.c The forest owner or manager hires well-qualified service providers to safely implement the management plan.	C	DOF requires OFA master logging certification for contractors as a pre-requisite to harvesting timber. The master logger program has a safety component. This requirement is clearly stated in contracts.
4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in	C	

<p>Conventions 87 and 98 of the International Labor Organization (ILO).</p>		
<p>4.3.a Forest workers are free to associate with other workers for the purpose of advocating for their own employment interests.</p>	C	<p>Federal and state laws govern worker rights. As a state agency, DOF has public employees' union and law enforcement union. Most non-exempt state employees are unionized.</p>
<p>4.3.b The forest owner or manager has effective and culturally sensitive mechanisms to resolve disputes between workers and management.</p>	C	<p>Ohio DNR and DOF have an employee grievance process. This process ensures that employees have a voice to air their concerns and disagreements. Grievances are reviewed and hearings may be held. Resolutions may be appealed. In 2014, the regional forestry office OSHA-posting board has information on how to anonymously report grievances and potential ethics violations.</p>
<p>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.</p>	C	
<p>4.4.a The forest owner or manager understands the likely social impacts of management activities, and incorporates this understanding into management planning and operations. Social impacts include effects on:</p> <ul style="list-style-type: none"> • Archeological sites and sites of cultural, historical and community significance (on and off the FMU); • Public resources, including air, water and food (hunting, fishing, collecting); • Aesthetics; • Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health; • Community economic opportunities; • Other people who may be affected by management operations. <p>A summary is available to the CB.</p>	C	<p>Social Impact is discussed in the management plans and in Chapter 12 of LM Manual and relies on the Forest Action Plan. DOF is the author and major partner in the strategies outlined in the Forest Action Plan and it is monitored every five years. The division website also offers a full discussion of participation and consultation.</p> <p>Evaluations of social impact occur thru several mechanisms:</p> <p>Forest Action Plan – This assessment includes a myriad of social and economic assessments and data. DOF was the author and a key partner and state forests are integral to the strategies in the document.</p> <ul style="list-style-type: none"> • Arch and Cultural sites – see evidence on C3 and DOF believes feedback received from a future advisory committee will assist in this effort. • Public Participation – mentioned above using its “Pathways to Participation” process. Forest Advisory Council –

		<p>provides feedback and consultation to DOF on a wide range of issues including those listed in this indicator. Law Enforcement coverage of all state forests by Park Officers.</p> <ul style="list-style-type: none"> • Ohio Fire Council / and Fire Assistance Programs – DOF participates in the effort to form an Ohio Fire Council. Ohio Rural Fire Council – DOF supports this council of rural fire departments. • Ohio Forestry Association – DOF is active in the Ohio Forestry Association and several staff hold office positions.
<p>4.4.b The forest owner or manager seeks and considers input in management planning from people who would likely be affected by management activities.</p>	<p>C</p>	<p>DOF offers several mechanisms including the Open Houses, Pathways to Participation, stakeholder meetings, website, and Forest Advisory Council thru which input and consultation is received regarding strategic and forest plans and site-specific activities. Other examples of DOF seeking and considering input include the Shawnee prescribed burn plan, the Shawnee Wilderness Plan and the HCVF assessment. Current revisions to Wilderness plan with comment period and public input.</p>
<p>4.4.c People who are subject to direct adverse effects of management operations are apprised of relevant activities in advance of the action so that they may express concern.</p>	<p>C</p>	<p>DOF policy for timber sales is to notify neighbors prior to harvesting, usually during the layout phase in order to give ample time for their concerns to be voiced. A public notice for timber sales is listed in the local newspaper. All timber sales have signage. DOF regularly issues statewide news release for large scale projects and planning efforts and new initiatives. For larger prescribed fires, DOF has sent post cards to neighbors and advertised on local radio stations. DOF also provides a Notice of Intent and Timber Harvest Plan to the local SWCD (NOI-THP). DOF offers an open house process. Forest managers are encouraged to maintain local contacts to township trustees and county officials. Finally, DOF actively engages other DNR divisions in order to get perspective on their input and their constituent sensitivities.</p>
<p>4.4.d For <i>public forests</i>, consultation shall include the following components:</p>	<p>C</p>	<p>1. DOF has “Pathways to Participation” outlined and available on its website. The Forest Advisory Council is also responsive</p>

<p>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;</p> <p>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;</p> <p>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.</p>		<p>to this indicator. Also public consultation meetings for its planning process.</p> <p>2. Open house notices, prescribed fire notices, timber notices, wilderness plan notices and extension of time for comments.</p> <p>3. DOF has a documented Dispute Resolution process.</p> <p>4. DOF is a member of the Vinton Furnace Research Advisory Council.</p> <p>5. DOF has a strategic plan, forest-specific 5-year management plan, and annual work plans and they are all posted on its website and reviewed during open houses.</p> <p>Management Review committee evaluates all comments and deals with them appropriately. DOF held several direct meetings with stakeholder groups, reworked its open houses to enhance participation with a formal slide show and question time, and did several other enhancements locally to promote its consultation efforts.</p>
<p>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.</p>	<p>NE</p>	
<p>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.</p>		
<p>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.</p>	<p>C</p>	
<p>5.1.a The forest owner or manager is financially able to implement core management activities, including all those environmental, social and operating costs, required to meet this Standard, and investment and reinvestment in forest</p>	<p>C</p>	<p>DOF is governed by language in state code that gives the Chief custody and management of forests and the necessary resources to fulfil the obligation. DOF has a suite of management policies that ensure compliance with this criterion. Despite difficult economic years, there is commitment at the department</p>

