Review of National Forests in Alabama's Revised Land and Resource Management Plan

September 2015

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Table of Contents

I. Introduction 5
II. Area Overview 6
III. Summary of Findings 6
A. Forest-wide multiple-use goals, objectives, and standards for the Forest, including estimates of the goods and services expected. 6
B. Multiple-use management prescriptions and management areas containing desired conditions, objectives and standards. 6
C. Identifying land that is suitable for timber production. 6
D. Determining the allowable sale quantity (ASQ) for timber and the associated sale schedule 7
E. Recommending wilderness areas. 7
F. Recommending wild and scenic river status. 7
G. Determining monitoring and evaluation requirements. 7
H. Identifying the lands that are administratively available for mineral development (including oil and gas), and consent to lease the available lands 7
IV. Need for Change Determination 8
V. Ecological Conditions and Trends 9
Restoration and Health of Forest Ecosystems 9
Watersheds – Water, Soil, and Air 20
Riparian Areas, Riparian Corridors and Streamside Zones Background 25
Threatened, Endangered and Sensitive Species 30
Rare Communities 48
Old Growth 51
Terrestrial Plant and Animal Communities 52
Fire Management 56
Recreation – Developed, Dispersed, and Backcountry 60
Wilderness and Wild and Scenic Rivers 61
Scenery 62
Heritage Resources 63
Minerals and Geologic Resources 66
Infrastructure 67
Land Acquisition 70
Special Uses 71
Natural Resource Interpretation and Education 72

VI. Social and Economic Conditions and Trends 76
VII. Evaluation of Need For Change 77
A. Forest-wide multiple-use goals, objectives, and standards for the Forest, including estimates of the goods and services expected. 77
B. Multiple-use management prescriptions and management areas containing desired conditions, objectives and standards. 78
C. Identifying land that is suitable for timber production. 78
D. Determining the allowable sale quantity (ASQ) for timber and the associated sale schedule 79
E. Recommending wilderness areas. 79
F. Recommending wild and scenic river status. 79
G. Determining monitoring and evaluation requirements. 79
H. Identifying the lands that are administratively available for mineral development (including oil and gas), and consent to lease the available lands 80
VIII. List of Preparers/Reviewers 81
IX. References 82

I. Introduction

In January 2004, the FEIS for the Revised Land and Resource Management Plan for the National Forests in Alabama was signed and implementation began. Alternative I from the FEIS was selected.

The revised Forest Plan decided and established the following:

1. Determining the Forest-wide multiple-use goals, objectives, and standards for the Forest, including estimates of the goods and services expected.

2. Determining multiple-use management prescriptions and management areas containing desired conditions, objectives and standards.

3. Identifying land that is suitable for timber production.

4. Determining the allowable sale quantity (ASQ) for timber and the associated sale schedule.

5. Recommending wilderness areas.

6. Recommending wild and scenic river status.

7. Determining monitoring and evaluation requirements.

8. Identifying the lands that are administratively available for mineral development (including oil and gas), and consent to lease the available lands.

As stated in 36 CFR 219.10(g)[1982 Planning Regulations], the Forest Supervisor shall review the conditions on the land covered by the plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. Now after 10 years of plan implementation this review is being prepared to (1) evaluate the current conditions of the ecological, social and economic sustainability on the national forest; (2) analyze trends that may influence progress toward desired conditions; and (3) determine any needed changes in plan direction. This review contains detailed information from years 2010-2014 as well as summary information from the previous 5-year review signed August 2011.

Additionally on April 9, 2012, the Department of Agriculture (USDA) adopted the final planning regulations for National Forest System (NFS)[2012 Planning Regulations] found at 36 CFR part 219 (77 FR 21161). Under the 2012 planning regulations(36 CFR 219.12(c), a monitoring program for the revised Forest Plan must be developed to meet the requirements of the 2012 planning regulations within 4 years of the establishment of the regulation(by May 9, 2016). This report serves to notify the public of the intent to develop the monitoring program as per the regulation.

This review assessed information provided by Forest Service employees, agency databases, and observations in the field. Summary information from previously prepared Monitoring and Evaluation Reports is also included and the full reports may be view online here.

II. Area Overview

The National Forests in Alabama includes approximately 668,000 acres of National Forest System land in the southern Appalachian Mountains, Cumberland Plateau, Piedmont and Coastal Plain physiographic regions. There are four National Forests, divided into six Ranger Districts.

- The Bankhead National Forest is located in the northwestern part of the state in Lawrence, Winston and Franklin Counties.
- The Conecuh National Forest is located in the southern part of the state along the Alabama/Florida line in Covington and Escambia Counties.
- The Talladega National Forest is divided into three Ranger Districts: the Oakmulgee District lies in the central part of the state, east of Tuscaloosa in Hale, Tuscaloosa, Bibb, Perry, Chilton and Dallas Counties. The Shoal Creek and Talladega Districts are located in the northeastern part of the state in Cherokee, Calhoun, Cleburne, Talladega and Clay Counties.
- The Tuskegee National Forest lies in the east-central part of the state west of Auburn, in Macon County.

III. Summary of Findings

A. Forest-wide multiple-use goals, objectives, and standards for the Forest, including estimates of the goods and services expected.

Finding: The review team identified no need to change existing plan direction in regard to multiple-use goals, objectives and standards.

B. Multiple-use management prescriptions and management areas containing desired conditions, objectives and standards.

Finding: The review team identified no need to change existing plan direction in regard to multiple-use management prescriptions and management area direction.

C. Identifying land that is suitable for timber production.

Finding: The review team identified no need to change existing plan direction in regard to the acres suitable for timber production.

D. Determining the allowable sale quantity (ASQ) for timber and the associated sale schedule.

Finding: The review team identified no need to recalculate the ASQ for the Forest Plan.

E. Recommending wilderness areas.

Finding: The review team identified no need to re-evaluate wilderness recommendations.

F. Recommending wild and scenic river status.

Finding: The review team identified no need to re-evaluate wild and scenic rivers recommendations.

G. Determining monitoring and evaluation requirements.

Finding: In accordance with the 2012 Planning rule(36 CFR 219.12(c)(1), a monitoring program for the revised Forest Plan must be developed to meet the requirements of the rule prior to May 2016.

H. Identifying the lands that are administratively available for mineral development (including oil and gas), and consent to lease the available lands.

Finding: The review team identified no need to change the lands identified as administratively available for mineral development or consent to lease the available lands.

IV. Need for Change Determination

Based on the implementation of the NFsAL Revised Forest Plan and the review as detailed in this document, I have determined that the condition on the land and demands of the public have not changed significantly since 2009. Accordingly, the NFsAL Revised Plan does not need to be revised at this time.

However, the review identified potential items of work and concerns that could lead to minor adjustments or amendments to the Plan. These items will be addressed as we continue to implement and monitor the Plan.

In accordance with 36 CFR 219.12(c), I will develop a monitoring program that meets the requirements of the 2012 planning regulations.

CARL PETRICK
Forest Supervisor

9/22/2015
Date

V. Ecological Conditions and Trends

The Revised forest plan has 49 Goals and associated objectives. These goals and objectives were used as a starting point to evaluate how well the plan is being implemented and where changes may be needed.

This section reports forest-wide summary information as well as specific detailed district examples where available.

Restoration and Health of Forest Ecosystems

GOAL 1 Manage forest and woodland ecosystems in order to restore and/or maintain native communities to provide the desired composition, structure and function. Emphasis will be placed on maintaining forest and plant community types not abundant on private lands.

Several components contribute to providing for the restoration and maintenance of native communities. Vegetative treatments including fire, timber harvest, tree planting and non-native invasive species (NNIS) treatments contribute to the composition, structure and function of major forest communities and to providing key habitats and successional stages.

Table 1 displays summary of acres of vegetative treatments during the first 5 years of forest plan implementation and the acres of treatments by activity and year for years 2010-2014.

Table 1: Acres of vegetative treatments by activity and fiscal year*.

Activity	Acres					
	FY 2005-FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Timber Harvest - Thinning	14,211	3,694	3,618	3,113	3,502	5,068
Burning	410,326	84,504	70,351	97,626	115,900	119,929
NNIS	2,959	961	975	602	516	1,471
Tree Planting	5,077	1,054	800	1,591	1,127	1559
Natural Regeneration	7,219	1,762	502	43	35	42
Site preparation	4,134	877	408	1,171	599	1,886
Timber Harvest – Regeneration	4,757	1,334	1,404	3,630	1,801	1,308

Table 1: Acres of vegetative treatments by activity and fiscal year*.

Activity	Acres					
	FY 2005-FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Release	9,073	1,776	3,231	2,280	1,718	2,651
Pre-commercial thinning	2,245	0	525	216	0	0

***All values except timber harvest acres taken from FACTS.**

Native woodland understories (especially herbaceous, grass-dominated communities) are being maintained and expanded in managed uplands via NNIPS treatments, timber thinnings and burning. RCW HMAs are generally some of the best representative examples of functional pyrophitic understories on NFsAL lands. These habitats also provide the required life cycle components for many other species of conservation concern like bobwhite quail, Bachman's sparrow, prairie warbler, and monarch butterfly. Quality understories are lacking in longer rotation burn areas and stands with shaded heavier basal areas.

OBJECTIVES

1.1 Restore and maintain approximately 17,000 acres of *Mountain Longleaf Pine Forests and Woodland Communities* (CISC 21 and 26) and associated upland pine (32), pine-hardwood (12), hardwood-pine (44, 45, 47, 48, 49) and hardwood (51, 52, 53, 54, 56, 60) forest types on the Talladega Division over the first ten years of plan implementation, and at similar rates following that period. Restoration of these native communities will reduce loblolly pine (31) and yellow pine (25) forest types, currently represented in the *Dry and Dry-Mesic Oak Pine Forest Community*.

Talladega

The Talladega Ranger District has completed numerous timber sales to implement longleaf restoration over the last several years, particularly on the south end of the district due to red-cockaded woodpecker habitat management area. Several environmental documents to provide future longleaf restoration and to prepare stands for expansion of the red-cockaded woodpecker are in progress.

1.2 Restore and maintain approximately 17,000 acres of *Upland Longleaf Pine Forests and Woodland Communities* (CISC 21 and 26) on the Coastal Plain management areas (Oakmulgee division, Conecuh National Forest, and the Tuskegee National Forest) over the first ten years of plan implementation, and at similar rates following that period. Restoration of these native communities will reduce loblolly pine (31), yellow pine (25) and slash (22) pine forest types,

currently represented in the *Dry and Dry-Mesic Oak Pine Forest* and *Wet Pine Forest Woodlands, and Savannas Communities*.

1.3 Restore and maintain approximately 10,000 acres of *Xeric Pine and Pine-Oak Forest and Woodland* (CISC 32 and 12), *Upland Longleaf Pine Forest and Woodland* (21 and 26), and *Dry Mesic Oak Forest* (53) *Communities* on the Bankhead National Forest over the first ten years of plan implementation, and at similar rates following that period. Restoration of these native communities will reduce loblolly pine (31) and yellow pine (25) forest types, currently represented in the *Dry and Dry-Mesic Oak-Pine Forest Community*.

1.4 Thin overstocked stands giving priority to first treatments. Thin stands of species not native to their site (usually CISC 22, 25, 31, 32) which cannot be immediately restored, to reduce hazards and sustain the stand until restoration can be accomplished. Thin approximately 30,000 acres on Bankhead National Forest, 24,000 acres on Conecuh National Forest, 12,000 acres on Oakmulgee Division, 20,000 acres on Talladega Division, and 500 acres on Tuskegee National Forest over the first ten years of plan implementation.

Bankhead

Table 2: Acres of Vegetation Management Activities by Implementation Year on the Bankhead National Forest*

	FY10-Acres	FY11-Acres	FY12-Acres	FY13-Acres	FY14-Acres	Total
Timber Harvest - Thinning	642	1,256	1,253	1,159	951	**5,261**
Burning	16,296	20,147	20,194	18,032	19,158	**93,827**
NNIS	464	311	184	290	388	**1,637**
Tree Planting	0	129	0	34	2	**165**
Natural Regen	0	0	0	0	0	**0**
Release-Fire	3,022	1,544	1,999	1,860	1,553	**9,978**
PCT/Release-Chainsaws	378	511	20	178	193	**1,280**
Site Prep	129	0	34	0	142	**305**

Table 2: Acres of Vegetation Management Activities by Implementation Year on the Bankhead National Forest*

	FY10-Acres	FY11-Acres	FY12-Acres	FY13-Acres	FY14-Acres	Total
Timber Harvest - Regen	0	0	0	0	64	**64**
Release	3,022	1,544	1,999	1,860	1,553	**9,978**
Pre-commercial Thinning	378	511	20	178	193	**1,280**
Midstory Removal	491	0	344	55	164	**1,054**

***Acres as reported by the Bankhead Ranger District**

The Bankhead National Forest (BNF) recently completed the planning process for the next stage in priority restoration work. A Decision Notice was signed in 2015 that authorizes the following restoration activities in the communities where restoration needs have been identified in the Forest Plan:

- 3,710 acres of thinning overstocked stands
- 920 acres of shortleaf pine woodland restoration by clearcut with reserves and planting shortleaf pine
- 70 acres of shortleaf pine – hardwood forest by clearcut with reserves and planting shortleaf pine
- 1,200 acres of midstory removal
- 250 acres of release for shortleaf and hardwood species
- 30 acres of hardwood regeneration and other associated projects.

