

**Fourche Mountain Ecological Management Unit  
Compartments 1312, 1313, 1314, 1315**

**FINAL  
Decision Notice  
and  
Finding of No Significant Impact  
for  
Timber Harvest and Associated Activities**

**Scott and Polk Counties, Arkansas**

**Responsible Agency:**

US Forest Service  
Ouachita National Forest  
Poteau-Cold Springs Ranger District

**Responsible Official:**

District Ranger Audie J. Brigance  
PO Box 417  
Booneville, AR 72927

**For Further Information Contact:**

Donna S. Reagan  
dreagan@fs.fed.us  
Cold Springs Ranger District  
PO Box 417  
Booneville, AR 72927  
479-675-4743 ext 107

**July 22, 2016**

## **USDA NON-DISCRIMINATION POLICY STATEMENT**

### **[DR 4300.003 USDA Equal Opportunity Public Notification Policy \(June 2, 2015\)](#)**

*In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.*

*Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.*

*To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [http://www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).*

*USDA is an equal opportunity provider, employer, and lender.*



The ecosystem management activities proposed are detailed below.

**Summary of Proposed Activities** - These are approximate acres only based on field examinations, GIS, and GPS.

PROPOSED MANAGEMENT ACTIVITIES	C-1312	C-1313	C-1314	C-1315	Total
<b>TIMBER HARVESTS</b>					
Commercial Thinning 60 BA pine 10 BA hardwood	282	465	191	294	1232
Commercial Thinning on 20' spacing (pole stands)	117	187	302	223	829
Commercial Thinning – Research Specifications	0	0	40	0	40
<b>Subtotal of Commercial Thinning Harvests</b>	<b>399</b>	<b>652</b>	<b>533</b>	<b>517</b>	<b>2101</b>
Modified Shelterwood (Regeneration stands)	25	50	50	49	174
<b>TOTAL HARVEST</b>	<b>424</b>	<b>702</b>	<b>583</b>	<b>566</b>	<b>2275</b>
<b>SILVICULTURE</b>					
Prescribed Burning (3-5 year rotation)	889	1111	2298	905	5203
Reforestation and TSI of proposed regeneration stands	25	50	50	49	174
TSI (hand tool release/pre-comm. thinning) of previous regen stands	60	32	139	0	231
<b>WILDLIFE</b>					
WSI on Commercially Thinned stands proposed to 60 BA	292	465	191	294	1242
Ponds Reconstruction	R-5	R-7	R-6	R-7	25
Pond New Construction	0	N-1	N-1	N-1	3
<b>ROADS</b>					
Roads: Obliteration					8.60
Roads: Reconstruction					3.16
Roads: Construction					0.45
Roads: Pre Haul Maintenance					8.31
Roads: Temporary					9.5
<b>Other</b>					
Landline Maintenance (miles)	1.25	1	0.75	1	4
Fireline Construction (miles)					19.45
Fireline Reconstruction (miles)					3.46
NNIS treatment with herbicide as needed					Yes

**All Regeneration Stands** would have **reforestation** and **timber stand improvement** activities (Site Preparation, Release, Mechanical Scarification, and TSI. If activities are not successful, rip and plant with shortleaf pine; hand tool release, herbicide, and pre-commercial thinning may be utilized.)

**Firelines** would be constructed around perimeters of all natural and artificial regeneration areas (i.e. shelterwood or existing regeneration areas). This also includes C-1314 Stand 16 (Phase II Research Area stand). The mechanically constructed fireline would be bladed down to mineral soil and approximately 8 feet wide. Bladed lines would be water barred as necessary on slopes to limit soil movement. Firelines would normally be installed within 50 feet either side of stand boundaries. The purpose of a fireline is for “control” if a prescribed fire is applied to the stands for site preparation and/or to exclude fire during years of stand development.

**Permits** would be offered to the public for collection of rocks by private individuals within road construction and reconstruction corridors. That is, rocks can be collected within areas of disturbance associated with road construction and reconstruction. Firewood and shale pit permits may be issued.

**RCW** - This proposed action includes other RCW treatments and activities, including use of cavity restrictors, snake and squirrel excluder devices, artificial cavities, single-bird augmentations, multiple-bird group-initiations, brush hogging in cavity tree clusters, removal of southern flying squirrels, population/nest monitoring, cavity maintenance and southern

pine beetle (SPB) and Ips control efforts. In active, inactive, and recruitment clusters, retain no more than 10 square feet of basal area per acre in overstory hardwoods. Remove all hardwoods within 50 feet of cavity trees. (Revised Forest Plan pg 122; 22.17) In the event a new RCW cavity tree is found or started within this project area, the immediate area, including drains, that surround the tree (10 acres) would be identified as an active cluster and all activities associated with enhancing and protecting the cluster would begin.