<p>management.</p>		<p>level to ensure DOF is viable. In recent years, DOF has sought grant funding for forest management operations to ensure its continued viability.</p> <p>Interviews with the Assistant Chief in 2014 confirm that DOF conducts regular budgetary analysis as part of annual planning and annual report processes, which ensures overall conformance to this indicator. Budgets and annual reports include progress on all public mandates and projects under DOF’s responsibility.</p>
<p>5.1.b Responses to short-term financial factors are limited to levels that are consistent with fulfillment of this Standard.</p>	<p>C</p>	<p>DOF has had to alter business practices to facilitate diverse financial support through increasing merchandising log sales and reliance on federal grants instead of state general revenue.</p> <p>DOF has slowed down on hiring during the recession, but has recently picked up as more funds have become available. Fire staff stated that equipment and staffing have remained consistent for completing prescribed burns.</p>
<p>5.2. Forest management and marketing operations should encourage the optimal use and local processing of the forest’s diversity of products.</p>	<p>C</p>	
<p>5.2.a Where forest products are harvested or sold, opportunities for forest product sales and services are given to local harvesters, value-added processing and manufacturing facilities, guiding services, and other operations that are able to offer services at competitive rates and levels of service.</p>	<p>C</p>	<p>Purchasers of state forest timber are mostly Ohio companies and local. If there are any non-local companies, they generally have local subcontractors (loggers). DOF works with loggers on utilization issues by participating in the Ohio Forestry Association. DOF merchandising program and pine pay-as-cut timber sales are designed to utilize low grade and pulpwood efficiently. DOF merchandising program is an extremely efficient way to utilize products generated in harvesting.</p> <p>Timber sales are competitively bid ensuring that a wide range of local industries have an opportunity to purchase products. All local companies are given opportunity. The timber bid list is over 100 companies. Merchandized</p>

		log sales are competitively bid and advertised to over 60 companies. Merchandised logs are sorted and companies have opportunity to select the products they desire.
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	<p>DOF has contract language and guidelines in the LM manual chapter 8 on utilization. DOF's Marketing and Utilization program responds to this indicator with the myriad of projects that are designed to promote better utilization. DOF is active in promoting utilization of salvage Ash timber from EAB mortality. DOF has a firewood program and sells permits to citizen's to remove firewood in order to promote utilization. DOF has a small sawmill that generates products for use by other public agencies and sells by-products to local citizens.</p> <p>Through an agreement with Gladfelter, DOF is able to conduct thinning and TSI operations on stands that otherwise would not be able to be entered financially currently. For example, Green Ridge A-26 Fiber Supply thinning allowed lower-grade material to be sold and allow the residual stand to develop to merchantable sizes sooner.</p>
5.2.c On public lands where forest products are harvested and sold, some sales of forest products or contracts are scaled or structured to allow small business to bid competitively.	C	<p>The nature of its stumpage and merchandising sales account for this in that most sales of stumpage or logs are small. The up-front costs are structured to allow for small business to participate (\$5000 up front deposit). Therefore this broadens the pool of potential purchasers. All purchasers of state forest timber are considered small businesses relatively speaking. See also indicator 4.1.e.</p>
5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.	C	
5.3.a Management practices are employed to minimize the loss and/or waste of harvested forest products.	C	<p>DOF specs on utilization are outlined in LM manual chapters 4, 7, and 8. DOF also makes conditions for harvesting outlined in the timber sale agreement. DOF has a logging inspection process and compliance with the contract is noted on the inspections and enforced by the Timber Sale Administrator (TSA). DOF can show history of responses to</p>

		catastrophic events such as ice storms and wildfires where salvage operations were intended to utilize potentially wasted products. DOF's firewood program also responds to this.
<p>5.3.b Harvest practices are managed to protect residual trees and other forest resources, including:</p> <ul style="list-style-type: none"> • 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	DOF specs on soil protection, residual trees, non-timber resources, and water are outlined in LM manual chapters 4, 5, 6 and 8. DOF has aesthetic guidelines outlined in chapter 6 of the LM manual. DOF has a marking estimate process that is used as a harvest specification document that is written by the forester and approved up the chain of command outlined in chapter 4 of the LM manual. DOF further specs harvests to the purchaser in the bid prospectus and the contract. DOF has language dealing with residual tree damage in the contract. DOF has a Wet Weather Logging policy included in chapter 8 of LM manual and the contract. DOF does a NOI-THP for the SWCD.
<p>5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.</p>	C	
<p>5.4.a The forest owner or manager demonstrates knowledge of their operation's effect on the local economy as it relates to existing and potential markets for a wide variety of timber and non-timber forest products and services.</p>	C	<p>DOF demonstrates a diverse offering of timber sales in a wide range of locations throughout the state including merchandised log sales. DOF directly benefits two local service contractors in the merchandising program. Services are competitively bid. DOF benefits local economy thru the revenue return to local governments. State forests also have impact on local recreation and tourism markets.</p> <p>ohio state university extension has prepared a pamphlet on the economic impacts of Ohio's forest products industry (Ohio's Forest Economy, 2010).</p>
<p>5.4.b The forest owner or manager strives to diversify the economic use of the forest according to Indicator 5.4.a.</p>	C	See 5.4.a.
<p>5.5. Forest management operations shall recognize, maintain, and, where appropriate,</p>	C	