1.5 Restore and increase, by 30% as a minimum, areas of each management unit managed as *Mountain Longleaf Forest and Woodland*, *Upland Longleaf Pine Forest and Woodland*, *Dry and Dry-Mesic Oak-Pine Forest*, and *Xeric Pine and Pine-Oak Forest and Woodland Community* types (or fire sub-climax, communities of pine (CISC 21, 32, 25, 22), pine/oak (26, 12, 16, 14), oak-pine (44, 45, 47, 48, 49), and oak (51, 52, 53, 54, 60) forest types) in woodland and savanna condition, with reduced tree canopy cover and restored native herbaceous ground cover over the first ten years of plan implementation.

Oakmulgee

Table 3 displays the acres within project level decision towards meeting Forest Plan Goal 1 on the Oakmulgee district by objective.

Table 3: **Project Level Decisions Oakmulgee Ranger District**				
	Objective 1.5 District Category: AOC 1 & AOC 2	**Objective 1.4** District Category: AOC 3	**Objective 1.2** District Category AOC 4	**Objective 1.4** District Category: AOC 5
Longleaf Ecosystem Restoration Project (EIS)	7,393	2,813	2,831	0
Comp 16 – Std 9 DM 12522	0	17	0	0
Comp 23/Std 36 & Comp 24/Stds 1 DM 6615	0	0	66	0
Comp 59 – Stds 7 & 30 DM 20915	0	0	57	0
Comp 49 – Stds 8 & 24 DM 20133		47	28	0
Comp 50 – Std 13 DM 15839			12	0
Payne Lake Project 2009 (EA)	255	0	522	0
Southern Pine Beetle Abatement Project	3,900	1,920	878	0
Comp 127 – Std 24 DM 28837	0	0	16	0
Comp 114 – Stds 22, 25 & 28 DM 26024	0	0	60	0
Comp 107 – Stds 26 & 27 DM 32575	0	0	61	0
Comp 107 – Std 22 DM 32576	0	41	0	0
Comp 107 – Std 21 & 25 DM 32577	0	0	57	0
Clary Hill Salvage	211	0	0	0
Pine Flat Salvage	202	0	0	0
Cowpen Salvage West DM	140	0	0	0
Friendship Salvage	229	0	0	0
Pine Flat EA	203	0	951	620
Deer Pen EA	22	0	153	187
TOTALS	**23,892**	**4,838**	**5,692**	**807**

Table 4 displays acres sold and harvest by Forest Plan objective under Forest Plan Goal 1 for the Oakmulgee Ranger District on the Talladega National Forest.

Table 4: Acres Sold and Harvested by Forest Plan Objective under Forest Plan Goal 1 on the Oakmulgee District

	Objective 1.5 *District Category: AOC 1 & AOC*		**Objective 1.4** *District Category: AOC 3*		**Objective 1.2** *District Category AOC 4*		**Objective 1.2** *District Category AOC 5*		Comments
	SOLD	CUT	SOLD	CUT	SOLD	CUT	SOLD	CUT	
2400-6T: C-27	0	0	92	92	0	0	0	0	

Table 4: Acres Sold and Harvested by Forest Plan Objective under Forest Plan Goal 1 on the Oakmulgee District

	Objective 1.5 *District Category: AOC 1 & AOC*		**Objective 1.4** *District Category: AOC 3*		**Objective 1.2** *District Category AOC 4*		**Objective 1.2** *District Category AOC 5*		Comments
	SOLD	CUT	SOLD	CUT	SOLD	CUT	SOLD	CUT	
2400-6T: 16A	72	72	17	17	205	205	0	0	
2400-6T: 16B	0	0	134	134	22	22	0	0	
IRSC: Power of Flight A	0	0	0	0	361	361	0	0	
2400-6T: 7, 10 & 11	85	85	43	43	335	335	0	0	
2400-6T: C-50	291	291	55	55	63	63	0	0	
2400-6T: C 45 & 49	84	69	160	160	28	28	0	0	
2400-6T: C 23 & 24	230	230	72	72	71	71	0	0	
2400-6T: C 22	252	252	0	0	0	0	0	0	
2400-6T: 59 & 67	77	77	237	237	249	249	0	0	
2400-6T: Payne Lake	128	128	53	53	150	150	0	0	
SPA: Vick Range	89	89	154	154	0	0	0	0	
IRTC: Yeager IRTC	0	0	0	0	167	167	0	0	
SPA: South Sandy #1	461	461	0	0	0	0	0	0	
SPA: South Sandy #2	519	510	0	0	0	0	0	0	
SPA: South Sandy #3	590	590	0	0	0	0	0	0	
SPA: South Sandy #4	0	0	0	0	158	0	0	0	
2400-6T: Upper Payne	56	28	0	0	42	0	0	0	
2400-6T: Eagle Roost	74	74	0	0	0	0	21	12	
IRTC: Dan Branch	109	31	0	0	181	0	50	0	
IRTC: Fire	245	0	0	0	311	0	152	0	
IRTC: 709 west	0	0	39	0	269	0	44	0	
SPA: Antelope	92	0	64	0	293	0	77	0	
2400-6T: Deer	55	0	0	0	198	0	158	0	
2400-6T: Huckleberry Hill	184	184	11	11	0	0	0	0	
2400-6T: Cahaba Tower	124	124	4	4	295	295	0	0	
TOTALS	**3,817**	**3264**	**1135**	**1032**	**3398**	**1966**	**502**	**12**	**Total sold = 8,852 Total Cut = 6,274**
		86%		91%		58%		2%	71%

GOAL 2 Minimize adverse effects of invasive non-native species. Control such species where feasible and necessary to protect National Forest resources.

The National Forests in Alabama developed an invasive species strategy to reduce, minimize or eliminate the potential for introduction, establishment, spread and impacts of invasive species across the national forests and the surrounding lands.

Since 2004, all NFsAL districts have become involved with the control of non-native invasive plant species (NNIPS). Each district currently has NEPA decisions in place for treatment. The following table lists total acres treated for each district from 2010 through 2014. While most infestations have required more than one herbicide treatment, several infestations have now been eradicated and have been re-colonized by native plant communities.

Table 5: Total Acres* of NNIPS Treated Forest-wide

Species	Total Acres Treated from 2004 to 2014						
	Bankhead	Conecuh	Oakmulgee	Shoal Creek	Talladega	Tuskegee	NFsAL
Cogongrass	0	172	103	1	0	5	**281**
Kudzu	565	4	795	608	10	22	**2,004**
Tallowtree	0	47	0	0	0	0	**47**
Privet	485	0	12	29	0	11	**537**
Mimosa	914	0	12	7	0	1	**934**
Lespedeza bicolor	305	0	91	438	1,391	110	**2,335**
Japanese Climbing Fern	0	36	0	0	0	5	**41**
Other - Mixed	882	93	85	2	25	16	**1,103**
Total	**3,151**	**352**	**1,098**	**1,085**	**1,426**	**170**	**7,282**

*Acres as reported in the Database of Record (FACTS)

Figure one displays total acres treated during the period 2005-2014, and Table 6 list acres treated by district for FY 2014.

Figure 1 - NFsAL Invasive Plant Acres Treated

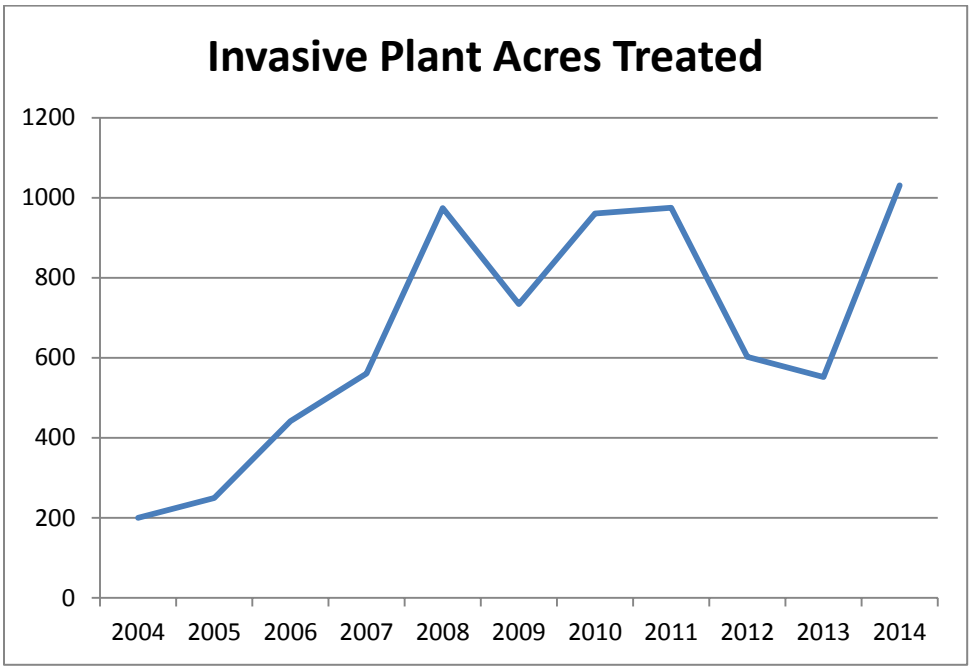


Table 6: NNIS Acres Treated by District and Species

	Acres treated in FY 2014						
	BH	CO	OA	SC	TA	TU	NFsAL
Cogongrass	0	26	18	0	0	1	45
Kudzu	0	0	9	15	5	0	29
Tallowtree	0	0	0	0	0	0	0
Privet	0	0	0	0	0	0	0
Mimosa	0	0	3	0	0	0	3
Lespedeza bicolor	0	0	39	251	221	45	556
Japanese Climbing Fern	0	0	0	0	0	0	0
Other - Mixed	388	0	10	0	0	0	398
Total	**388**	**26**	**79**	**266**	**226**	**46**	**1031**

Cogongrass remains a priority invasive for NFsAL. Two (Conecuh and Oakmulgee) of the six districts have extant known cogongrass infestations and annual treatments are occurring in an attempt to eradicate all known congongrass from NFsAL lands.

Bankhead

The Bankhead National Forest recognizes that NNIPS represent a significant threat to our restoration efforts as well as how these communities function. We are concentrating our efforts in a manner that will be most effective in restoring all aspects of a particular community, instead of just concentrating on one part, e.g. overstory, etc. A total of 1,637 acres of NNIS have been treated during the period 2010 through 2014 on the Bankhead National Forest (see Table 2 above).

Talladega

The Talladega Ranger District has made tremendous strides toward removing bicolor lespedeza hazards along open roads on the south end of the district. The priority now is stands where there is a sea of bicolor lespedeza plants which have been released by prescribing burning and harvesting. Eradication efforts continue with both retreatment and treating new areas.

OBJECTIVES

2.1 Inventory and map priority areas with non-native, invasive plant species (noxious weeds).

Various surveys (via contract, volunteer, and agency personnel) have occurred over the past decade and have resulted in the identification of hundreds of priority NNIS infestation points and polygons. These spatial data were represented in various ArcMap layers and files. During two migration events, these data were uploaded into the NRIS TESP-Invasives corporate database in 2011 and 2012. Many other invasive plant infestations exist on the NFsAL and are surveyed and mapped locally and/or using the corporate database as projects and funding opportunities develop.

GOAL 3 Manage existing forest communities to reduce risks from insects and disease.

Under the Section 8204 of the Agricultural Act of 2014, the governor of Alabama requested and was granted two landscape scale area designations as part of an insect and disease treatment program. The Talladega National Forest and the Bankhead National Forest were designated. Designated areas will be further evaluated in an open, transparent and collaborative manner to identify potential projects that reduce the risk or extent of, or increase resilience to insect and disease infestations.