**Nest boxes** for other species would also be installed where appropriate.

### Matrix of Needed Road Work Needed for Fourche Mountain Ecological Management Unit

Road Name	Segment	Type of Work	Description
Q15B	NA	Reconstruct	Reconstruct approximately 0.50 mile of this road from mile post 0.00 to mile post 0.50. Road will be seasonally open after harvest.
Q13	NA	Reconstruct	Reconstruct approx. 0.75 mile of this road from US Highway 270 to the intersection of road Q13F. Road will be open after harvest.
Q13E	NA	Reconstruct	Reconstruct approximately 1.20 mile of this road from Q13 to the end. Road will be open after harvest.
Q13G	NA	Reconstruct	Reconstruct approximately 0.01 mile. This one deep fill pipe that needs to be replaced. Road will be closed after harvest.
Q12F	NA	Reconstruct	Reconstruct approximately 0.70 mile of this road from Q13E to end. Road will be closed after harvest.
			<b>Total Reconstruction – 3.16 miles.</b>
Q15B	NA	Prehaul Maintenance	1.02 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures from mile post 0.50 to mile post 1.52. Road would be seasonally open after harvest.
54	NA	Prehaul Maintenance	1.90 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures from mile post 0.00 to mile post 1.90. Road would be open to mile post 1.30 after harvest.
Q13	NA	Prehaul Maintenance	1.44 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures from mile post 0.75 to mile post 2.19. Road would be open after harvest.
Q13F	NA	Prehaul Maintenance	0.70 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures between areas of reconstruction. Road would be open after harvest.
Q13G	NA	Prehaul Maintenance	1.01 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures Q12F and the end. Road would be closed after harvest.
Q12C	NA	Prehaul Maintenance	0.40 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures. Road would be closed after harvest
932B	NA	Prehaul Maintenance	1.44 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures. Road would be open after harvest
932	NA	Prehaul Maintenance	0.40 miles of dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures. Road would be open after harvest
			<b>Total Prehaul Maintenance = 8.31 miles</b>
Q14D	NA	Construction	0.45 miles of new construction to access proposed harvest areas
			<b>Total Construction = 0.45 miles</b>
54	NA	Road to Obliterate	Obliterate this road as it is in a poor location and not needed any more from mile pile post 1.90 to mile post 3.20, for a total of 1.30 miles of obliteration.
Various	NA	Roads to Obliterate	These roads are not shown on the transportation map but are listed under the Summary and Recommendations section of this report. All of these roads are currently listed as system roads but are in poor locations mostly by drains. These roads can be considered obliterated by nature and taken off the road system. (7.30 miles)
			<b>Total Road Obliteration – 8.60 miles</b>
Temp Roads			9.5 miles – Many of these are old roads that would be opened. A few would be new. All temporary roads would be closed after harvest. Per Revised Forest Plan design criteria, temporary roads will be decommissioned, revegetated, and recontoured upon termination of management activity.
Various		Decks	Approximately 120 decks to be seeded as temporary wildlife openings.

## Compartment 1312 Proposed Actions

Stand	Management	Acres	Prescribed Burning	Commercial Thin		Shelterwood Harvest	Reforestation and TSI of Proposed Regeneration Stands *	TSI* Previous Regeneration Stands	WSI*	Ponds N – new R - recon
				60 BA pine 10 BA Hdw	20' spacing					
1	MA 22	57	57		57					R-1
2	MA 22	84	84	84					84	R-1
3	MA 22	60	60					60		R-1
4	MA 22 / 17 - Drain	115	115							
5	MA 22 - ½ in Rare II	61	61	61					61	
6	MA 22	87	87	87					87	R-1
7	MA 22	60	60		60					R-1
8	MA 22	27	27							
9	MA 22	25	25			25	25			
10	MA 22 / 17	25	25							
11	MA 22 / 17	81	81							
12	MA 17	81	81							
13	MA 22	31	31							
14	MA 22/Recruitment	10	10	10					10	
15	MA 22/Recruitment	10	10	10					10	
16	MA 17	10	10						10	
17	MA 22	35	35							
18	MA 22/Replacement	10	10	10					10	
19	MA 22/Replacement	10	10	10					10	
20	MA 22/Replacement	10	10	10					10	
<b>TOTAL</b>		889	889	282	117	25	25	60	292	R-5