<p>enhance the value of forest services and resources such as watersheds and fisheries.</p>		
<p>5.5.a In developing and implementing activities on the FMU, the forest owner or manager identifies, defines and implements appropriate measures for maintaining and/or enhancing forest services and resources that serve public values, including municipal watersheds, fisheries, carbon storage and sequestration, recreation and tourism.</p>	<p>C</p>	<p>DOF actively consults with partners and considers their interests. DOF incorporates results from the SCORP and the Forest Action Plan in decisions – both documents address forest services. DOF actively consults with core recreation groups such as Ohio Horseman’s Council, Buckeye Trail Association, and motorized groups on recreation interests that it need to consider. DOF zones protect riparian, floodplain forests, HCVF and Aesthetic areas. DOF harvest levels are modest. DOF has at least 3 carbon-storage lease agreements for tree plantings on formally agricultural or non-productive sites. Further, DOF lists a discussion of forest services that are considered in the forest-specific 5-year management plans.</p>
<p>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.</p>	<p>C</p>	<p>DOF can demonstrate 3 carbon-storage leases and can demonstrate that harvest-levels are modest thereby ensuring carbon stores are reliable. DOF discuss the forest services considered in the 5-year management plans. Further, DOF has worked with Division of Soil and Water and DNAP to identify quality waters and habitats on state forests and zoned them appropriately.</p>
<p>5.6. The rate of harvest of forest products shall not exceed levels which can be permanently sustained.</p>	<p>C</p>	
<p>5.6.a In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the planning unit. The sustained yield harvest level calculation is documented in the Management Plan.</p> <p>The sustained yield harvest level calculation for each planning unit is based on:</p> <ul style="list-style-type: none"> documented growth rates for particular sites, and/or acreage of forest types, age- 	<p>C</p>	<p>DOF procured inventory services on 8 state forests in 2009 which covers 80% of the FMU. Those data were grown using FVS. The other 13 state forests (20% of FMU) estimated G&Y using FIA averages for each county. Historical harvesting data is available for past decades. A rolling 10 average harvest level shows harvest levels are 17% of calculated growth. Discussion of G&Y and harvest levels included in the 5-year forest specific management plan and the LM manual chapter 3. G&Y calculations were based on strata and stand type. G&Y calculated mean annual increment over a 10 year period.</p>

<p>classes and species distributions;</p> <ul style="list-style-type: none"> • 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. <p>The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.</p>		<p>G&Y calculated for both “un-constrained” and “constrained” acreages based on its zones in Chapter 2 of the LM manual.</p> <p>G&Y assumed no growth impact from harvest or silviculture this run in order to establish a base line for monitoring. Successive runs will include harvest/silviculture impacts in future but data do not yet have data to support this run.</p> <p>Desired Future Condition document is written and included in the 5-year plans. DOF new initiative to set harvest goal of 40% of annual growth over a 5-year period (to coincide with 5-year plans). DOF has the data, calculations, and documentation to back up the 40% goal. DOF wrote a set of guidelines for the public to explain how the 40% goal will be interpreted on a forest level. Further DOF revised its Desired Future Condition document to be more in-line with the goals outlined in the state-wide Forest Action Plan.</p> <p>DOF uses the OAK SILVAH program to process data and determine AAH.</p>
<p>5.6.b Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.</p>	<p>C</p>	<p>Annual harvest levels are known for last several decades. Average harvest levels for last ten years are calculated per forest and included in the 5-year plans. Harvest level target is 40% of the annual growth. Last year the actual harvest level was 30% of growth. The rolling 5-year average of harvest levels is at 25% of growth.</p> <p>Growth rate is just over 41 MMBF and AAH is 16 MMBF. AAH is summarized in DOF’s “Harvest Levels by Year” spreadsheet. Currently, the 5 year average is 9,874,326 BF and the 10 year average is 9,338,668 BF.</p>
<p>5.6.c Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that</p>	<p>C</p>	<p>DOF outlines this in the DFC doc and in Chapter 3 of the LM Manual. DFC included in the 5-year management plans. Reacting to sobering data presented in FIA that show oak decline and the “mesification” of Ohio forests,</p>

<p>have been depleted or rendered to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.</p>		<p>DOF is focused on oak management and a full discussion of this focus is outlined in all its documents. DOF is committed to training all foresters on this new focus and shifting its treatments to those that promote oak.</p> <p>See responses to Minor CAR 2013.1 and OBS 2013.2.</p>
<p>5.6.d For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary use rights may be impacted by such harvests. In other situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.</p>	<p>C</p>	<p>DOF does not manage or allow of the commercial collection of NTFPs. However, forest visitors are allowed to collect mushrooms and berries on a recreational basis.</p> <p>Ginseng and roots are regulated by law and prohibited from collecting on DOF land. DOF has no income from NTFP.</p>
<p>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.</p>		
<p>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.</p>	<p>NE</p>	
<p>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</p>	<p>C</p>	