Bankhead

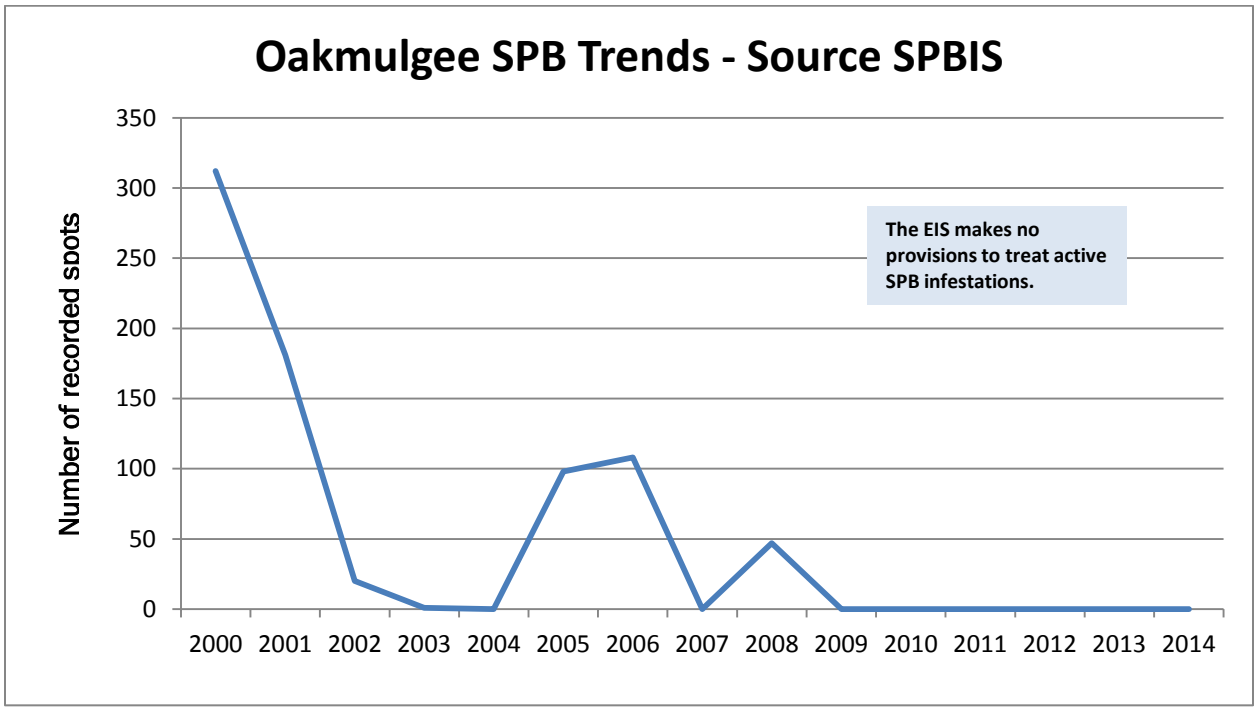
The Bankhead National Forest was severely impacted by the Southern Pine Beetle in the early 2000's and is aggressively working to reduce the risk of this in the future. The efforts include thinning southern yellow pine stands, prescribed burning and restoring appropriate pine species to the site, e.g. shortleaf and longleaf pines.

Monitoring the eastern hemlock communities on the Forest for the presence of Hemlock Woolly Adelgid (HWA) infestations continues. To date, no HWA has been detected on the BNF, however a Decision Notice was signed in 2013 that will allow hemlock treatments to reduce the impacts of HWA. The hemlock population on the Bankhead represents the southernmost extent of the eastern hemlock range and is an important component of the canyon/riparian communities on the BNF.

Oakmulgee

The Oakmulgee District has a history of SPB infestations and those infestations generally follow trends or cycles. To determine current risk and stay aware of population trends, the District participates in a South-wide monitoring survey of populations of SPB and their associated predatory clerid (Family *Cleridae*) beetles. Each spring traps baited with SPB attractant are set out in the forest. This trapping regime is repeated on federal, state, and private lands across the south for a 4-6 week period. From this trapping, predictive indicators are used to provide a forecast level of SPB activity. Indexes related to the number of SPB trap/day, the ratio of the predatory clerid beetles to the prey SPB, and the % SPB are applied to the SPB prediction model.

Figure 2 - Oakmulgee SPB Trends



Oakmulgee survey data from 2008 – 2012 indicates populations well below the threshold for a declining population. Additional trend data from other sample sites in the state predicts SPB populations in Alabama to be categorized as Static/Low for the same time frame.

It should be noted that the survey data for 2013 are reflecting SPB/Day indices of over 80 SPB/Day and percent SPB index of 35%. **(Reference Figure 3: Spring SPB Pheromone Survey Data (SPB/Day) and Figure 4: Spring SPB Pheromone Survey Data (%SPB)).** In general, average trap catches that exceed 30 SPB/day especially those in which SPB make up more than 35% of the total catch, are indicative of increasing or continued high SPB infestation levels. When catches of predators (clerids) far outnumber those of SPB and fewer than 10 SPB adults are caught per day, infestation trends are likely to decline or remain at low levels.

Figure 3- Spring SPB Pheromone Survey Data (SPB/day)

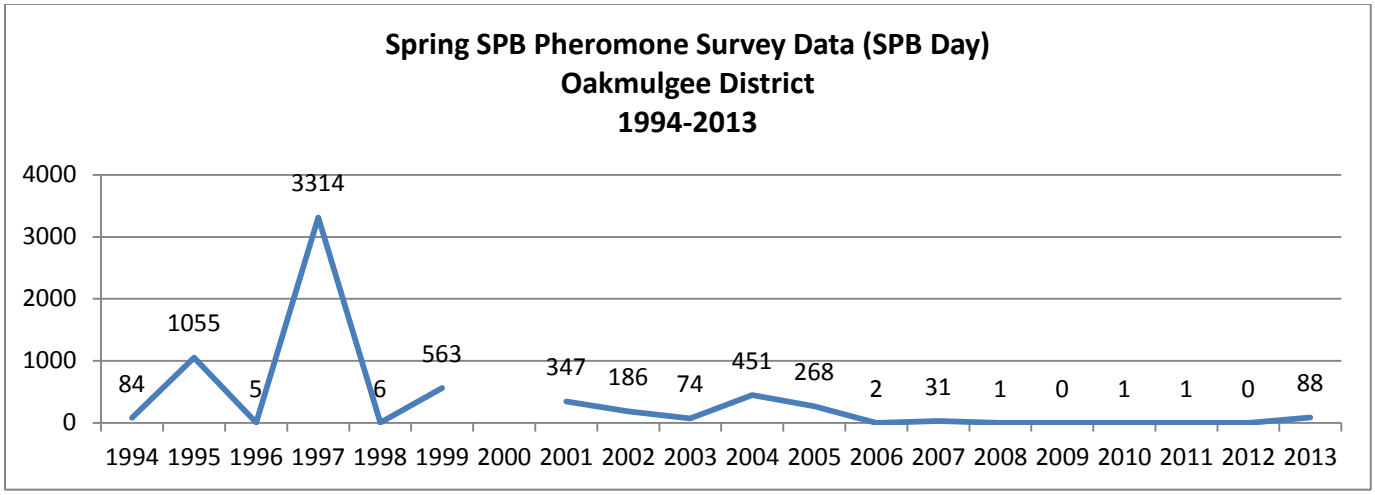
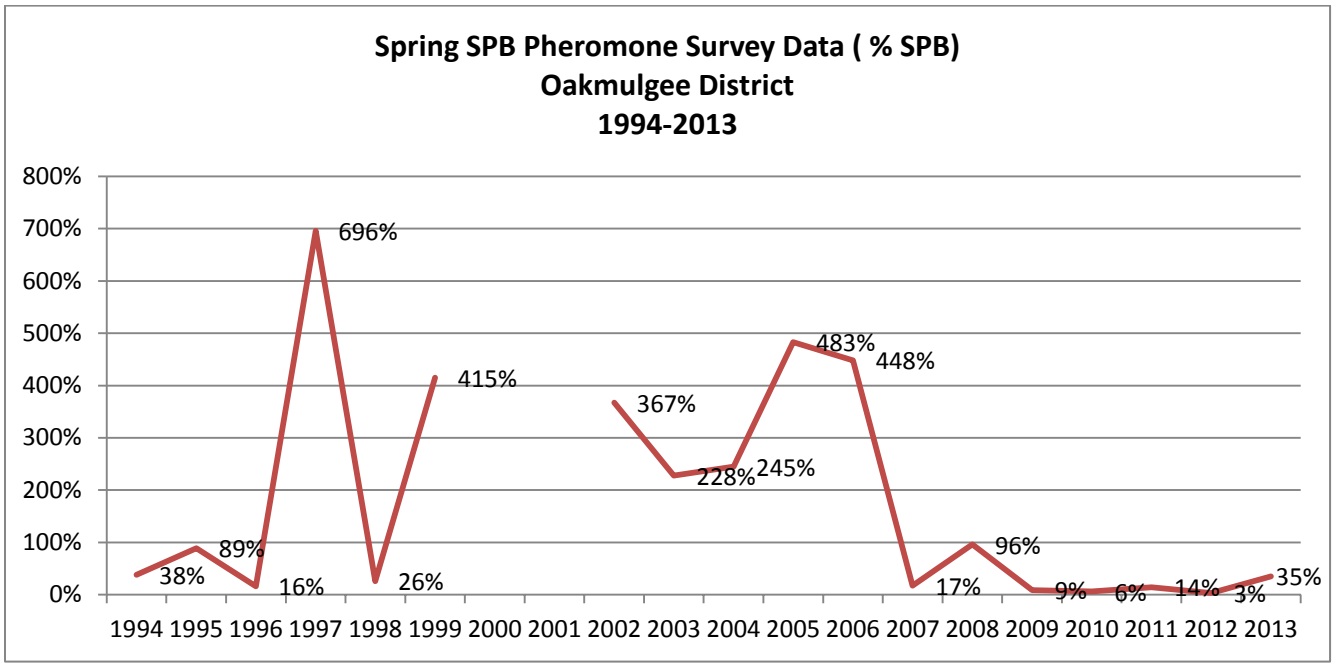


Figure 4 - Spring Pheromone Survey Data (% SPB)



Watersheds – Water, Soil, and Air

GOAL 4 Watersheds are managed and/or restored to provide resilient and stable conditions to support the quality and quantity of water necessary to protect ecological functions and support intended beneficial water uses.

The National Forests in Alabama manages and/or restores its watersheds to provide resilient and stable conditions to support the quality and quantity of water necessary to protect ecological functions and support intended beneficial water uses. The primary goal of the water program is to ensure compliance with the Clean Water Act and thereby supports the designated uses of all water bodies, streams, and wetlands as described by the Alabama Department of Environmental Management (ADEM). We ensure that all designated uses including Fish and Wildlife, Public Water Supply, Swimming and Other Whole Body Water Contact Sports, and Outstanding Alabama Water are supported and that our management activities do not result in impairment or contribute to any current impairment. Currently there are no 303d listed waters on the NFsAL and there are no downstream 303d listed waters caused by our management activities.

Talladega

A watershed assessment was completed on the Tallaseehatchee watershed and improvements to the watershed were identified.

OBJECTIVES

4.1 In 5th level watersheds with a high percentage of impaired waters, but a low percentage of National Forest ownership, examine possible partnership opportunities with other interested individuals and entities to address impairment issues.

Restoring and managing watersheds is an ongoing process with partners such as the Alabama Department of Environmental Management, The Natural Resources Conservation Service, Nature Conservancy and others thru programs that support the improvement of watersheds.

Bankhead

The Bankhead National Forest works through an informal partnership with Alabama Water Watch and Winston County Smith Lake Advocacy on the Rock Creek Watershed Management Plan. Rock Creek is identified on Alabama Department of Environmental Management's 303D list of impaired water bodies. AWW received an EPA planning grant to identify potential sources of pollution and voluntary measures to rectify impairment issues in the Rock Creek watershed. An application for an EPA grant to implement the Management Plan has been submitted.

The Bankhead National Forest has worked recently to correct poorly maintained sections of the Owl Creek and Flint Creek trail systems. This work has included installing two horse trail bridges to reduce the negative impacts to water quality associated with water crossings. Other work has included general maintenance across the trail system which has reduced erosion and potential impacts to the stream system.

4.2 Watershed improvement needs are prioritized annually by watershed assessment issues and current inventory.

Watershed Assessments continue using a new process implemented in 2011, Watershed Condition Class Assessments (WCCA). Each watershed is categorized by 12 assessment areas that are numerically ranked resulting in conditions described as poor, fair or good. Watershed Action Plans are written to address watershed needs and implemented as funding becomes available. Currently we have two watershed action plans implemented: Rush Creek-Brushy Creek on the Bankhead NF and Tallaseehatchie Creek on the Talladega Division, Talladega NF.

4.3 Annually coordinate non-point source pollution (NPS) assessments with the Alabama Department of Environmental Management (ADEM).

In the past, NFsAL coordinated and reported watershed improvement project accomplishments to ADEM that reduced sources of NPS. NPS for forest practices is now permitted by ADEM in the form of storm water permits that covers NPS from roads and logging decks exceeding 5 acres in size. NFsAL forest practices follow State best

management practices as well as more stringent Forest Plan standards in control of sources of NPS. The NFsAL watershed improvement program provides restoration to an average of 30 acres per year of actively eroding sites.

The NFsAL ensure compliance with these Federal and State standards by actively participating in the planning stages of all projects from the NEPA planning stages through implementation and beyond. Annual watershed assessments are coordinated to support these NEPA projects.

GOAL 5 Maintain or improve water quality to meet State and Federal standards and to provide for the beneficial uses of water.

OBJECTIVES

5.1 Establish and maintain baseline water monitoring stations in each physiographic area.

A water monitoring program was implemented in 2004 to address this objective and ran thru 2010.

Bankhead

The Bankhead has an informal partnership with Alabama Water Watch and Winston County Smith Lake Advocacy. These groups monitor water quality (chemical and bacterial) on Smith Lake and in Sipsey Fork.

5.2 Base watershed assessments/analysis each year on areas with proposed management activities.

Implementing the new watershed condition class assessment process described above under 4.3 determines watershed priorities. Additional watershed analysis are conducted during the NEPA process and used in conjunction with WCCA to address specific forest management activities.

5.3 Determine minimum instream flow rate for order 4 and higher streams with priority for streams with aquatic T&E species.

This is accomplished on a case by case basis as needed. Currently water rights issues within the State of Alabama are minimal and do not affect in-stream requirements for the NFsAL to maintain in order to provide a viable flow for aquatic T&E species.