## Compartment 1313 Proposed Actions

Stand	Management	Acres	Prescribed Burning	Commercial Thin		Shelterwood Harvest	Reforestation and TSI of Proposed Regeneration Stands *	TSI* Previous Regeneration Stands	WSI*	Ponds N – new R - recon
				60 BA pine 10 BA Hdw	20' spacing					
1	MA 22	14	14		14					
2	MA 22	25	25			25	25			
3	MA 22	56	56		56					
4	MA 22	45	45	45					45	R-1
5	MA 22	50	50							
6	MA 22	57	57	57					57	R-1
7	MA 22 - Drain	151	151							
8	MA 22	31	31		31					
9	MA 22	63	63		63					R-1
10	MA 22	89	89	89					89	R-1
11	MA 22	45	45	45					45	
12	MA 22	90	90	90					90	R-2
13	MA 22	32	32					32		
14	MA 22	25	25			25	25			N-1
15	MA 22	69	69	69					69	R-1
16	MA 22	44	44							
17	MA 22 / 17	32	32							
18	MA 22 / 17	33	33							
19	MA 17	54	54							
20	MA 22	23	23		23					
21	MA 22/Recruitment	10	10	10					10	
22	MA 22/Recruitment	10	10	10					10	
23	MA 22/Recruitment	10	10	10					10	
24	MA 22/Recruitment	10	10	10					10	
25	MA 22	12	12							
26	MA 22/Replacement	10	10	10					10	
27	MA 22/Replacement	10	10	10					10	
28	MA 22/Replacement	10	10	10					10	
<b>TOTAL</b>		<b>1111</b>	<b>1111</b>	<b>465</b>	<b>187</b>	<b>50</b>	<b>50</b>	<b>32</b>	<b>465</b>	<b>R-7;N-1</b>

## Compartment 1314 Proposed Actions

Stand	Management	Acres	Prescribed Burning	Commercial Thin		Shelterwood Harvest	Reforestation and TSI of Proposed Regeneration Stands *	TSI* Previous Regeneration Stands	WSI*	Ponds N – new R - recon
				60 BA pine 10 BA Hdw	20' spacing					
1	MA 22	44	44		44					
2	MA 22	24	24	24					24	
3	MA 22	86	86		86					
4	MA 22	43	43		43					
5	MA 17	9	9							
6	MA 17	34	34							
7	MA 22	25	25			25	25			N-1
8	MA 22 - Rare II	40	40	40					40	R-2
9	MA 22	27	27		27					
10	MA 22 - Rare II	21	21				21			
11	MA 22 - Rare II	50	50		50					
12	MA 22	45	45							
13	MA 22 - Rare II	64	64				64			
14	MA 22	16	16							
15	MA 22 - Drain	8	8							
16	Research Area***	40	40	40						
17	MA 22	52	52		52					
18	MA 22 - Rare II	54	54	54					54	R-1
19	MA 22	49	49				49			R-1
20	MA 22	25	25	25					25	
21	MA 22	42	42							R-1
22	MA 22	46	46							
23	MA 22	36	36			25	25			R-1
24	MA 22/Recruitment	10	10	10					10	
25	MA 22	28	28	28					28	
26	MA 22	58	58							
27	MA 22	28	28							
28	MA 22 - Drain	9	9							
29	MA 17	33	33							
30	MA 17	961	961							
31	MA 22/17 - Drain	281	281							
32	MA 22/Replacement	10	10	10					10	
<b>TOTAL</b>		<b>2298</b>	<b>2298</b>	<b>231</b>	<b>302</b>	<b>50</b>	<b>50</b>	<b>139</b>	<b>191</b>	<b>R-6;N-1</b>

## Compartment 1315 Proposed Actions

Stand	Management	Acres	Prescribed Burning	Commercial Thin		Shelterwood Harvest	Reforestation and TSI of Proposed Regeneration Stands *	TSI* Previous Regeneration Stands	WSI*	Ponds N – new R - recon
				60 BA pine 10 BA Hdw	20' spacing					
1	MA 22	55	55	55					55	
2	MA 22	38	38		38					
3	MA 22	30	30	30					30	
4	MA 22	12	12		12					
5	MA 22	93	93		93					N-1
6	MA 22	24	24			24	24			R-1
7	MA 22	70	70	70					70	
8	MA 22	20	20	20					20	
9	MA 22	15	15	15					15	
10	MA 22	25	25			25	25			
11	MA 22	44	44	44					44	
12	MA 22	136	136							R-1
13	MA 22	14	14							R-1
14	MA 22 - Drain	3	3							
15	MA 22/Recruitment	10	10	10					10	R-1
16	MA 22/Recruitment	10	10	10					10	
17	MA 22/Recruitment	10	10	10					10	
18	MA 22 - Drain	164	164							R-1
19	MA 22	19	19							
20	MA 22	80	80		80					R-1
21	MA 22/Replacement	10	10	10					10	
22	MA 22/Replacement	10	10	10					10	R-1
23	MA 22/Replacement	10	10	10					10	
<b>TOTAL</b>		<b>905</b>	<b>905</b>	<b>294</b>	<b>223</b>	<b>49</b>	<b>49</b>	<b>0</b>	<b>294</b>	<b>R-7;N-1</b>