<p>collecting shall be controlled.</p>		
<p>6.2.a If there is a likely presence of RTE species as identified in Indicator 6.1.a then either a field survey to verify the species' presence or absence is conducted prior to site-disturbing management activities, or management occurs with the assumption that potential RTE species are present.</p> <p>Surveys are conducted by biologists with the appropriate expertise in the species of interest and with appropriate qualifications to conduct the surveys. If a species is determined to be present, its location should be reported to the manager of the appropriate database.</p>	<p>C</p>	<p>DOF outlines safeguards in the LM manual and in its management plans. DOF has a zoning system as well as policies to review heritage data prior to site disturbing activities. DOF complies with DOW Wildlife Action plans for all forest dwelling RTE species. DOF is on the Karner Blue Butterfly recovery team. DOF complies with the Indiana Bat Management Strategy, which recommends protection of hibernacula, and management practices for creating or maintaining roost trees and snags.</p> <p>DOF policy states that it follows up with any positive “hit” on any database. DOW biologists review management plans and plans, as well as GIS data. They provide feedback and comment as necessary. DOF has in-house botanist who reviews certain sites based on heritage data and provides a thorough field survey for rare plants. DOF botanist is reviewing any positive hits from the database and forwarding findings to the database program administrator. DOW is the new keeper of the database renamed the Ohio Biodiversity Database.</p>
<p>6.2.b When RTE species are present or assumed to be present, modifications in management are made in order to maintain, restore or enhance the extent, quality and viability of the species and their habitats. 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.</p>	<p>C</p>	<p>DOF’s approach is outline in the LM manual and documented in its marking estimates, burn plans, etc. There is a mitigation section where DOF documents what was found and its adjustments to the activity. Training on RTE species has been included in its regular trainings. DOF has a zone system that includes HCVF (HCVF includes areas of RTE species concentrations) and RSAs.</p> <p>For the green adder’s mouth (<i>Malaxis unifolia</i>), DOF was notified of a patch on Tar Hollow State Forest that might have been impacted by a timber sale. Trees were removed from the sale that surrounded the plants and equipment was excluded from the area. This plant was discovered post-site plan preparation since the heritage database was updated after the initial planning. DOF sent in two different teams to examine the area and</p>

		<p>found more sites where the plant occurred than when the database was updated.</p> <p>For timber rattlesnakes, prescribed burns that could directly affect them are avoided through conducting prescribed burn while snakes are hibernating (burn season is late fall to early spring, no later than first week of April). DOF does not usually have access to den sites due to issues of confidentiality, so the current guidelines seem reasonable.</p> <p>For bats, DOF retains loose-bark hickory species on all timber harvests per recommendation of DOW. Other tree species are also retained. As all species of bats are possibly impacted by White-nose Syndrome, DOF is working on refining its bat-strategy.</p>
<p>6.2.c For medium and large public forests (e.g. state forests), forest management plans and operations are designed to meet species' recovery goals, as well as landscape level biodiversity conservation goals.</p>	<p>C</p>	<p>DOF participates and complies with DOW Wildlife Action Plans (recovery goals) for forest dwelling RTE species. They are referenced in the 5-year management plans. DOF is an active contributor to the Indiana Bat Management Strategy and the Karner Blue Butterfly Recovery Team. DOF adopted the biodiversity goals outlined in the Forest Action Plan and placed them in each forests management plans.</p> <p>DOW and DOF have been cooperating on implementing forest management that it intended to create openings for oak regeneration and structure for several wildlife species that may have been more prevalent during pre-European settlement conditions.</p> <p>DOF's fire staff consult with DOW staff to protect potential den sites for Timber Rattlesnakes during prescribed burns, as confirmed through interviews with DOF and DOW. The early successional habitat creates foraging habitat for small mammals, which are a food source for snakes. Burns also may promote snags and woody debris, which snakes use for shelter and hiding. DOF has</p>

		never burned a den to best of its knowledge since burns occur in the late fall or early spring prior to snakes coming out of hibernation.
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 has a Law Enforcement patrols on the FMU and enforces laws including poaching. All state forests are open for public hunting. DOW enforces RTE species laws on state forests.
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.	C	
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, in cooperation with other state agencies and stakeholder, has determined that most of the FMU is in older age classes. Thus, it primarily focuses on oak-hickory management. In general, DOF’s approach to dealing with under-represented successional stages is outlined in the DFC document.
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	This analysis is inclusive of DOF’s zone system and delineations of areas to be set aside in more restrictive zones. DOF’s site level assessments are designed to capture anything not considered during zoning, such as vernal pools and other smaller areas not captured during zoning analysis. DOF manages Maumee State Forest that lies within the Oak Openings region and DOF have recognized restoration of oak species density and age class diversity at Maumee is necessary.
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	C	Ohio state forests exist in the context of heavy-handed anthropogenic influences including widespread iron-ore furnaces in the mid- to late-1800s. These furnaces required vast quantities of wood material to fire the furnaces. Subsequent land use was mostly in