The NFsAL maintains a collection of geospatial datasets that identifies riparian areas, streamside management zones, special areas, stream courses, and stream orders. These datasets are used during the analysis and planning stages of all projects as well as the

implementation. We have developed decision support systems and atlases to allow for full integration of these knowledge based datasets with field personnel.

GOAL 6 Maintain soil (site) productivity and improve, where feasible.

Talladega

Several watershed improvement projects were completed to include blocking numerous illegal ATV trails, removing access for unmanaged recreation at Rob Roy on Talladega Creek and controlling off road illegal vehicle traffic in many locations.

OBJECTIVES

6.1 Each year, obtain soil quality data necessary to provide input into WEPP model for areas with proposed management activities.

This is being accomplished by Forest Service Research branch, Universities and the Natural Resource Conservation Service (NRCS). Data is collected thru National Soil Survey and stored in the NASIS database operated and maintained by the NRCS.

6.2 Complete soil resource inventory on the Oakmulgee Division, Talladega National Forest.

The Soil Inventory of the Oakmulgee Division, Talladega National Forest was completed during FY 2007.

6.3 Re-correlate and update as necessary the Bankhead National Forest soil resource inventory.

A re-correlation of a 1979 soil inventory of the Bankhead National Forest was initiated in Winston County through the Natural Resource Conservation Service. Winston County is complete while Franklin and Lawrence Counties remain.

GOAL 7 Implement the goals of the Federal Clean Air Act, (CAA) along with the goals of other federal legislation aimed at protection and management of the National Forests. The CAA has goals for protection and improvement of: air quality through the National Forest (plus surrounding lands) and, the air quality related values (AQRVs) established for the Sipsey Wilderness (a Class I area). Inventory and management provisions within Renewable Resources Planning Act (RPA) provide goals similar to "AQRV protection " for the general Forest area.

OBJECTIVES

7.1 Forest Service (FS) will review applications to state air regulatory agencies for major new emissions near the Sipsey Wilderness for potential impacts on its air quality related values (AQRVs).

The Clean Air Act and its amendments include special provisions to help protect air quality in Class I areas such as Sipsey Wilderness on the William B. Bankhead National Forest. Specifically, the Prevention of Significant Deterioration (PSD) permitting program requires that new large sources of air pollution near Class I areas must be evaluated to ensure that no adverse impacts occur to any AQRVs. The Federal Land Manager (FLM), who has authority over the protected Class I areas, or his delegate, reviews emission information from the proposed source to make a determination as to whether adverse impacts may occur.

Typically, a proposed permitting action is screened to determine if either the emissions from the source are sufficiently high or the distance to the Class I area are sufficiently low to warrant an atmospheric modeling analysis. Only a few permitting actions have large enough emissions while still being fairly close to the Class I area to warrant this additional level of scrutiny. Once atmospheric modeling is completed, the results are reviewed to assess any potential impacts that the source may have on the Class I area. Often at this stage of the review, the Forest Service's involvement can result in lowered emission rates from the source, which will have a positive impact on the AQRVs at the Class I area. If atmospheric modeling results indicate that adverse impacts to the resource may occur and negotiation with the applicant or regulatory agency does not result in lower permitted emission rates from the source, then the FLM may issue an "Adverse Impact Determination" to the air regulatory agency. Since the Forest Service is only serving as an advisor during this permitting process, it is the ultimate responsibility of the air regulatory agency to either issue or deny the PSD permit, despite the issuance of an "Adverse Impact Determination".

NFsAL reviews all PSD permits affecting the Sipsey Wilderness and submits comments to ADEM.

7.2 Forest Service will participate in the State Implementation Plan (SIP) planning process. One objective of the SIP is to regulate atmospheric emissions from many industrial, commercial, land use and other types of activities. Forest Service participation will focus on air pollution impacts on resources throughout the National Forests and on regulation of pollutants that may be generated by land management activities.

State air regulatory agencies typically prepare SIPs in response to nonattainment designations within their borders. The pollutants of most concern within Alabama are ozone and fine particulate matter, and the area around Birmingham has been designated as nonattainment for both of these pollutants. However, since no National Forest intersects the nonattainment area, and emissions from Forest Service activities have not been shown to contribute to ozone or fine particulate matter exceedances in the Birmingham area, the

Forest Service did not participate in the SIP planning process for these two pollutants. However, the U.S. Environmental Protection Agency (EPA) will occasionally require updated SIPs in response to new air quality issues, such as the Regional Haze Rule, and the Forest Service participated in the Regional Haze SIP planning process. This is discussed in further detail under Objective 7.4.

7.3 FS will annually review the status of counties near the National Forests regarding their attainment of the National Ambient Air Quality Standards. Where a non-attainment area is formally recognized, FS will participate in SIP modification, as described above, to bring the area back into attainment status.

The only area in Alabama that is in non-attainment with the National Ambient Air Quality Standards (NAAQS) is the metropolitan area of Birmingham, which does not encompass any portion of the National Forests in Alabama. The SIP process is complete. The NFsAL is an active participant with the State of Alabama/ADEM.

7.4 Forest Service will work with state air regulatory agencies and regional planning organizations to reduce visibility impairment at the Sipsey Wilderness Class I area.

As mentioned above, the Forest Service worked closely with the state of Alabama, as well as all states, in the Regional Haze SIP planning process. The Regional Haze SIP sets forth emission reductions that are required to bring visibility back to "Natural Background" conditions at Class I areas such as Sipsey Wilderness by the year 2064. The Air Resource Specialists with the Forest Service worked with the regional planning organization VISTAS (Visibility Improvement State and Tribal Association of the Southeast) on developing emission inventories, reviewing atmospheric modeling, and assessing whether the proposed emission controls on existing sources (called Best Available Retrofit Technology, or BART) were appropriate. The Forest Service also provided technical expertise and comments on the draft Alabama Regional Haze SIP that was submitted to EPA for approval in 2008. EPA has not yet approved any state's SIP.

Riparian Areas, Riparian Corridors and Streamside Zones Background

GOAL 8 **Riparian ecosystems, wetlands and aquatic systems are managed and/or restored to protect and maintain soil, water, vegetation, fish and wildlife associated resource values.**

The NFsAL implements riparian standards in all projects.

OBJECTIVES

8.1 Inventory riparian areas as management activities are proposed.

Riparian area inventory is accomplished thru the NEPA process and implementation of forest projects. Floodplains and wetlands are identified.

8.2 Up to 10% of riparian areas may be managed to provide non-forested habitat conditions, such as dense cane thickets, wet meadows, and wet savannas through overstory density reduction to meet habitat needs for birds, as well as meeting the needs of other riparian dependent species or rare habitats that may overlap or be contained within the riparian corridor. Additionally, maintain a minimum of 1 to 2 percent of the riparian corridor in early successional forest conditions.

While certain segments of riparian non–forested habitats (canebreaks) and bogs have been maintained to some degree with periodic low intensity prescribed fire, timber harvest or other canopy-reducing treatment in these areas has not generally occurred since the signing of the ROD. There are certainly opportunities to enhance riparian early seral habitats. These areas need to be identified and included as future projects are planned and implemented. Natural events are contributing to maintain early successional forests in riparian areas and corridors.

Conecuh

In June 2010, the district ranger Conecuh National forest signed a decision, (Longleaf Restoration Phase II) that included 43 acres of bog restoration including removal of woody overstory, and brushy shrubs allowing the restoration of the hydrology of the areas. This decision also included maintenance of these areas using fire. The Enhanced Invasive Plant Control Decision signed by the Forest Supervisor in June 2012, approved the use of herbicides to treat invasive plants for maintenance and restoration in these communities.

8.3 Conduct inventories and establish baselines to determine needs for large woody debris within stream channels and riparian zones.

The National Forests in Alabama have completed a comprehensive GIS database that includes all streams (Ephemeral, Intermittent, and Perennial), Streamside Management Zones (SMZ), Reserve Areas, Special Areas, and Riparian Corridors.

The NFsAL has not yet completed a comprehensive inventory of riparian areas to determine current habitat conditions. This inventory is needed to determine the percentage of non-forested riparian habitat conditions, such as dense cane thickets, wet meadows, and wet savannas that exist in comparison to forested riparian habitat.

The status of the objective to maintain 1 to 2 percent of the riparian corridor in early successional forest conditions is currently unknown. There have been no management activities implemented that would create this early successional habitat but there have been limited amounts of this habitat created through natural events such as hurricanes, tornadoes, and straight line winds. A comprehensive inventory is also needed to determine the amounts of this early successional habitat that currently exist.

There have also been no formal inventories to establish baseline needs for large woody debris(LWD) within stream channels and riparian zones. Informal inventories by watershed personnel and the fisheries biologist reveal that the natural accumulation of large woody debris is adequate for the habitat needs of riparian dependent species. In nearly all instances the riparian areas of streams in the NFsAL are wooded and logging along stream banks has not occurred for several years. The implementation of stream side management zones and the riparian corridor management prescription as outlined in the 2004 Forest Plan will ensure the riparian areas will remain intact and functional. No formal inventories of LWD in stream channels are necessary because intact and function riparian areas will supply natural levels of LWD input to stream channels. In the instance that we acquire land that has been logged intensively within an entire watershed including trees adjacent to the stream banks then formal LWD inventories may be required.

GOAL 9 **Provide riparian and aquatic ecosystem conditions that are suitable to maintain well distributed viable populations of all aquatic species native to the planning area. Manage for diverse, balanced, integrated, and adaptive aquatic/riparian communities, and provide habitat conditions to support desirable population levels and distribution of selected species (e.g. species with special habitat needs such as shoal, cave, or spring obligates; recreationally important species; threatened or endangered species; or species of special interest).**

Oakmulgee

Cahaba River Wetland Restoration CE, DM, Jan 5, 2010, restores approximately 75 acres of wetland condition by repairing breach in the back along the Cahaba River. The partnership includes, ALA-TOM RC&D, Goodwyn, Mills, & Caywood, World Wildlife Fund, and adjacent landowners. The project is complete.

Talladega

Two culverts identified as barriers to fish passage were removed and replaced with bottomless culverts on NFSR 615 and 616.

OBJECTIVES

9.1 Conduct aquatic and riparian ecosystem surveys to determine baseline and desired conditions. Collect both species specific and general habitat information to assess progress towards attainment of recovery and conservation objectives.

Numerous baseline aquatic surveys, with a focus on T&E and FSS species, have been accomplished since 2004 to identify species distribution and assess habitat conditions within project areas and for the purpose of inventory and monitoring. This information has been used by NFsAL resource managers to identify which aquatic species of concern are in

project areas and to analyze the potential effects of management activities on aquatic communities and their habitat. Forest-wide fish and mussel monitoring plans have been developed and baseline information has been collected to monitor the effects of Forest Plan implementation on aquatic populations and habitat. This information is stored in a continually updated geo-referenced database that is accessible internally to the NFsAL.

Figure 5 - Photos of Fish and Mussel Sampling Efforts and Individuals Captured or Observed during Aquatic Surveys.

9.2 Inventory/map invasive non-native species.

During site visits to develop lake management plans (see Goal 10, Objective 10.1) aquatic NNIS were identified, if present, and treatment, monitoring, and prevention plans were developed. The documents of record for monitoring aquatic NNIS are the individual lake management plans.

GOAL 10 **Lakes, ponds, and reservoirs support balanced, productive recreational fisheries to the extent appropriate for native aquatic species viability, threatened and endangered species, State and federal water quality standards, funding, and public demand.**

Annually Bankhead installs fish structures to improve habitat and angler opportunities in lakes and reservoirs.

Talladega

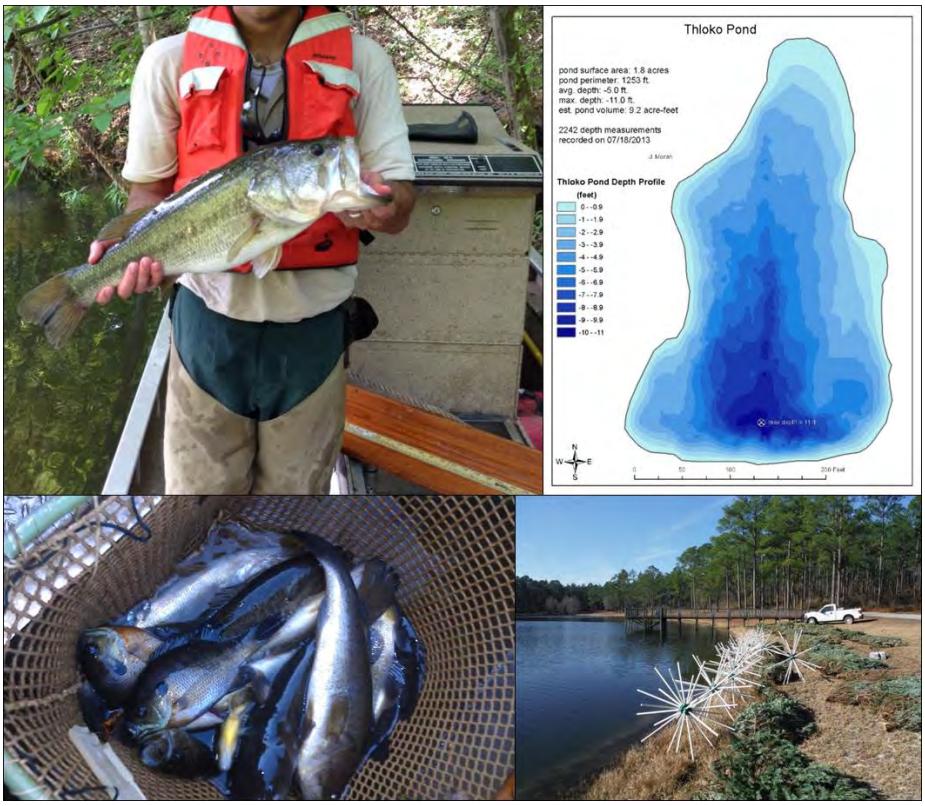
Annually the Talladega Ranger District installs fish structures (felled trees or cane structures) into Lake Virginia and Little Wills Lake to provide improved fish habitat. The district also stocked sterile carp to aid in controlling muskgrass in Little Wills.