\*See Proposed Management Activities descriptions and footnotes on Summary of Proposed Actions page

## Decision

Based on the analysis documented in the EA, it is my decision to implement the Proposed Action identified above for the Fourche Ecological Management Unit. My decision is based on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information. See Relevant Planning Documents (EA Chapter 1 p. 13), Technical Requirements and Forest Plan Mitigations (EA Chapter 2 p. 17), and Literature Cited (EA Chapter 6 p. 85).

## Reasons for the Decision

1. The Proposed Action was chosen over Alternative I (No Action) because the No Action Alternative would not meet the identified purpose and need for this project as stated in the EA beginning on page 6.
2. The Proposed Action was chosen over Alternative II (Proposed Action without herbicide use) because herbicide is an effective treatment for the control of non-native invasive species and as an option for regeneration.
3. The Proposed Action was chosen over Alternative III (No Road Construction) because it will create more early seral habitat (174 acres as opposed to 124 acres), increase the wildlife water sources by reconstructing 10 more ponds than Alternative III and constructing 2 more, provide for more development of forbs and grass on the landscape, and improve the resiliency and vigor of residual stands on a larger area of the forest.

Specifically, the Proposed Action would best meet the following project objectives (EA, p. 21):

- To create a healthy forest condition for RCW habitat.
- To create early seral stage habitat (even-age only).
- To remove off-site species (loblolly).
- To reduce competing vegetation for nutrients, water, and sun.
- To site prep a bed for seed fall after the regeneration harvests.
- To provide new growth for wildlife to eat.
- To reduce heavily stocked understories and midstories primarily due to lack of fire as part of the ecosystem.
- To reduce fuel loading.
- To create a suitable seedbed in regeneration sites after initial prescribed burning.
- To increase growth rate and quality of desired trees by reducing competition for nutrients and water among species.
- To ensure survival of desired trees by releasing suppressed trees from competing tree species.
- To create water sources for wildlife.
- To reduce midstory and allow development of grasses and forbs on the forest floor.
- To move toward the open road density objective.
- To access harvest units and provide safe road system.
- To repair or maintain road surfaces, ditch erosion, and repair or replace rusted-out pipes.
- To provide short-term access to harvest units.
- To reduce the impacts to streams and get rid of roads not needed in the future.
- To supply firewood areas to the local community.
- To supply rock permits to the local community.
- To stop or slow the infestation of invasive and non-native species such as mimosa, lespedeza, privet, or any other species of these types encountered within this analysis area.
- To ensure landlines are maintained.

## Role of the Interdisciplinary Team and Public Involvement

An email was sent with an electronic link to the detailed description of the Proposed Actions and associated maps using PALS's electronic mailing list. This list is created from those whom have shown interest in this project through the project website <http://www.fs.fed.us/nepa/fs-usda-pop.php/?project=44969> (5/11/15). In addition, a hardcopy was mailed to 12 people and a direct email was sent to individuals informing them of the electronic link to the project information. A list of recipients is located in the project file at the district office and in Chapter 5. As a result, Gene Miller with the National Wildlife Turkey Federation and Lindsey D. Bilyeu, NHPA Senior Section 106 Reviewer-Historic Preservation Department) with the Choctaw Nation of Oklahoma responded. A 30-day comment period legal was published February 26, 2016 and ended March 28, 2016. One person, Dick Artley, responded. A response to his comments was emailed to him. The district took three actions in the environmental assessment regarding his comments:

1. Removal of claims that logging reduces fire effects
2. Removal of references to clear cutting. This project does not propose any.
3. Add in language to temporary roads to include "Per Revised Forest Plan design criteria, temporary roads will be decommissioned, revegetated, and recontoured upon termination of management activity."