<p>conservation zones, unless an alternative plan is developed that provides greater overall protection of old growth values.</p> <p>Type 1 Old Growth is protected from harvesting and road construction. Type 1 old growth is also protected from other timber management activities, except as needed to maintain the ecological values associated with the stand, including old growth attributes (e.g., remove exotic species, conduct controlled burning, and thinning from below in dry forest types when and where restoration is appropriate).</p> <p>Type 2 Old Growth is protected from harvesting to the extent necessary to maintain the area, structures, and functions of the stand. Timber harvest in Type 2 old growth must maintain old growth structures, functions, and components including individual trees that function as refugia (see Indicator 6.3.g).</p> <p>On public lands, old growth is protected from harvesting, as well as from other timber management activities, except if needed to maintain the values associated with the stand (e.g., remove exotic species, conduct controlled burning, and thinning from below in forest types when and where restoration is appropriate).</p> <p>On American Indian lands, timber harvest may be permitted in Type 1 and Type 2 old growth in recognition of their sovereignty and unique ownership. Timber harvest is permitted in situations where:</p> <ol style="list-style-type: none"> 1. Old growth forests comprise a significant portion of the tribal ownership. 2. A history of forest stewardship by the tribe exists. 	<p>the form of low-intensity farming and woodlot grazing. These influences leave us with a forest that is relatively even-aged and less than 120 years old. DOF believes that, based on inventory data, it does not have any type 1 or type 2 old growth. 40 years of compartment reviews have helped discern the lack of old growth.</p> <p>DOF has management zones that will promote future later successional stands. In those zones, no activities, except invasive species control, is allowed. DOF has policies to deal with Legacy Trees and Retention Trees that will promote future later successional areas. Mohican State Forests, as well as the Shawnee Wilderness and other RSAs, have later successional forest as their desired future condition.</p>
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<ol style="list-style-type: none"> 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. 		
<p>6.3.b To the extent feasible within the size of the ownership, particularly on larger ownerships (generally tens of thousands or more acres), management maintains, enhances, or restores habitat conditions suitable for well-distributed populations of animal species that are characteristic of forest ecosystems within the landscape.</p>	<p>C</p>	<p>In large part, DOF's <i>oak management focus</i> has implications for a host of wildlife species that would predictably suffer if the forests were allowed to transition to mesic species over much of the landscape. DOW, USFS research, and other partners and publications support DOF in this effort.</p> <p>Several examples support DOF's wildlife enhancement efforts, including for non-game species. DOF has 2 Ruffed Grouse management areas and 1 Wild Turkey management area. Shawnee and Zaleski are identified by DOW as "forest focus areas" for most, if not all, important wildlife species and have associated tactical plans. DOF has invasive species programs. Rattlesnake habitat is a central focus at Shawnee SF. Past tree planting efforts on reclaimed mine areas at Fernwood, Harrison, and Perry State Forests. There have been historic tree planting for soil conservation at Mohican, Hocking, etc. DOF has the Indiana Bat Management Strategy that has a habitat component, such as retention of loose-bark hickory species within harvest units. DOF cooperates with TNC to provide a corridor between the Edge of Appalachia Preserve and Shawnee State Forest. DOF manages the Forest Legacy Program to promote conservation easements.</p>
<p>6.3.c Management maintains, enhances and/or restores the plant and wildlife habitat of <i>Riparian Management Zones (RMZs)</i> to provide:</p> <ol style="list-style-type: none"> a) habitat for aquatic species that breed in surrounding uplands; 	<p>C</p>	<p>DOF zone system outlined in LM manual chapter 2 contains a "Resource Protection" zone that includes all of the major floodplain forests that it manages. Management guidelines prevent clearcutting and heavy equipment use in the zone. DOF has an SMZ</p>

<p>b) habitat for predominantly terrestrial species that breed in adjacent aquatic habitats;</p> <p>c) habitat for species that use riparian areas for feeding, cover, and travel;</p> <p>d) habitat for plant species associated with riparian areas; and,</p> <p>e) stream shading and inputs of wood and leaf litter into the adjacent aquatic ecosystem.</p>		<p>policy. DOF identified OEPA designated high quality streams located on state forests. DOF solicited input from the fisheries section of DOW for identification of important stream habitats and zoned them as appropriate. DOF foresters have been trained on SMZs.</p> <p>Protection of SMZs from harvest and equipment entry are the primary methods of meeting elements a)-e) of this indicator.</p>
<p>Stand-scale Indicators</p> <p>6.3.d Management practices maintain or enhance plant species composition, distribution and frequency of occurrence similar to those that would naturally occur on the site.</p>	C	<p>Oak ecology and management is the main focus in hardwood areas. Pine stands mostly consist of old plantations that are managed in the long-term to revert to hardwood. All foresters have received training on SILVAH Oak, an Appalachian-Allegheny Hardwood silvicultural management system developed at the USDA Forest Service.</p>
<p>6.3.e When planting is required, a local source of known provenance is used when available and when the local source is equivalent in terms of quality, price and productivity. The use of non-local sources shall be justified, such as in situations where other management objectives (e.g. disease resistance or adapting to climate change) are best served by non-local sources. Native species suited to the site are normally selected for regeneration.</p>	C	<p>DOF relies mostly on natural regeneration. No planting sites were viewed in 2014.</p>
<p>6.3.f Management maintains, enhances, or restores habitat components and associated stand structures, in abundance and distribution that could be expected from naturally occurring processes. These components include:</p> <p>a) large live trees, live trees with decay or declining health, snags, and well-distributed coarse down and dead woody material. Legacy trees where present are not harvested; and</p> <p>b) vertical and horizontal complexity.</p> <p>Trees selected for retention are generally</p>	C	<p>DOF has guidelines relating to Legacy Trees and Retention Trees in the LM Manual. Further guidance on retention trees is outlined in DOW documents such as the Indiana Bat Management Strategy and others. DOF and DOW coordinated on revising the retention guidelines in the LM manual to reconcile three different documents and to eliminate confusion with staff.</p> <p>See OBS 2014.2.</p>

<p>representative of the dominant species found on the site.</p>		
<p>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.</p> <p>In the Lake States Northeast, Rocky Mountain and Southwest Regions, when even-aged silvicultural systems are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime unless retention at a lower level is necessary for the purposes of restoration or rehabilitation. See Appendix C for additional regional requirements and guidance.</p>	<p>C</p>	<p>DOF believes that even-aged systems are most appropriate to oak regeneration. Evidence is outlined in the timber harvest prep chapter of the LM manual. DOF have a retention policy. Silviculture systems conducive to oak management include treatments that meet this indicator such as deferment cuts and shelterwoods.</p> <p>DOF and DOW coordinated on revising the retention guidelines in the LM manual to reconcile three different documents and to eliminate confusion with staff.</p> <p>See OBS 2014.2.</p>
<p>6.3.g.2 Under very limited situations, the landowner or manager has the option to develop a qualified plan to allow minor departure from the opening size limits described in Indicator 6.3.g.1. A qualified plan:</p> <ol style="list-style-type: none"> 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 	<p>C</p>	<p>Outlined in the LM manual.</p> <p>There are only 3 situations where DOF may depart from retention guidelines. 1) The Grouse Management Areas – clearcut treatments are used, generally less than 10 acres, however some are between 10 and 15 acres. These areas are managed per agreements with the Ruffed Grouse Society; 2) Pine clearcut harvests – biologists and foresters agree that pine retention trees are not appropriate given that the intent is to promote hardwood regeneration; and 3) Salvage – responses to catastrophic events such as tornado, ice storm, and wildlife will likely not meet retention goals given that there are few trees left to retain.</p> <p>See OBS 2014.2.</p>