OBJECTIVES

10.1 Develop lake and reservoir management plans and periodically (every 1-5 years) review and update the plans in coordination with State and other agencies and partners.

Management plans have been developed and continually updated in the last 7 years for all lakes, ponds, and reservoirs in developed recreation areas along with other selected waterbodies with high visitor angler use. Electrofishing samples were used to evaluate current conditions of game fish populations. Habitat conditions, including aquatic plant communities (NNIS and native), and angler access were also evaluated. This information was used to outline habitat and angler access improvement and monitoring recommendations in the management plans. Many of the recommendations found in the lake management plans have been implemented by the district biologist to enhance lake habitat and accomplish yearly targets.

Figure 6 - Photos of Lake Evaluations and Habitat Enhancement Efforts on the NFsAL



Threatened, Endangered and Sensitive Species

GOAL 11 Substantially contribute to the recovery of federally listed threatened and endangered species, and provide for the conservation of sensitive species so as to minimize the need for additional federal listings under the Endangered Species Act.

Rare Community/Rare Species Work

The NFsAL timber and prescribed fire programs have helped to restore and enhance rare communities across the Forest by providing historical conditions across the landscape.

A wide variety of rare plant / rare community conservation work has occurred over the past decade. This has ranged from bog and glade habitat restoration work to propagation of rare plant species. A Region-wide Candidate Conservation Agreement for the federal Candidate plant Georgia aster was signed by the Regional Forester in 2014. The Talladega Georgia aster population is thought to be the largest in the state, thanks to active cooperative management activities over the past decade by the Forest Service, Alabama Power, and Auburn University. Due primarily to the signing of the CCA, the species has been precluded from the federal listing process at this time. A Challenge Cost Share Agreement was initiated and signed in summer of 2013 between the NFsAL and Auburn University Horticulture Department, to propagate Georgia aster and other rare plant species over the next 5 years. Other plants in production at the AU greenhouses include Wherry's pitcher plant and bog flameflower. If districts have other rare species propagation needs, they should notify the agency contact for the Agreement (R. Shurette).

In addition to rare species propagation, NFsAL is working with Auburn (starting in 2014) to produce pollinator specialty plugs for outplanting in wildlife openings and other strategic locations. Specifically, milkweed species (*Asclepias*) that will provide habitats for the declining monarch butterfly are being propagated currently along with other pollinator-targeted plant species (including *Liatris pillosus*). Mixed herbaceous understory seed was collected on the Conecuh District in late 2014, under a cooperative project with NRCS using a flail-vacuum. These seeds will be used in 2015 to re-vegetate select areas on the Conecuh.

Figure 7 - Monarch Butterfly on Georga Aster, Talladega District 2014

Figure 8- Collecting herbaceous understory seed(under a longleaf pine stand) with a flail-vacuum on the Conecuh District, 2014.

OBJECTIVES

11.1 Actively participate in the writing and implementation of recovery plans, habitat management plans, and conservation plans. Seek opportunities to expand or re-introduce threatened, endangered and sensitive species.

Indigo Snake - The Eastern indigo snake (*Drymarchon couperi*) is a federally listed species that had not been documented in Alabama for over 50 years. The Eastern Indigo Snake Repatriation Project (Conecuh National Forest) is in its fifth year now and has been a huge success. Ninety-eight (98) snakes have been released to date and gravid females have recently been found, which suggests natural reproduction may now

be occurring. Approximately 200 more snakes are planned for release over the next 5 years. A trophic cascade study in regards to prey species (other snakes, small mammals, birds) is now being implemented in the areas of the releases.

Figure 9 -Indigo Snake Re-partiation, Conecuh National Forest

Rare plant propagation/safegurading projects have occurred for Georgia aster, bog flameflower, Wherry's red pitcher plant, fleshy-fruit gladecress, and turkeybeard.

Figure 10 shows Wherry's red pitcher plants grown from rhizome cuttings collected on the cuttings from Boggy Hollow bog, Conecuh NF. These seedlings were out-planted into a separate safeguarding bog on the Conecuh district.

Figure 10 - Wherry's Red Pitcher Plant propagation

About the same time as the 2004 Forest Plan Revision the Alabama Department of Conservation and Natural Resources (ADCNR) was in the process of developing a strategy for the comprehensive conservation of Alabama's wildlife (ADCNR 2005). The NFsAL was a partner in developing this plan and has participated in the current ongoing revision of the plan.

The NFsAL has partnered with the ADCNR in an ongoing effort to provide brood stock of federally listed and forest sensitive mussels. Individuals from NFsAL streams with healthy populations have been collected and used as brood stock for the purpose of propagation at the Alabama Aquatic Biodiversity Center in Marion, Alabama. The resulting progeny have been stocked in state waters where local populations were extirpated or would benefit from supplemental stocking. The brood stock mussels collected from NFsAL streams were returned to the location they were collected after propagation efforts were completed.

11.2 In cooperation with partners, conduct surveys of species and habitats to determine baseline and desired conditions during this planning period.

Several cooperative agreements with Alabama Natural Heritage Program and University partners over the past decade have yielded a significant amount of information regarding rare or otherwise important plant and animal species and habitats. Examples of these cooperative projects include survey for Alabama Canebrake pitcher plant habitats on the Oakmulgee, survey of Bankhead glades, survey of lichens and bryophytes on the Shoal Creek, White-fringeless orchid survey on the Talladega Division, Streak-sorus fern and Kral's water plantain survey on the Bankhead, flattened musk turtle and Black Warrior waterdog surveys on Bankhead, gopher tortoise and gopher frog surveys on the Conecuh, Kentucky yellow lady's slipper survey on the Talladega, and numerous aquatic surveys. This information is represented in the NFsAL GIS database.

The NFsAL conducts annual surveys on approximately 300 bird points. On the NFsAL the bird points were established in the 1997, and in June 2007 Population Trends and Habitat Occurrence of Forest Birds on Southern National Forests 1992-2004 (General Technical Report NRS-9) was published with results from this ongoing effort. On the Conecuh National forest and the Bankhead National Forest, NFsAL works with partners and volunteers to complete the bird surveys.

The NFsAL has continued to cooperate with universities and state, federal, and private agencies in conducting baseline aquatic surveys to gather information for inclusion in, among other things, recovery plans, habitat management plans, and conservation plans at local and regional levels. Examples of technical and published reports resulting from these surveys are listed in the reference section at the end of this document. The information collected by partners is stored in a continually updated geo-referenced database that is accessible internally to the NFsAL.

11.3 Develop and annually review an aquatic conservation strategy based on fifth-level HUCs. Utilize the conservation strategy to focus resources and foster cooperative efforts on those areas that will aid in the recovery of aquatic T&E species.

To date the NFsAL has not developed an aquatic conservation strategy based on fifth-level HUCs. With the delineation of 6th level HUCs nationwide by the USGS the Forest Service standard of analysis has shifted to the 6th level. In 2011, the NFsAL completed a Watershed Condition Classification (WCC) according to national USDA, Forest Service standards for all 6th level HUCs on the Forest. The resulting watershed action plans developed from the WCC along with local 6th HUC analysis will be used to as a conservations strategy to aid in the recovery of aquatic T&E species.

11.4 The following objectives are established to contribute to recovery of threatened, endangered, and candidate plants over the life of the Forest Plan. Forest-wide inventories for these species will be continued to document new or additional occurrences.

Table 7: FLRMP Table 2.6 Management Objectives for Recovery of Threatened, Endangered, and Candidate Plants

Common Name	Scientific Name	Current Number of Populations/ Occurrences	Desired Minimum Population Size (where applicable)	Management Objective*
Georgia aster	*Aster georgianus*	3	250 plants	1,2,3
White-fringeless orchid	*Plantathera integrilabia*	7	250 plants	1,2,3
Green pitcher plant	*Sarracenia oreophila*	0	200 clones or individual plants	3,4
Tennessee yellow-eyed grass	*Xyris tennesseensis*	0	100 plants	3,4
Georgia rockcress	*Arabis Georgiana*	1	100 plants	4
Alabama leather flower	*Clematis socialis*	0	100 plants	4
Leafy prairie clover	*Dalea foliosa*	0	200 plants	3,4
Eggert's sunflower	*Helianthus eggertii*	0	150 plants	3,4
Fleshyfruit gladecress	*Leavenworthia crassa*	0	250 plants	3,4
Lyrate bladderpod	*Lesquerella lyrata*	0	250 plants	3,4
Mohr's Barbara's buttons	*Marshallia mohrii*	0	50 plants	?
Harperella	*Ptilimnium nodosum*	0	500 stems	3,4
Kral's water-plantain	*Sagittaria secundifolia*	3	50 clones or plants	1,2,3
Alabama canebrake pitcherplant	*Sarracenia rubra* var. *alabamensis*	0	100 clones or plants	2,3,4
Alabama streak-sorus fern	*Thelypteris pilosa* var. *alabamensis*	15	500 gametophytes or individual plants	1,2,3

*1 = Maintain current number of populations/occurrences through protection and maintenance of existing sites.
2 = Increase number of populations/occurrences by improving and/or increasing available habitat and relying on natural recruitment rather than reintroduction and propagation.
3 = Increase number of populations/occurrences with the assistance of reintroduction and propagation efforts.
4 = Species is not currently documented from the forest; efforts to document presence will continue.

New occurrences for 2 of the following species have been found and/or established. Some others have planned survey work. Current number occurrences and total individuals are denoted in the original table in red type.

Table 8: FLRMP Table 2.6 Management Objectives for Recovery of Threatened, Endangered, and Candidate Plants

Common Name	Scientific Name	Current Number of Populations/ Occurrences	Desired Minimum Population Size (where applicable)	Management Objective*
Georgia aster	*Aster georgianus*	3 6	250 plants 1000+ ind. Plants total	1,2,3
White-fringeless orchid	*Plantathera integrilabia*	7	250 plants	1,2,3
Green pitcher plant	*Sarracenia oreophila*	0	200 clones or individual plants	3,4
Tennessee yellow-eyed grass	*Xyris tennesseensis*	0	100 plants	3,4
Georgia rockcress	*Arabis Georgiana*	1	100 plants	4
Alabama leather flower	*Clematis socialis*	0	100 plants	4
Leafy prairie clover	*Dalea foliosa*	0	200 plants	3,4
Eggert's sunflower	*Helianthus eggertii*	0	150 plants	3,4
Fleshyfruit gladecress	*Leavenworthia crassa*	0 1	250 plants 350+ ind. Plants total	3,4
Lyrate bladderpod	*Lesquerella lyrata*	0	250 plants	3,4
Mohr's Barbara's buttons	*Marshallia mohrii*	0	50 plants	?
Harperella	*Ptilimnium nodosum*	0	500 stems	3,4
Kral's water-plantain	*Sagittaria secundifolia*	4	50 clones or plants	1,2,3
Alabama canebrake pitcherplant	*Sarracenia rubra* var. *alabamensis*	0	100 clones or plants	2,3,4
Alabama streak-sorus fern	*Thelypteris pilosa* var. *alabamensis*	15	500 gametophytes or individual plants	1,2,3

* 1 = Maintain current number of populations/occurrences through protection and maintenance of existing sites.
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  3 = Increase number of populations/occurrences with the assistance of reintroduction and propagation efforts.
  4 = Species is not currently documented from the forest; efforts to document presence will continue.

Bankhead

On the Bankhead, work to restore the Indian Tomb Hollow glade and rare and listed plants found there is on-going throughout the life of the Forest Plan. Fleshy-fruit gladecress is one rare plant that occurs on the Indian Tomb Hollow glade. It was listed as endangered in 2014. The Indian Tomb Hollow glade is proposed as critical habitat for the fleshy-fruit gladecress. On-going restoration efforts of the glade include treating encroaching native and non-native vegetation with herbicides and hand tools. Additionally, employees and volunteers clean up trash that is dumped on the glade and work together to block illegal vehicle and horse use of the area by blocking roads and trails. The Missouri Botanical Garden is conducting a microclimate study at the Indian Tomb Hollow glade to determine habitat and climate conditions associated with Fleshy-fruit gladecress.