## Issues Identified

***Issue #1:** Herbicide use is considered an "issue to be analyzed in depth" because of the intensity of interest that will require the formulation of a "non-herbicide" alternative. Herbicide use is proposed to achieve the desired conditions to establish native forest cover where needed. This would be to remove nonnative species such as mimosa or privet.*

***Issue #2:** Road construction is considered an "issue to be analyzed in depth" because of the intensity of interest that will require the formulation of a "no road construction" alternative. Road construction is proposed to access forest stands proposed for harvest.*

## Alternatives Eliminated From Detailed Study

There were no issues or unresolved conflicts to drive the following additional alternatives, but the interdisciplinary team considered the following:

### No Harvest Alternative

This alternative was considered by the Interdisciplinary Team but eliminated from detailed analysis because the Team felt the No Action Alternative adequately addressed the overall effects of a no harvest alternative.

## Alternatives Considered in Detail

Four alternatives were analyzed in the EA:

1. **Proposed Action** – This alternative is described on pages 4-9 of this document. (Also, see EA, pp. 22 and Appendix A).
2. **Alternative I (No Action)** - Under the No Action Alternative neither the Proposed Action nor any other action alternative would be implemented. (See EA, p. 22). Management activities would be deferred until a later entry. However, ongoing Forest Service approved activities would continue in the project area.
3. **Alternative II (Proposed Action without herbicide use)**- This alternative is the same as the Proposed Action except for herbicides are not proposed treatment of non-native invasive plant species (See EA, p. 22 and Appendix A).
4. **Alternative III (No New Roads)**- Under this alternative, there would be no road construction (temporary or system); only proposed timber harvest (and dependent management actions) accessible by the current transportation system would occur (See EA, p. 23 and Appendix B).

**Forest Plan Mitigations (EA, p. 17)**

The Forest-wide Design Criteria for Management Areas 17 and 22 are incorporated by reference as mitigating measures into the Proposed Action by smart design and are located on the website (as of 03/30/2016) at [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fsm9\\_039613.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_039613.pdf).

**Project Specific Protective Measures (EA, p. 17)**

**Soils**

Allow heavy equipment operations on hydric soils, soils with a severe compaction hazard rating, and floodplains with frequent or occasional flooding hazard only during the months of July through November. Operations during December through June are allowed with the use of methods or equipment that do not cause excessive soil compaction. This standard does not apply to areas dedicated to intensive use, including but not restricted to administrative sites, roads, primary skid trails, log decks, campgrounds, and special use areas. (Revised Forest Plan, SW001, p. 74)

Allow heavy equipment operations on soils that have a high compaction hazard rating only during the months of April through November. Operations during December through March are allowed with the use of methods or equipment that do not cause excessive soil compaction. This standard does not apply to areas dedicated to intensive use, including but not restricted to administrative sites, roads, primary skid trails, log decks, campgrounds, and special use areas. (Revised Forest Plan, SW002, p. 74)

These standards apply to operations in the stands displayed in the table below.

**Stands Requiring a Limited Operating Season**

Compartment	Stand	Operating Season
1312	1	July-November
1312	2	April-November
1312	7	April-November
1312	14	April-November
1312	19	April-November
1313	1	April-November
1313	2	April-November
1313	4	April-November
1313	6	April-November
1313	10	April-November
1313	12	April-November
1313	21	April-November
1313	23	April-November
1314	1	April-November
1314	2	April-November

Compartment	Stand	Operating Season
1314	3	April-November
1314	4	April-November
1314	7	April-November
1314	8	April-November
1314	16	April-November
1314	17	April-November
1314	20	April-November
1314	23	April-November
1314	24	April-November
1314	32	April-November
1315	6	April-November
1315	7	April-November
1315	8	April-November
1315	16	April-November
1315	17	April-November

## Herbicide Use

- HU001 – Herbicides will be used only where necessary to achieve the desired condition in the treatment area, and then only when site specific analysis shows no unacceptable negative effects to human or wildlife health or the ecosystem as defined in HU002.
- HU002 – Herbicides will be applied at the lowest rate effective in meeting project objectives and according to guidelines for protecting human and wildlife health. Site-specific risk assessments are required prior to herbicide application and must be calculated using the procedure developed by Syracuse Environmental Research Associates (SERA).
- HU003 – To minimize potential effects of herbicide use, whenever possible, use individual stem treatments and directed spraying.
- HU004 – Herbicides that are not soil-active will be used in preference to soil-active ones when the vegetation management objectives can be met.
- HU006 – Clearly marked buffers will protect streamside zones, private land and public water supplies.
- HU010 – The use of herbicides is prohibited in the immediate vicinity of Proposed, Endangered, or Threatened plants.
- HU011 – Within a 300-foot buffer from any source waters (public water supply), do not apply herbicide treatments unless a site-specific analysis supports use within the designated buffer to prevent more serious environmental damage than is predicted if pesticides are used.
- HU012 – No herbicide mixing, loading, or cleaning areas will occur within a 300-foot buffer of private land, open water, source waters (public water supply), wells, or other sensitive areas.
- HU018 – A certified pesticide applicator will administer all pesticide application contracts and will supervise any Forest Service personnel involved with the application of pesticides on the Forest.