<p>result in equal or greater benefit to wildlife, water quality, and other values compared to the normal opening size limits, including for sensitive and rare species.</p> <p>5. Is reviewed by independent experts in wildlife biology, hydrology, and landscape ecology, to confirm the preceding findings.</p>		
<p>6.3.h The forest owner or manager assesses the risk of, prioritizes, and, as warranted, develops and implements a strategy to prevent or control <i>invasive species</i>, including:</p> <ol style="list-style-type: none"> 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	<p>DOF had several strong efforts to control invasive plants on a wide scale from 2009-2011. Those funds have since ceased, but there were many thousands of acres treated.</p> <p>Forest Health program has been active in last two years on control efforts regarding HWA and other invasive pests.</p>
<p>6.3.i In applicable situations, the forest owner or manager identifies and applies site-specific fuels management practices, based on: (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, (4) public safety, and (5) applicable laws and regulations.</p>	C	<p>DOF has a fire management program that responds to this indicator. In 2014, DOF burned 351 acres in the southern district during the spring burn season (March to the end of the first week of April). This year, the burn plan includes 1507 acres (2 in the fall and the rest will be in Spring 2015).</p>
<p>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.</p>	NE	
<p>6.5 Written guidelines shall be prepared and implemented to control erosion; minimize forest damage during harvesting, road construction, and all other mechanical</p>	NE	

disturbances; and to protect water resources.		
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.	C	
6.9.a The use of <i>exotic species</i> is contingent on the availability of credible scientific data indicating that any such species is non-invasive and its application does not pose a risk to native biodiversity.	C	There have been historic plantations of a host of tree species and they are still visible today, mostly white pine. Current policy is not to plant exotic species and to manage these historical planting to restore native hardwood composition. DOF uses grass seed mixes recommended (annual rye, clover, etc.) in the State BMP manual. DOF has gotten some grants to use native seed mixes, though.
6.9.b If exotic species are used, their	C	Most exotic plantings were done in the 1930s

<p>provenance and the location of their use are documented, and their ecological effects are actively monitored.</p>		<p>and 1940s when the Civilian Conservation Corp was active.</p>
<p>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</p>	<p>C</p>	<p>White pine and other conifers have not regenerated off-site and regeneration has been very low. Native hardwood regeneration usually outcompetes the planted exotic pines.</p>
<p>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.</p>	<p>NE</p>	
<p>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.</p>		
<p>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.</p>		
<p>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 the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.</p>	<p>C</p>	
<p>8.1.a Consistent with the scale and intensity of management, the forest owner or manager develops and consistently implements a regular, comprehensive, and replicable written monitoring protocol.</p>	<p>C</p>	<p>DOF's approach to monitoring is outlined in Chapter 12 of the LM manual. Monitoring is multi-faceted. Monitoring efforts include the compartment review process, GIS analysis, G&Y, logging inspections, forest health monitoring, and program reports.</p>
<p>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</p>	<p>C</p>	

<p>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.</p>		
<p>8.2.a.1 For all commercially harvested products, an inventory system is maintained. The inventory system includes at a minimum: a) species, b) volumes, c) stocking, d) regeneration, and e) stand and forest composition and structure; and f) timber quality.</p>	C	<p>DOF maintains an inventory database, G&Y monitoring, and a GIS program. DOF relies on the 20-yr compartment review process for monitoring of a) thru f). 80% of state forest acreage has a complete inventory and data is used in G&Y calculations. DOF also relies on FIA averages and trends for the remaining 20% of state forest acreage, and has future plans to procure inventory on this remaining acreage.</p>
<p>8.2.a.2 Significant, unanticipated removal or loss or increased vulnerability of forest resources is monitored and recorded. Recorded information shall include date and location of occurrence, description of disturbance, extent and severity of loss, and may be both quantitative and qualitative.</p>	C	<p>The Forest Health program has a monitoring protocol and results are disseminated both on an annual basis and more frequently via the distribution of the PEST news and the annual Forest Health Conference. Local unanticipated loss or vulnerability is documented, reviewed, prescribed, and treated as needed.</p>
<p>8.2.b The forest owner or manager maintains records of harvested timber and NTFPs (volume and product and/or grade). Records must adequately ensure that the requirements under Criterion 5.6 are met.</p>	C	<p>DOF maintained a database of harvest volumes that includes decades of data. Database is central to the statutory requirements of revenue distribution to local governments.</p>
<p>8.2.c The forest owner or manager periodically obtains data needed to monitor presence on the FMU of:</p> <ol style="list-style-type: none"> 1) Rare, threatened and endangered species and/or their <i>habitats</i>; 2) Common and rare plant communities and/or habitat; 3) Location, presence and abundance of invasive species; 4) Condition of protected areas, set-asides and buffer zones; 5) High Conservation Value Forests (see Criterion 9.4). 	C	<ol style="list-style-type: none"> 1) DOF relies on other DNR agencies to provide data relating to RTE species through the procedures and mechanism outlined the LM manual e.g. the Biodiversity Database, biologist review, and RTE mgmt training for staff; 2) DOF relies on partnerships with USFS FIA and USFS NA Research on the mgmt and maintenance of Oak Hickory ecosystems and their restoration; 3) DOF has two programs: one dealing with private lands and one dealing with state forests that are designed to directly give forestry assistance and treatment of invasive plants; DOF also is a supporter of USFS NA Research that involves location and treatment