There is a number of partnership projects focused on rare and listed aquatic species on Bankhead that are associated with the FERC re-licensing of the Warrior River Project (Lewis Smith Lake Reservoir). The Alabama Natural Heritage Program is conducting a project focused on flattened musk turtle, Black Warrior Waterdog, Alabama Streak Sorus Fern and Kral's Water Plantain. The Natural Heritage Program work aims to determine the extent of the range of these species on Bankhead. It will also identify key habitat components for these species in Bankhead streams. The Southern Research Station – Center for Aquatic Technology Transfer is also working on a multi-year project focusing on fish, mussels and crayfish within and upstream of Lewis Smith Lake Reservoir. The project has described the transition zone between Smith Lake and upper stream habitats, inventoried species within the lake, transition zone, and streams above the zone. Several new locations for sensitive and proposed species have been documented through these partnership projects. Reports for these projects are available.

Listed Bats

Bankhead installs artificial roost structures (bat houses) each year on the Forest to provide alternate roosting habitat for forest bats. All caves on Bankhead are closed to prevent the spread of white-nose syndrome. Bats are monitored via several techniques including cave surveys, mist-netting, harp trapping and Anabat acoustic driving surveys. Data are available upon request. Additionally, the Bankhead will partner on a project to radio track female Indiana bats leaving Bankhead hibernacula in the spring. The goal of this 2015 project is to determine Indiana bat maternity roosting habitat.

Table 9: Armstrong Cave Bat Survey Data							
Year	2014	2013	2012	2011	2010	2009	2007
Indiana Bats	68	92	74	104	109	54	69
Gray Bats	0	0	1	1	0	0	2
Northern Long Eared	15	13	15	36	18	2	2
Eastern Pipistrelle	808 est.	637	462	690est.	300 est.	659	525

Table 10: Backwards Confusion Cave Bat Survey Data							
Year	2014	2013	2012	2011	2010	2009	2007
Indiana Bats	7	9	10	7	6	6	6
Gray Bats	0	0	0	0	0	0	0
Eastern Pipistrelle	105	25	30	21	50	25	24
Big Brown Bats				1			

Bankhead partners with Alabama Power to conduct annual bald eagle surveys on Smith Lake. While bald eagles are observed on Smith Lake, nesting activity on or adjacent to Forest Service lands has not been documented in recent years.

Since 2012/2013, Bankhead and Black Warrior WMA have participated in a regional Golden Eagle Camera Survey.

Alabama A&M University continues to conduct research projects on Bankhead National Forest. While the projects do not focus on federally listed species, some of them include Sensitive or Proposed species. These include an aquatic wildlife (fish and mussels) project on Bankhead streams and a bat research project. Additional wildlife research projects on Bankhead include small mammals, herpetofauna, songbirds and feral swine.

Red-cockaded Woodpecker Management Needs

GOAL 12 Contribute to the conservation and recovery of the Red-cockaded woodpecker (Picoides borealis), a federally listed, endangered species through the

implementation of forest and population management practices described in the Revised Recovery Plan and RCW ROD.

Figure 11 - RCW Cavity Insert Installation, Talladega National Forest.

OBJECTIVES

12.1 Manage forests to provide a minimum of 120 acres of "good quality foraging habitat," as defined in the Agency/Technical Draft Revised Recovery Plan, for each active and recruitment cluster. Good quality foraging habitat includes tree canopies of approximately 40-60 ft^2 average BA, groundcovers that are generally $\geq$ 40% herbaceous, pyrophytic plants, and no mid-story hardwoods over 7' tall.

Vegetation management activities, listed in Table 1(page9-10), contribute to providing habitat for the RCW. Approximately 14,000 acres have been harvested and/or restored to on-site native species over the last 10 years. Restoration activities remove off-site species and replace them with site appropriate species, usually longleaf pine. The re-introduction of fire to the landscape allows the native grasses and forbs to occupy the ground stories.

These young longleaf stands will eventually become foraging and then nesting habitat for the RCW. Mid-story treatments improve the quality of the foraging habitat for RCW as well as allows sunlight through the canopy to the forest floor and increase herbaceous understory for associated species such as Bachman's sparrow, bobwhite quail, prairie warbler, etc. Approximately 11,000 acres of mid-stories have been treated/improved over the last 10 years (2005-2014).

Oakmulgee

Table 11: Acres of RCW Midstory Treatments on the Oakmulgee Ranger District 2005-2014

RCW Midstory Treatment	Acres	Delivery
2005	253 185	Contract: AG -4146-PO5-0058 CT Clause 6T Sale – 16A
2006	840	Power of Flight IRSC: AG-4146-C-06-0022 Contract: AG-4146-C-06-0021
2007	540	Contract: AG-4146-C-06-0021
2008	650	Contract: AG-4146-S08-0011
2009	225	Contract: AG -4146-C-09-0013
2010	158	Agreement: 05-CS-11080104-099
2010	248	Agreement: 10-SA-11080104-001
2011	461	Agreement: AG-4146-C-06-0022
2012	340	Agreement: AG-4146-D-12-0026
2012	250	Contract: 04-002544
2013	491	Agreement: 11-SA-11080104
2014	315	Contract: AG-4146-C-12-0013
	4706	

Talladega

Recently the Talladega District completed the Guinn Integrated Resource Timber Contract (IRTC) which was part of the Upper Tallaseehatchee/Eumawhee Creek Stewardship Contracting Proposal. Under this contract 194 acres of midstory removal for the red-

cockaded woodpecker were completed. Another 204 acres of midstory treatment is planned in the Turned Around IRTC. This work is in addition to approximately 200 acres completed annually on the district.

12.2 Prescribe burn within RCW HMA using both dormant and growing season burns. Average annual fire return interval should be 1-5 years in suitable habitats.

Oakmulgee

Table 12: OAKMULGEE RCW CLUSTERS and FIRE RETURN INTERVALS					
COMP	# RCW Clusters	Active RCW Clusters	Last Season Burned	# Burn Entries 2005-2014	AVG Return Interval
2	1	1	2010	2	5
4	2	2	2005	1	10
5	2	1	2010	2	5
6	2	1	2010	1	10
7	6	5	2013	3	3
8	5	5	2014	4	3
10	2	2	2013	4	3
11	7	5	2014	4	3
12	4	4	2014	5	2
13	11	10	2014	5	2
14	4	3	2012	2	5
15	6	5	2013	2	5
16	1	0	2008	1	10
17	1	0	2012	2	5
18	3	2	2010	2	5

Table 12: OAKMULGEE RCW CLUSTERS and FIRE RETURN INTERVALS					
COMP	# RCW Clusters	Active RCW Clusters	Last Season Burned	# Burn Entries 2005-2014	AVG Return Interval
21	1	1	2010	1	10
23	5	2	2006	1	10
24	8	7	2009	2	5
25	3	3	2011	2	5
30	1	1	2011	2	5
31	3	3	2014	3	3
32	4	3	2010	2	5
33	4	3	2014	3	3
38	1	0	2009	1	10
39	3	3	2009	1	10
40	6	6	2008	1	10
43	2	2	2014	1	10
44	7	3	2014	3	3
45	7	2	2014	3	3
48	4	3	2008	1	10
49	2	1	2014	2	5
57	4	4	2010	2	5
59	3	2	2014	3	3
60	2	1	1999	0	15
61	1	1	2013	2	5

Table 12: OAKMULGEE RCW CLUSTERS and FIRE RETURN INTERVALS					
COMP	# RCW Clusters	Active RCW Clusters	Last Season Burned	# Burn Entries 2005-2014	AVG Return Interval
66	1	1	2006	1	10
67	2	1	2014	1	10
68	3	3	2006	1	10
105	2	0	2007	1	10
108	2	0	1994	0	20
113	3	2	2014	2	5
114	2	1	2007	1	10
116	3	0	2014	1	10
117	6	2	2006	1	10
118	3	0	2008	1	10
115	4	0	never	0	77
126	1	0	never	0	77
127	1	0	2013	1	10
128	1	0	2012	1	10
142	1	0	never	0	77
137	1	0	2002	0	12
TOTALS	**164**	**107**			**11**
Summary		**44**	**# of active clusters with < 3 year fire return interval**		
		41%	**% of active clusters with ≤ 3 year fire return interval**		

12.3 Manage forest successional stages to maintain a minimum of 50 percent of forested acres in mid to late successional forest, including old growth; a minimum of 20 percent of forested acres in late-successional or old growth forest; and 4 to 10 percent in early-successional forest. Within the pine and pine-hardwood component, manage forest successional stages to maintain a minimum of 83 percent in mid to late successional forest and old growth (> than 20 years old); a minimum of 50 percent of forested acres in late successional or old growth forest (> 60 years); and 4 to 8.6 percent in early successional forest (≤ 10 years old).

12.4 Management prescriptions for support populations on public lands will be the same as those applied in core populations. Managers should increase their populations to the maximum the habitat base will support, using the level of monitoring recommended based on population size and the recovery standard for foraging habitat. Manage for the red-cockaded woodpecker populations as shown in Table 13 below.

Table 13: FLRMP Table 2.7 RCW Population Objectives

RCW HMA	2002 Active Clusters	Short- Term Population Objective	Long-Term Population Objective	Recovery Designation
Shoal Creek	8	18	125	Essential Support
Talladega	0	10	110	Essential Support
Oakmulgee	120	185	394	Secondary Core
Conecuh	19	28	309	Secondary Core

Table 14: FLRMP Population Objectives and RCW Annual Report Summaries for 2004-2014

Actual Population Size	RCW HMA	2002 Active Clusters	Short-term *(Plan Horizon)* Population Objective	Long-term Population Objective *(Recovery)* Objective	2004 Active Clusters	2005 Active Clusters	2006 Active Clusters	2007 Active Clusters	2008 Active Clusters	2009 Active Clusters	2010 Active Clusters	2011 Active Clusters	2012 Active Clusters	2013 Active Clusters	2014 Active Clusters
	Conecuh	19	28	308	23	27	28	37	36	35	36	36	33	37	40
	Oakmulgee	120*	185	395	100	100	100	102	104	104	106	111	116	116	107
	Shoal Creek	8	18	125	10	11	13	13	14	16	10	17	20	23	23
	Talladega	0	10	110	0	0	0	0	0	3	4	6	6	10	12
	Totals	**27**	**241**	**938**	**133**	**138**	**141**	**152**	**154**	**158**	**156**	**170**	**175**	**186**	**182**

***2003 Complete survey of Oakmulgee RCW clusters revealed a 20% decline since 1993 (date of previous 100% survey). Actual number of clusters was found to be 98.**

Conecuh

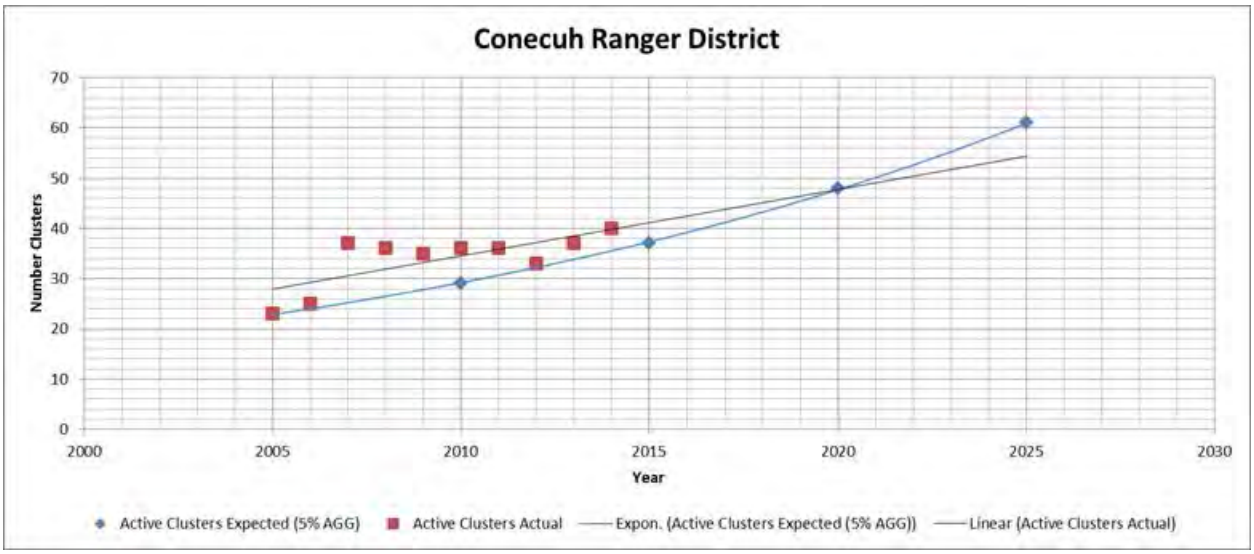


Figure 12 – RCW Expected 5% Annual Growth Curve and Actual Linear Regression Trend Lines for 2005-2014