## Heritage

The following measures only apply to cultural resource sites that are unevaluated, eligible for listing, or listed in the National Register of Historic Places.

### ***HP1: Site Avoidance During Project Implementation***

Avoidance of historic properties (HP) will require the protection from effects resulting from the undertaking. Effects will be avoided by (1) establishing clearly defined site boundaries and buffers around archeological sites where activities that might result in an adverse effect. Buffers will be of sufficient size to ensure that integrity of the characteristics and values which contribute to, or potentially contribute to, the properties' significance will not be affected, and (2) routing proposed new roads, temporary roads, log landings and skid trails away from historic properties;

### ***HP2: Site Protection During Prescribed Burns***

- *Firelines.* Historic properties located along existing non-maintained woods roads used as fire lines will be protected by hand-clearing those sections that cross the sites. Although these roads are generally cleared of combustible debris using a small dozer, those sections crossing archeological sites will be cleared using leaf blowers and/or leaf rakes. There will be neither removal of soil, nor disturbance below the ground surface, during fireline preparation. Historic properties and features located along proposed routes of mechanically-constructed firelines, where firelines do not now exist, will be avoided by routing fireline construction around historic properties. Sites that lie along previously constructed dozer lines from past burns where the firelines will be used again as firelines, will be protected during future burns by hand clearing sections of line that cross the site, rather than re-clearing using heavy equipment. Where these activities will take place outside stands not already surveyed, cultural resources surveys and regulatory consultation will be completed prior to project implementation. Protection measures, HP1, HP3, and HP4, will be applied prior to project implementation to protect historic properties.
- *Burn Unit Interior.* Combustible elements at historic properties in burn unit interiors will be protected from damage during burns by removing excessive fuels from the feature vicinity and, as necessary, by burning out around the feature prior to igniting the main burn, creating a fuel-free zone. Burn out is accomplished by constructing a set of two hand lines around the feature, approximately 30 to 50 feet apart, and then burning the area between the two lines while the burn is carefully monitored. Combustible features located

in a burn unit will also be documented with digital photographs and/or field drawings prior to the burn. Historic properties containing above ground, non-combustible cultural features and exposed artifacts will be protected by removing fuel concentrations dense enough to significantly alter the characteristics of those cultural resources. No additional measures are proposed for any sites in the burn interior that have been previously burned or that do not contain combustible elements or other above ground features and exposed artifacts as proposed prescribed burns will not be sufficiently intense to cause adverse effects to these features.

- *Post-Burn Monitoring.* Post-burn monitoring may be conducted at selected sites to assess actual and indirect effects of the burns on the sites against the expected effects. SHPO consultation will be carried out with respect to necessary mitigation for any sites that suffer unexpected damage during the burn or from indirect effects following the burn.

### ***HP3: Other Protection Measures***

If it is not feasible or desirable to avoid an historic property that may be harmed by a project activity (HP1), then the following steps will be taken: (1) In consultation with the Arkansas SHPO, the site(s) will be evaluated against NRHP significance criteria (36 CFR 60.4) to determine eligibility for the NRHP. The evaluation may require subsurface site testing; (2) In consultation with the Arkansas SHPO, tribes and nations, and with the ACHP if required, mitigation measures will be developed to minimize the adverse effects on the site, so that a finding of No Adverse Effect results; (3) The agreed-upon mitigation measures will be implemented prior to initiation of activities having the potential to affect the site.

### ***HP4: Discovery of Cultural Resources during Project Implementation***

Although cultural resources surveys were designed to locate all NRHP eligible archeological sites and components, these may go undetected for a variety of reasons. Should unrecorded cultural resources be discovered, activities that may be affecting that resource will halt immediately; the resource will be evaluated by an archaeologist, and consultation will be initiated with the SHPO, tribes and nations, and the ACHP, to determine appropriate actions for protecting the resource and mitigating adverse effects. Project activities at that locale will not resume until the resource is adequately protected and until agreed-upon mitigation measures are implemented with SHPO approval.