		options for invasives on state forests; 4) Monitoring of HCVF is discussed in Ch 1 of LM manual and in the HCVF assessment document.
8.2.d.1 Monitoring is conducted to ensure that site specific plans and operations are properly implemented, environmental impacts of site disturbing operations are minimized, and that harvest prescriptions and guidelines are effective.	C	DOF has a logging inspection procedure and precommercial activity inspection procedure that responds to this indicator. The procedure is outlined in Chapter 8 and 9 of the LM manual. DOF worked with the USFS Delaware research lab to formulate a monitoring protocol and included this in Chapter 12 of LM Manual.
8.2.d.2 A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	C	DOF has a cooperative roadway maintenance agreement with the Ohio DOT. DOF personnel monitor roads are part of the agreement. Timber road construction is infrequent, most forest have plenty of access. Forest staff regularly monitors recreation trails in cooperation with rec groups as part of their annual duties. A limited-use road monitoring and inspection form were formulated and included in Chapter 12 of LM manual.
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	Socio-economic impact monitoring is outlined in Chapter 12 of the LM manual. See also DOF’s recreation program, marketing and utilization program, public participation efforts, and the Forest Action Plan.
8.2.d.4 Stakeholder responses to management activities are monitored and recorded as necessary.	C	Outlined in DOF’s “pathways to participation” and management review procedures. Comments solicited during open houses, public meetings, and plan revisions are addressed by the Integration Committee. DOF maintains a catalog of public records requests and disputes.
8.2.d.5 Where sites of cultural significance exist, the opportunity to jointly monitor sites of cultural significance is offered to tribal representatives (see Principle 3).	C	Outlined in Principle 3 above. DOF consults with tribal representatives, Hopewell NHP, and Newark Earthworks.
8.2.e The forest owner or manager monitors the costs and revenues of management in	C	Management and fiscal section monitor costs and revenue in order to adjust to difficulties in the state budget. Program monitor their

order to assess productivity and efficiency.		respective activities and report to management and decisions are made in the Integration Committee upon review of reports.
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.	C	
8.4.a The forest owner or manager monitors and documents the degree to which the objectives stated in the management plan are being fulfilled, as well as significant deviations from the plan.	C	Incorporated into DOF's planning process and integration committee management review. Also incorporated into regular discussions with the Forest Advisory Council. Per interview with the Assistant Chief, DOF completes monthly and annual reports to track progress to meeting management objectives.
8.4.b Where monitoring indicates that management objectives and guidelines, including those necessary for conformance with this Standard, are not being met or if changing conditions indicate that a change in management strategy is necessary, the management plan, operational plans, and/or other plan implementation measures are revised to ensure the objectives and guidelines will be met. If monitoring shows that the management objectives and guidelines themselves are not sufficient to ensure conformance with this Standard, then the objectives and guidelines are modified.	C	Addressed via the statements to achieve and maintain FSC certification of state forestland. Also outlined in chapter 1 of LM manual that deal with procedures to address CAR's and other adjustments to management. Annual reports are used to report on qualitative and quantitative information on meeting objectives. If any major issues are detected, leadership staff may decide that a change in the management plan or its components are necessary.
8.5 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.	C	
8.5.a While protecting landowner confidentiality, either full monitoring results or an up-to-date summary of the most recent monitoring information is maintained,	C	All documents are public record. Specifically, all plans and activities are presented in open houses along with G&Y, social impact monitoring, and many other reports and data

<p>covering the Indicators listed in Criterion 8.2, and is available to the public, free or at a nominal price, upon request.</p>		<p>available on the Division website. Annual reports primarily include the results of monitoring and are available to the general public.</p>
<p>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.</p> <p>High Conservation Value Forests are those that possess one or more of the following attributes:</p> <ul style="list-style-type: none"> 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). 		
<p>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.</p>	<p>NE</p>	
<p>9.2 The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.</p>	<p>NE</p>	
<p>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.</p>	<p>NE</p>	
<p>9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.</p>	<p>C</p>	
<p>9.4.a The forest owner or manager monitors, or participates in a program to annually</p>	<p>C</p>	<p>Management options in HCVF are very limited and currently include treatment of invasive</p>

<p>monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of Principle 8.</p>		<p>species. Except for restoration areas at Maumee SF, there will be no extraction of resources in HCVF. Therefore, DOF believes that monitoring need not occur on an annual basis, but on a regular schedule more consistent with its management plan updates.</p>
<p>9.4.b When monitoring results indicate increasing risk to a specific HCV attribute, the forest owner/manager re-evaluates the measures taken to maintain or enhance that attribute, and adjusts the management measures in an effort to reverse the trend.</p>	<p>C</p>	<p>DOF commits to adjusting management options based on monitoring results. Besides invasive species, there have been no new threats to HCVs identified during regular monitoring activities.</p>