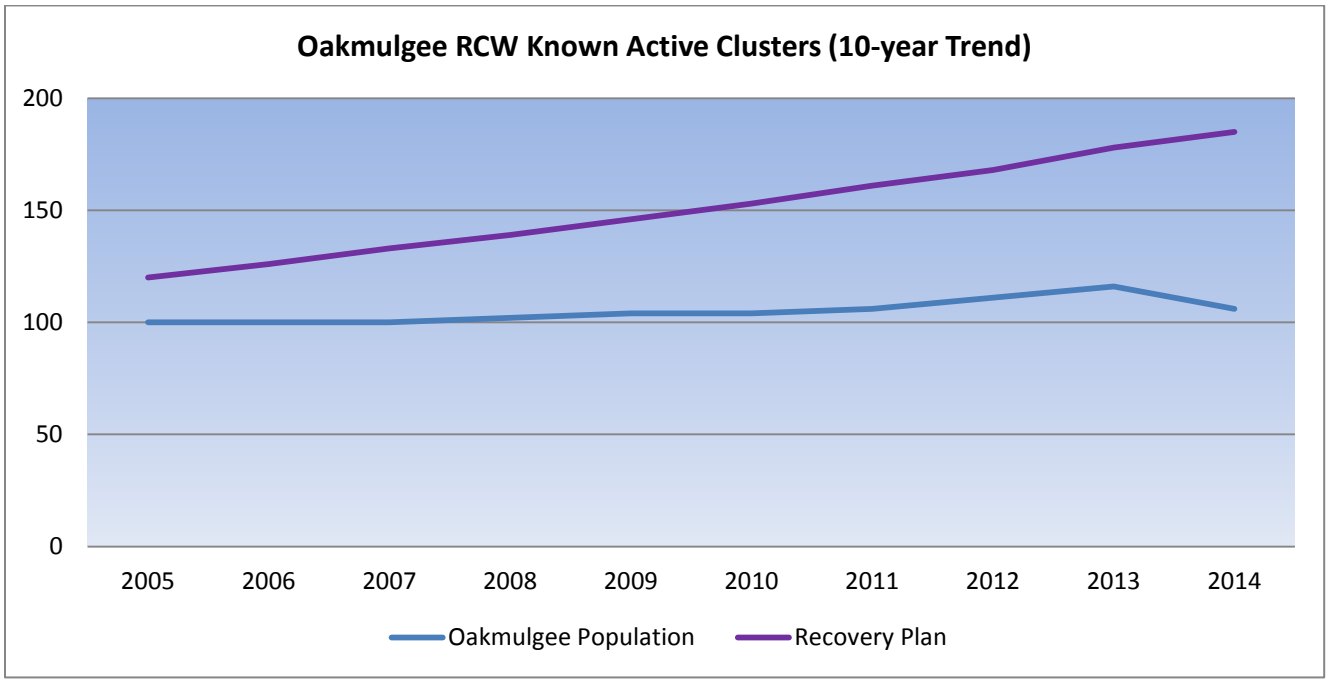


Figure 13 - Oakmulgee RCW Known Active Clusters (10-year Trend)

Table 15: Oakmulgee RCW Cavity installation by Year and Delivery method.			
RCW Cavity Installation	**Description**	**Cavities**	**Delivery**

Table 15: Oakmulgee RCW Cavity installation by Year and Delivery method.

RCW Cavity Installation	Description	Cavities	Delivery
2005	Artificial Inserts	25	Force Account
2006	Artificial Inserts	50	Force Account
2007	Artificial Inserts	35	Force Account
2008	Artificial Inserts	65	Force Account
2009	Artificial Inserts	65	Force Account
2011	Artificial Inserts	73	Force Account
2012	Artificial Inserts	54	Force Account
2013	Artificial Inserts	25	Force Account
2013	Artificial Inserts	135	Contract: 10-SA-11080104-001
2014	Artificial Inserts	14	Force Account
TOTALS		**541**	

Table 16: Kleptoparasite Removals by Year and Delivery Oakmulgee Ranger District.

Kleptoparasite Removals	Description	SFS Removed	Delivery
2005	SFS Removed	67	Force Account
2007	SFS Removed	31	Force Account
2008	SFS Removed	24	Force Account
2011	SFS Removed	17	Force Account
2012	SFS Removed	180	Force Account
2014	SFS Removed	73	Force Account
TOTALS		**392**	

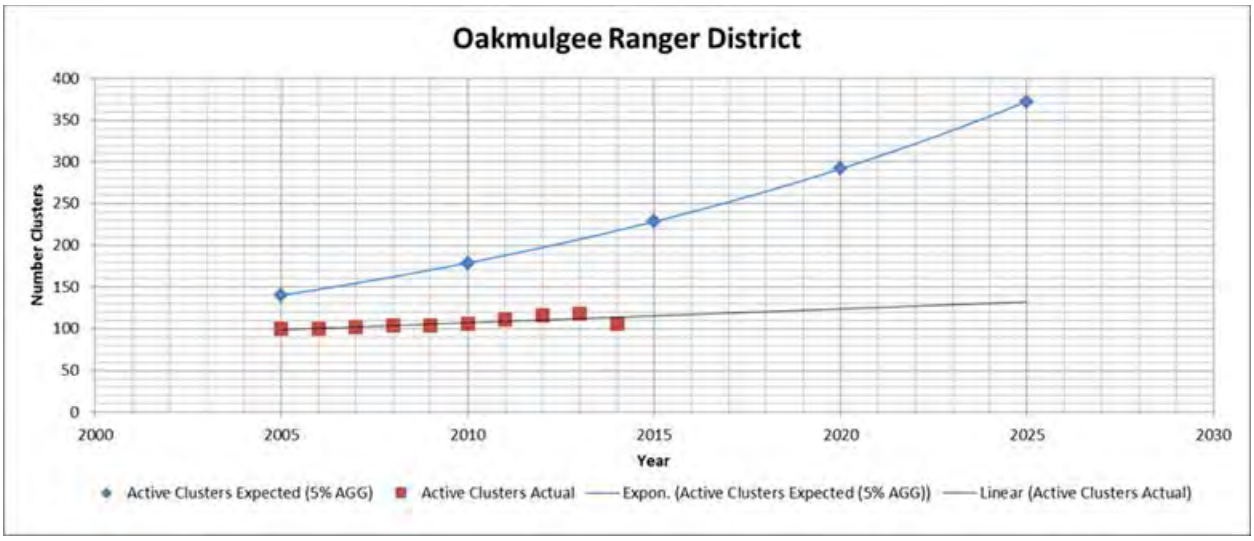


Figure 14 – RCW Expected 5% Annual Growth Curve and Actual Linear Regression Trend Lines for 2005-2014

Shoal Creek

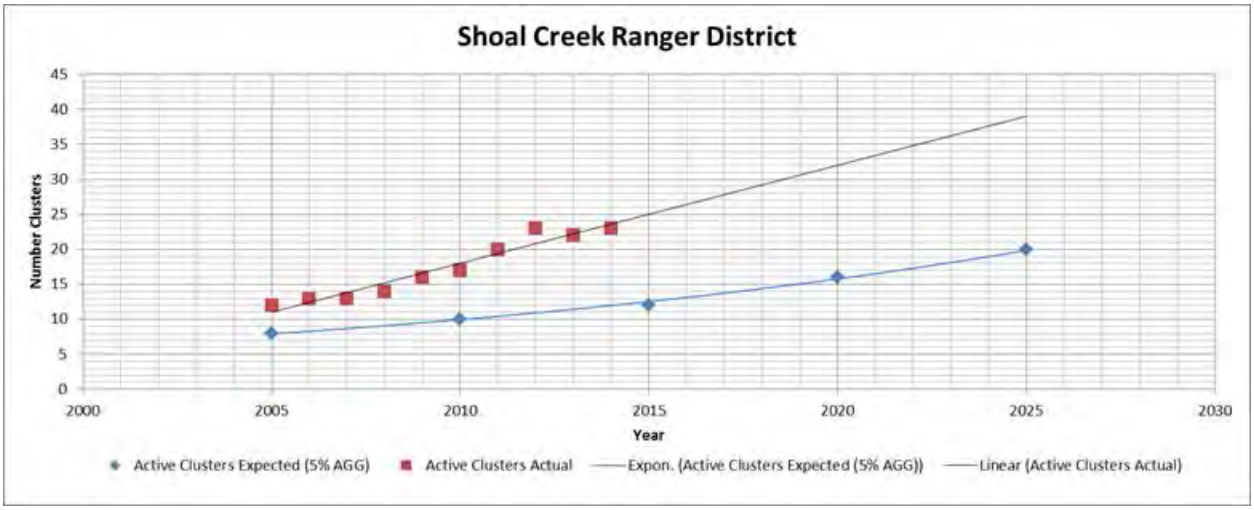


Figure 15 - RCW Expected 5% Annual Growth Curve and Actual Linear Regression Trend Lines for 2005-2014

Talladega

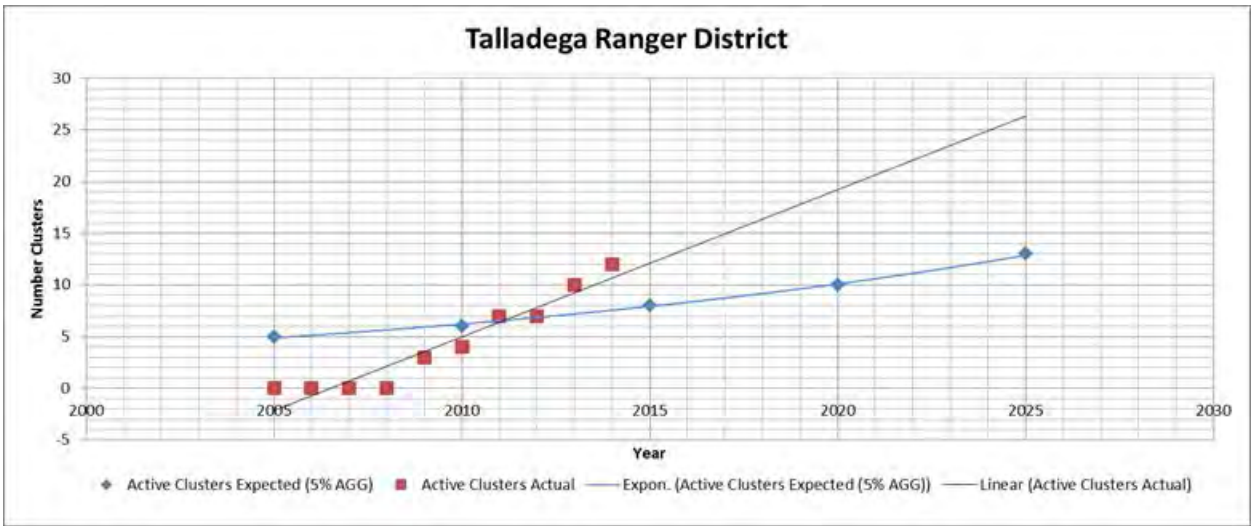


Figure 16 - RCW Expected 5% Annual Growth Curve and Actual Linear Regression Trend Lines for 2005-2014

Indiana Bat Management Needs

Indiana Bat – The Indiana bat is federally listed as an endangered species and listed by the State of Alabama as a Priority One Species. This bat is generally associated with limestone caves in the eastern United States. They were previously known from the Bankhead NF and in 2012 a bat tagged with a radio transmitter located in a cave White County Tennessee dispersed ~150 miles south to a maternal roost tree on the Shoal Creek RD in Cleburne County, Alabama. Following this finding, an effort was undertaken to confirm the presence

of a maternity colony on the district in 2013. Radio-telemetry conducted on 11 bats during 2012 and 2013 resulted in the identification of sixteen roosts, with 1 tree used both years. This finding represents new information that should be included when evaluating on-going and future projects on the Talladega Division of the Talladega NF (Talladega and Shoal Creek Ranger Districts).

A Forest Plan Amendment was completed in 2014 and signed in 2015 that removed one standard (growing season burning restriction) amended 3 standards related to Indiana bats and the management of healthy upland ecosystems.

White nose syndrome continues to affect and kill large number of bats across the eastern US, and has caused the USFWS to consider listing certain species. A Regional and NFsAL cave closure has been implemented over the past several years in an attempt to help reduce human-caused spread, although the bats are inoculating new caves on their own. On 3-7-2014, Bankhead and State biologists and a University of North Alabama professor documented WNS symptoms in both main Indiana hibernacula (Armstrong and Backwards-Confusion caves) on the Bankhead. Affected tri-colored bats were collected from both caves and sent to Southeastern Cooperative Wildlife Disease Study at University of Georgia and the *Pseudogymnoascus destructans* fungus was confirmed.

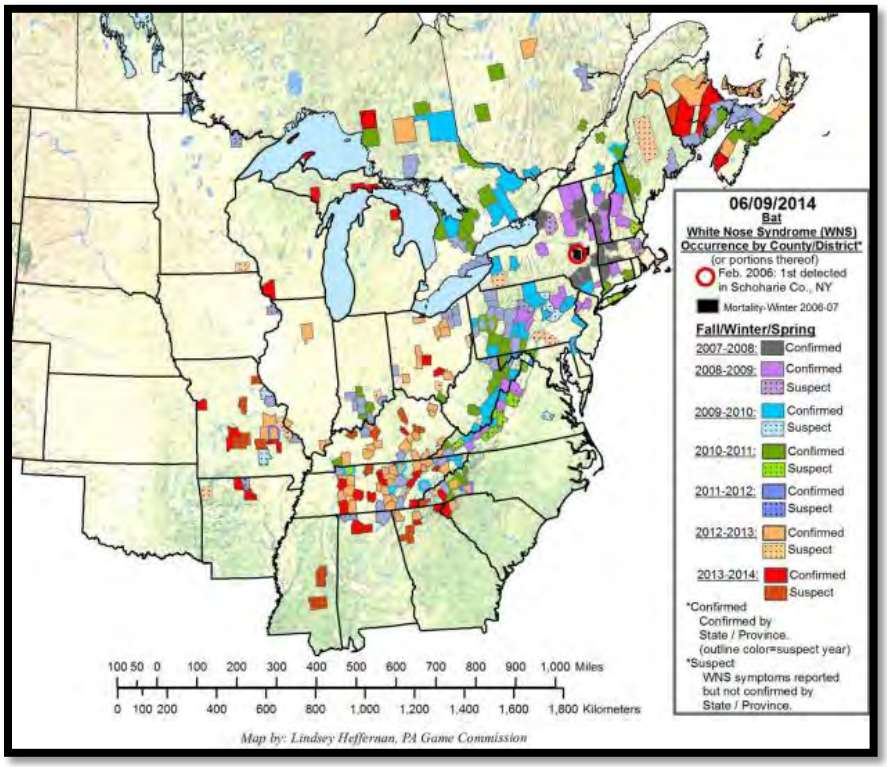


Figure 17 - White Nose Syndrome(WNS) Occurrence

Rare Communities

GOAL 13 Protect or restore the composition, structure, and function rare communities found on National Forest land.