## **Monitoring**

The Revised Forest Plan lists monitoring activities for the Ouachita National Forest. The Forest's monitoring program is designed to evaluate the environmental effects of actions similar to those proposed in this project, and also serves to assess the effectiveness of treatments. In order to ensure that the appropriate design criteria protecting soil stability, water quality, and other resources are followed, trained contract administrators and inspectors would be on-site during the implementation phase of the project. For those activities that include the use of herbicides, surveillance monitoring to ensure that herbicide label instructions are being followed would be conducted as part of the contract administration. Form R8-FS-2100-1, Herbicide Treatment and Evaluation Record, would be used to monitor work involving herbicides. Stream samples would also be taken to monitor for offsite movement. Fourche Mountain would be monitored before and after the Proposed Actions including timber harvesting, reforestation, and wildlife activities. No stream surveys were conducted because this watershed remains at a LOW risk according to the ACE model.

## **Finding of No Significant Impact (FONSI)**

I have determined that the proposed actions are not a major federal action, either individually or cumulatively, and will not significantly affect the quality of the human environment based on the EA and from past experience with similar forest management activities. Therefore, an environmental impact statement is not necessary. This determination is based upon the following factors:

1. Both beneficial and adverse effects have been considered and this action will not have a significant effect on the quality of the human environment (EA, Chapter 3 Environmental Disclosures).
2. The degree to which public health and safety may be affected is minimal (EA, pp. 74).
3. The project will not affect any unique characteristics of the geographic area (historic or cultural resource, wetlands, and floodplains, etc.). This is based on information gathered through records and site specific field inventories (EA, p. 30-36, 79-80).
4. Based on public involvement and the analyses conducted in the EA, the effects on the quality of the human environment are not likely to be highly controversial (EA, p.13 and Chapter 3 Environmental Disclosures).
5. The actions do not involve highly uncertain, unique, or unknown environmental risks to the human environment. All actions described have been conducted before, and district staff members have considerable expertise in carrying out these actions (EA, Chapter 3 Environmental Disclosures).
6. The actions in this decision will not establish a precedent for future actions with significant effects nor does it represent a decision in principle about a future consideration (EA, Chapter 3 Environmental Disclosures).
7. The cumulative effects of the proposed actions have been analyzed with consideration for past and foreseeable future activities on adjacent public and private land, and no significant cumulative effects would result from implementation (EA, p. 23) and Chapter 3 Environmental Disclosures).
8. The actions will not affect any sites listed in or eligible for listing in the National Register of Historic Places nor will they cause loss or destruction of significant scientific, cultural or historic resources. This is based on site specific cultural resource surveys conducted on the analysis area, preparation of a Cultural Resources Report, and consultation on the proposed project with the Arkansas State Historic Preservation Officer. (EA, pp. 79-80).
9. The action is “not likely to adversely affect” the red-cockaded woodpecker or its habitat. The action is “likely to adversely affect” the Northern long-eared bat; however, there are no effects beyond those previously disclosed in the programmatic biological opinion on implementing the final 4(d) rule dated January 5, 2016 (BE, p. 30).
10. None of the actions threaten to lead to violation of federal, state, or local laws imposed for the protection of the environment. This will be ensured by carrying out the decision in a way that is consistent with the forest-wide design criteria, management requirements and mitigation measures established in the Revised Forest Plan. For water quality management, State approved Best Management Practices will be used for this project. The project will be monitored to ensure BMPs are implemented. If implementing BMPs on a specific site results in effects significantly higher than anticipated, because of unforeseen site factors or events, appropriate corrective measures will be considered and implemented. This project will fully comply with State approved BMPs and the Clean Water Act (EA, pp. 33-36).

## **Findings Required by Other Laws and Regulations**

I have determined that actions included in this decision are consistent with the Revised Forest Land and Resource Management Plan for the Ouachita National Forest because the selected alternative has been planned and will be implemented in accordance with all applicable design criteria of the Revised Forest Plan (EA, p. 17). The actions described in the selected alternative are typical of those projected for implementation in the Revised Land and Resource Management Plan and for which the environmental effects are disclosed in the Final Supplement to the Environmental Impact Statement (FEIS).

## **National Forest Management Act (NFMA)**

Under 16 U.S.C. 1604 (g)(3)(E), a Responsible Official may authorize site-specific projects and activities on NFS lands to harvest timber only where:

1. Soil, slope, or other watershed conditions will not be irreversibly damaged (EA, p. 30-32).
2. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest; hand-planting will occur if natural regeneration is inadequate (EA, p. 42-46).
3. Protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment where harvests are likely to seriously and adversely affect water conditions or fish habitat; protection is provided by adherence to minimum widths of streamside management areas (SMAs), protected areas adjacent to bodies of water and on each side of perennial streams and other streams with defined channels (Revised Forest Plan, pp. 103-104).
4. The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber. See EA, Purpose & Need, pp. 6-12; EA.