<p style="text-align: center;">APPENDICES</p>		
<p>APPENDIX C: REGIONAL LIMITS AND OTHER GUIDELINES ON OPENING SIZES: Indicator 6.3.g.1 This Appendix contains regional Indicators and guidance pertinent to maximum opening sizes and other guidelines for determining size openings and retention. These Indicators are requirements based on FSC-US regional delineations</p>		
<p>APPALACHIA REGION</p>		
<p>6.3.g.1.a When even-aged silviculture (e.g., seed tree, regular or irregular shelterwood), or deferment cutting is employed, live trees and native vegetation are retained and opening sizes are created within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime in each community type, unless retention at a lower level is necessary for restoration or rehabilitation purposes. Harvest openings with no retention are limited to 10 acres. <i>Guidance: Even-age silviculture is used only where naturally occurring species are maintained or enhanced. Retention within harvest units can include riparian and streamside buffers and other special zones. In addition, desirable overstory and understory species may be retained outside of buffers or special zones while allowing for regeneration of shade-intolerant and intermediate species consistent with overall management</i></p>	<p>C</p>	<p>DOF has policies for even-aged management, including that harvest openings larger than 10 acres have retention. See OBS 2014.2.</p>

<p><i>principals. Where stands have been degraded, less retention can be used to improve both merchantable and non-merchantable attributes.</i></p>				
<p>6.3.g.1.b When uneven age silvicultural techniques are used (e.g., individual tree selection or group selection), canopy openings are less than 2.5 acres. Applicability note: <i>Uneven age silvicultural techniques are used when they maintain or enhance the overall species richness and biologic diversity, regenerate-shade tolerant or intermediate-tolerant species, and/or provide small canopy openings to regenerate shade-intolerant and intermediate species. Uneven-age techniques are generally used to develop forests with at least three age classes. Uneven age silviculture is employed to prevent high-grading and/or diameter limit cutting.</i></p>	C	DOF does not use uneven-aged techniques with frequency, and most are limited to Northern and Allegheny Hardwoods that consist of more shade-tolerant species.		
<p>APPENDIX E: STREAMSIDE MANAGEMENT ZONE (SMZ) REGIONAL REQUIREMENTS: Indicator 6.5.e This Appendix addresses regionally explicit requirements for Indicator 6.5.e and includes SMZ widths and activity limits within those SMZs for the Appalachia, Ozark-Ouachita, Southeast, Mississippi Alluvial Valley, Southwest, Rocky Mountain, and Pacific Coast regions. The forest owner or manager will be evaluated based on the sub-indicators within their specific region, below.</p>				
<p>APPALACHIA REGION: <i>The SMZ is designed to allow harvesting and provide flexibility for silvicultural management.</i></p>				
<p>6.5.e.1.a All perennial streams have buffers (streamside management zones, SMZs) that include an inner SMZ and an outer SMZ. SMZ sizes are minimum widths that are likely to provide adequate riparian habitat and prevent siltation. If functional riparian habitat and minimal siltation are not achieved by SMZs of these dimensions, wider SMZs are needed.</p>	C	DOF’s SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).		
<p>Table 6.5.f (APP only) Widths of inner and outer Streamside Management Zones. Widths of outer SMZs are applicable where data do not support narrower widths*</p>				
Stream Zone Type	SLOPE CATAGORY			
	1-10%	11-20%	21-30%	31-40%
	4	1		1

					% +
Inner Zone (Perennial)	25'	25'	25'	25'	25'
Outer Zone (Perennial)	55'	75'	105'	110'	140'
Total For Perennial	80'	100'	130'	135'	165'
Zone For Intermittent	40'	50'	60'	70'	80'
*All distances are in feet -slope distance and are measured from the high water mark.					
6.5.e.1.b (APP only) The inner SMZ for <i>non-high-quality waters</i> (see state or local listings describing the highest quality waters in the state or region) extends 25 feet from the high water mark. Single-tree selection or small group selection (2-5 trees) is allowed in the inner SMZ, provided that the integrity of the stream bank is maintained and canopy reduction does not exceed 10 percent (90 percent canopy maintenance). Trees are directionally felled away from streams. Note: The inner SMZ is designed as a virtual no-harvest zone, while allowing the removal of selected high-value trees.	C	DOF's SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).			
6.5.e.1.c (APP only) Along perennial streams that are designated as <i>high-quality waters</i> (see state or local listings describing the highest quality waters in the state or region), no harvesting is allowed in the inner SMZ (25 feet from the high water mark), except for the removal of wind-thrown trees. Stream restoration is allowed if a written restoration plan provides a rational justification and if the plan follows local and regional restoration	C	DOF's SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).			

plans.		
6.5.e.1.d (APP only) Outer SMZs, outside and in addition to inner SMZs, are established for all intermittent, and perennial streams, as well as other waters. When the necessary information is available, the width of a stream management zone is based on the landform, erodibility of the soil, stability of the slope, and stability of the stream channel as necessary to protect water quality and repair habitat. When such specific information is not available, the width of streamside management zone is calculated according to Table 6.5.f	C	DOF's SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).
6.5.e.1.e (APP only) Harvesting in outer SMZs is limited to single-tree and group selection, while maintaining at least 50 percent of the overstory. Roads, skid trails, landings, and other similar silviculturally disturbed areas are constructed outside of the outer SMZ, except for designated stream crossings or when placement of disturbance-prone activities outside of the SMZ would result in more environmental disturbance than placing such activities within the SMZ. Exceptions may be made for stream restoration.	C	DOF's SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).
6.5.e.1.f (APP only) The entire SMZ of intermittent streams is managed as an outer buffer zone.	C	DOF's SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).
6.5.e.1.g (APP only) The activities of forest management do not result in observable siltation of intermittent streams. The activities of forest management do not result in observable siltation of intermittent streams.	C	DOF's SMZ addendum complies with or exceeds FSC APP requirements for minimum buffer widths and management practices. See updated SMZs (Streamside Management Zones from Division of Forestry Land Management Manual).

Appendix 6 – Chain of Custody Indicators for FMEs

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