A Responsible Official may authorize site-specific projects and activities on NFS lands using clearcutting, seed tree cutting, shelterwood cutting, and other cuts designed to regenerate an even-aged stand of timber as a cutting method only where:

1. For clearcutting, it is determined to be the optimum method; for other cutting methods it is determined to be appropriate and meets the objectives and requirements of the applicable land management plan (16 U.S.C. 1604 (g)(3)(F)(i)). See EA, Purpose & Need, pp. 6-12; EA.
2. The interdisciplinary review has been completed and the potential environmental, biological, aesthetic, engineering, and economic impacts on each advertised sale area have been assessed, as well as the consistency of the sale with the multiple use of the general area (16 U.S.C. 1604 (g)(3)(F)(ii)). See EA, Chapter 3.
3. Cut blocks, patches, or strips are shaped and blended to the extent practicable with the natural terrain (16 U.S.C. 1604 (g)(3)(F)(iii)). The Scenery Treatment Guide-Southern Region National Forests will be followed.
  - Trees should be selectively removed to improve scenery within high use areas, vista points, and along interpretive trails.
  - Flowering and other visually attractive trees and understory shrubs should be favored when leaving vegetation.
  - During permanent road construction, slash should be removed from view in the immediate foreground to the extent possible. Slash may be aligned parallel to roads at the base of fill slopes to collect silt, but usually only if it provides this function.
  - Slash should be burned or lopped to within an average of 2 feet of ground, when visible within 100 feet on either side of Concern Level 1 travel routes. Slash should be treated to within an average of 4 feet of the ground when visible within 100 feet on either side of Concern Level 2 travel routes.
  - Root wads and other unnecessary debris should be removed or placed out of sight within 100 feet of key viewing points.
  - Stems should be cut to within 12 inches of the ground in the immediate foreground.
  - Special road and landing design should be used. When possible, log landings, roads and bladed skid trails should be located out of view to avoid bare mineral soil observation from Concern Level 1 and 2 travel routes.
  - The visual impact of roads and constructed fire lines should be blended so that they remain subordinate to the existing landscape character in size, form, line, color, and texture.
  - Openings and stand boundaries should be organically shaped. Straight lines and geometric shapes should be avoided. Edges should be shaped and/or feathered where appropriate to avoid a

shadowing effect in the cut unit. Openings should be oriented to contours and existing vegetation patterns to blend with existing landscape characteristics, as appropriate.

- Cut and fill slopes should be revegetated to the extent possible. Cut banks should be sloped to accommodate natural revegetation.
4. These cuts are carried out according to the maximum size limits for areas to be cut in one harvest operation as required by 16 U.S.C. 1604 (g)(3)(F)(iv)). Cuts are carried out according to the maximum size of regeneration area for even-aged management under Design Criteria FR009 (Revised Forest Plan, p. 81).
  5. Timber cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and esthetic resources, and the regeneration of the timber resource (16 U.S.C. 1604 (g)(3)(F)(v)). See EA, Chapters 2 & 3.
  6. Under 16 U.S.C. 1604 (m) even-aged stands of trees scheduled for regeneration harvest generally have reached culmination of mean annual increment of growth, unless the purpose of the timber cutting is excepted in the land management plan. Regeneration harvests are in compliance with Design Criteria FR009, Harvest Age (Revised Forest Plan page 81).

#### **OBJECTION OPPORTUNITIES**

This decision was subject to objection pursuant to 36 CFR 218; one objection was received. The reviewing officer responded in writing to the objection on July 18, 2016, with instructions to include mitigation from the *Scenery Treatment Guide-Southern Region National Forests* for even-aged regeneration (shelterwood) harvests in this decision.

#### **IMPLEMENTATION DATE**

As per 36 CFR 218.12, this decision may be signed and implemented immediately.

#### **Contact**

For further information on this decision, contact Donna Reagan, Cold Springs Ranger District, PO Box 417, Booneville, AR 72927; phone (479) 675-4743 ext. 107; email [dreagan@fs.fed.us](mailto:dreagan@fs.fed.us).

#### **Responsible Official**

*/s/ AJ Brigance*

---

District Ranger AJ Brigance

July 22, 2016

---

DATE