OBJECTIVES

13.1 Inventory/map rare communities and identify and prioritize restoration needs.

From legacy and paper survey data from numerous surveys, many NFsAL rare communities have been spatially mapped and are now represented in several layers in the NFsAL GIS database. There are plans to merge these various rare community layers (bogs, glades, canyons, etc.) into one functional layer in 2015.

Other (lower priority) existing rare communities still need to be mapped and incorporated into the spatial database.

Bankhead

As described in Goal 11, Bankhead is actively working to restore the Indian Tomb Hollow glade and rare plants associated with it. Additionally, the Bankhead continues restoration work, some on-going, on a number of sandstone glades as well. As glades are documented and funds available, staff and volunteers work together to remove encroaching vegetation, control non-native invasive plants, block or deter illegal access (4wd) and remove dump sites. This work includes the Balls Mountain, Corinth, and Round Mountain glades to date.

Isolated depressional wetlands, locally known as gum ponds, are important rare communities on Bankhead. Many have been ditched and drained in the past. As wetlands are documented and funding becomes available, they are restored where possible. The Corinth Wetland (1 acre) was restored by plugging a ditch and cutting encroaching trees and vegetation. The 249Z1 wetland was restored by plugging a ditch and turning road drainage out of the wetland.

GOAL 14 Areas with special geological, paleontological, botanical, zoological, cultural, or heritage characteristics will be managed (or where feasible restored) to protect those characteristics.

Botanical areas are included in district burn programs, but NNIS issues have been identified that need to be addressed, especially in the Flint Creek and Bartram Botanical Areas.

Bankhead

Riparian standards are implemented to protect critical habitat, riparian habitats, and aquatic species.

Critical habitat for fleshy-fruit gladecress is proposed at Indian Tomb Hollow (see Goal 13).

Critical habitat for rush darter was designated on Bankhead.

Critical habitat for Black Warrior waterdog is expected to be proposed.

The Forest Service staff work with the US Fish and Wildlife Service on these designations.

Old Growth

GOAL 15 **A variety of large, medium, and small old growth patches will be managed (through restoration, protection, or maintenance activities) to meet biological and social needs. These patches could include stands of either "existing old growth" or "future old growth".**

OBJECTIVES

15.1 Complete field verification of possible existing old growth areas in our current inventory, and map small and medium patches.

The Final Environmental Impact Statement for the Revised Land and Resource Plan National Forests in Alabama (FEIS) identifies possible old growth by community type for the forest. Additionally, management prescriptions such as wilderness and remote backcountry were identified as providing for large areas with others such as canyon corridors, riparian, providing as key linkages for old growth characteristics. (FEIS, p. 3-158).
Review of the Forest Plan revealed that forest-wide goal 15 states:

> *"A variety of large, medium, and small old growth patches will be managed (through restoration, protection, or maintenance activities) to meet biological and social needs. These patches could include stands of either "existing old growth" or "future old growth"."*

Forest-wide objective 15.1(Forest Plan, p. 2-41) provides for the inventory and mapping of old growth, however, the Forest Plan did not contain a specific forest-wide standard for old growth management.

On October 7, 2010, Amendment 1 for Old Growth Standards amended the Revised Land and Resource Management Plan (Forest Plan) for the National Forests in Alabama to add the following standards for the management of old growth.

> FW 183 - Inventory stands for existing old growth conditions during project planning using the criteria in Old Growth Guidance for the Southern Region. Consider the contribution of identified patches to the distribution and abundance of the old growth community type and to the desired condition of the appropriate prescription during project analysis.

FW 184 - Existing old growth as defined in Old Growth Guidance for the Southern Region, when encountered, will be managed to protect the old growth characteristics.

Terrestrial Plant and Animal Communities

GOAL 16 **Provide habitats to support desirable levels of selected species (e.g., species with special habitat needs such as large, contiguous forested landscapes; species commonly trapped/hunted; or species of special interest).**

MIS

Twelve species were selected as management indicator species (MIS). Three of the twelve, white-tailed deer, eastern wild turkey and northern bobwhite quail were selected to help indicate management effects on meeting hunting demand for these species. The NFsAL works in cooperation with the Alabama Department of Conservation, Wildlife and Freshwater Fisheries Division in managing habitat for these species and monitoring them. Statewide information concerning hunting and harvests is available online http://www.outdooralabama.com/research-mgmt/publications/.

Over the past ten years, the NFsAL have provided (via both force account and through partnership with the Alabama Department of Conservation and Natural Resources) hundreds of acres of warm and cool season food plots for public wildlife viewing and harvest opportunity. Typical plantings on all districts include cool season (winter wheat, oats, clovers, Austrian winter peas) for white-tail deer and wild turkey, and warm season crops (browntop, sorghum, millets, chufa, etc.) for turkeys, deer, and bobwhite quail. These supplemental plantings are primarily for concentrating game species and not for providing the foundations of nutrition. The mainstay of these species' nutrition is provided via the native vegetation of the surrounding ecosystems.

Figure 18 - Cool Season Food Plot (wildlife opening) of Wheat, Oats, and Clover on the Talladga RD

Figure 19 - The Talladega NF Provides Quality Hunting Opportunities for Wild Turkey

The remaining MIS are birds and are monitored using "The Southern National Forest's Migrant and Resident Landbird Conservation Strategy" (Gaines and Morris 1996). The NFsAL continues to conduct annual surveys on approximately 300 points. On the NFsAL the bird points were established in the 1997, and in June 2007 Population Trends and Habitat Occurrence of Forest Birds on Southern National Forests 1992-2004 (General Technical Report NRS-9) was published with results from this ongoing effort. MIS bird species trends (total for all NFsAL lands) over the past decade are represented in table 17 below.

Table 17: MIS Bird Species Trends 2004-2013

Species	Survey Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
ACADIAN FLYCATCHER		60	69	66	59	64	65	78	70	79	51	**661**
BROWN-HEADED NUTHATCH		28	24	36	23	31	24	27	16	21	31	**261**
HOODED WARBLER		93	117	125	117	108	110	146	117	196	106	**1,235**
NORTHERN BOBWHITE		16	19	23	17	8	30	24	9	39	15	**200**
PILEATED WOODPECKER		46	83	60	72	58	88	113	87	111	111	**829**
PRAIRIE WARBLER		141	201	205	240	188	182	188	216	250	191	**2,002**
RED-COCKADED WOODPECKER		4	4	6	5	5	6	6	4	9	4	**53**
SCARLET TANAGER		50	75	69	56	33	77	64	48	70	15	**557**
SWAINSON`S WARBLER			9	4	1	3	1			5	3	**26**
WILD TURKEY		12	6	9	3	2	1		10	3	5	**51**
WOOD THRUSH		37	46	53	42	55	37	42	18	47	31	**408**
Total		**487**	**653**	**656**	**635**	**555**	**621**	**688**	**595**	**830**	**563**	**6,283**
No. Species matching Criteria:		**10**	**11**	**11**	**11**	**11**	**11**	**9**	**10**	**11**	**11**	
No. Points matching Criteria:		**240**	**293**	**301**	**298**	**280**	**298**	**302**	**268**	**328**	**223**	**2,831**

OBJECTIVES

16.1 Provide upland fire climax communities aimed at producing large trees in the overstory and open park-like understory composition dominated by native grasses and forbs.

16.2 Promote or retain hardwood dominated, hard and soft mast producing riparian areas to benefit hardwood associated Partners in Flight priority species.

16.3 Promote or retain xeric mast producing hardwoods in upland areas to benefit select species. Manage for a diversity of oak species to minimize yearly fluctuations in acorn supplies for wildlife species.

16.4 Provide breeding, wintering, and migration staging and stopover habitat for migratory birds in ways that contribute to their long-term conservation.

16.5 Provide habitats for species needing large blocks of contiguous forests, especially where such conditions are not found on other lands within the landscape.

16.6 Encourage maintenance of forest as a land use on private lands within and surrounding national forests through land acquisition, agreements, and education in order to maximize benefits of national forest lands to area sensitive forest interior species.

Bankhead

The Bankhead National Forest has identified the Black Pond and Inman Field Quail Emphasis Areas for woodland restoration projects with an emphasis on improving Northern Bobwhite Quail habitat. In these areas the desired conditions in the uplands are longleaf and shortleaf pine woodlands. These areas will demonstrate how a combination of commercial timber sales, midstory removal, and prescribed burning are used to achieve desired conditions. The areas will be used to showcase and demonstrate pine woodlands and the importance of this habitat to native wildlife species, including the Northern bobwhite quail, eastern wild turkey, prairie warbler, and brown-headed nuthatch.

Creating early successional wildlife habitat through woodland restoration benefits numerous bird species of conservation concern associated with woodland, grass, and shrubby habitats including Northern bobwhite, prairie warbler, Bachman's sparrow, blue-winged warbler, field sparrow, pine warbler, brown-headed nuthatch, and yellow-breasted chat. Restoration of wildlife habitat including pine woodlands is essential for bird conservation and is identified in Partner's in Flight's Bird Conservation Plans and Alabama Wildlife Conservation and Management Recommendations for Imperiled Wildlife. Native fire dependent woodlands and associated species are vanishing across the landscape.

On-going forest management practices to improve Northern Bobwhite Quail habitat include midstory removal in mature pine stands, prescribed burning, loblolly pine plantation thinning, longleaf and shortleaf pine reforestation, non-native invasive plant control and wildlife opening management.

Projects in these areas were made possible by a National Fish and Wildlife Foundation Power of Flight grant in partnership with Quail Unlimited and the Southern Company. Walk-in use of the Quail Emphasis Areas in encouraged. However, hunters shouldn't expect a huntable population of quail to return to the area for quite some time.

A cooperative monitoring effort for white-tailed deer has been on-going on the Bankhead National Forest and Black Warrior Wildlife Management Area since the 1980's. Annual deer spotlight surveys are conducted on the Black Warrior WMA (Western Survey Route) and off the WMA on the Bankhead (Eastern Survey Route). Ten surveys are completed once each year. These surveys are conducted during a two week time period. Surveys are conducted

ordinarily during the last week of October and first week of November. All surveys are completed before the first Black Warrior Wildlife Management Area (WMA) gun deer hunt.

Cerulean Warblers (a species that need large block of contiguous forest) have been detected at 18 locations of the Bankhead National Forest between 1999 and 2005. During the 2007 survey a nest with adults and chicks was found. Monitoring for this species continues by the state DCNR and Bankhead NF staff. Table 18 displays the survey results for cerulean warbler for the period 2005-2014.

Table 18 – Survey Results for Cerulean Warbler for the Period 2005-2014

Species			Survey Year	2005	2006	2007	2008	2009	2010	2011	2013	2014		Total
CERULEAN WARBLER				1	1	2	2	1	2	2	1	1		**13**
Total				**1**	**1**	**2**	**2**	**1**	**2**	**2**	**1**	**1**		**13**
No. Species matching Criteria:				**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**		
No. Points matching Criteria:				**1**	**1**	**2**	**2**	**1**	**2**	**1**	**1**	**1**		**12**

Talladega

The Piedmont Birding Trail includes stops at Lake Chinnabee and Turnipseed Campground. Talladega County has stops at Porter's Gap and Bull's Gap trailheads. Cleburne County has a stop at Cheaha trailhead. All of these areas were selected to allow visitors to enjoy nature and become aware of the importance of forests to bird species of concern.

Fire Management

GOAL 17 Achieve a balance between suppression, to protect life, property, and resources, and fire use, to regulate fuels and maintain healthy ecosystems. Use wildland fire to protect, maintain, and enhance resources, and, as nearly as possible, allow fire to function in its natural ecological role.

GOAL 18 Use fire to restore and maintain fire dependant and associated communities. Fire regimes are restored within or near the historical range (Condition Class 1).

Talladega

On September 25, 2013, the District Ranger signed a Decision Notice and FONSI for an Environmental Assessment to continue prescribed burning for fuel reduction and ecosystem restoration on 158,600 acres of the Division. In 2010, 194 acres of chainsaw felling and 231 acres of mulching were completed under the American Recovery and Reinvestment Act

of 2009 (ARRA) to change Condition Class. The unit has several Wyden Agreements with landowners which helps to reduce line construction when prescribe burning.

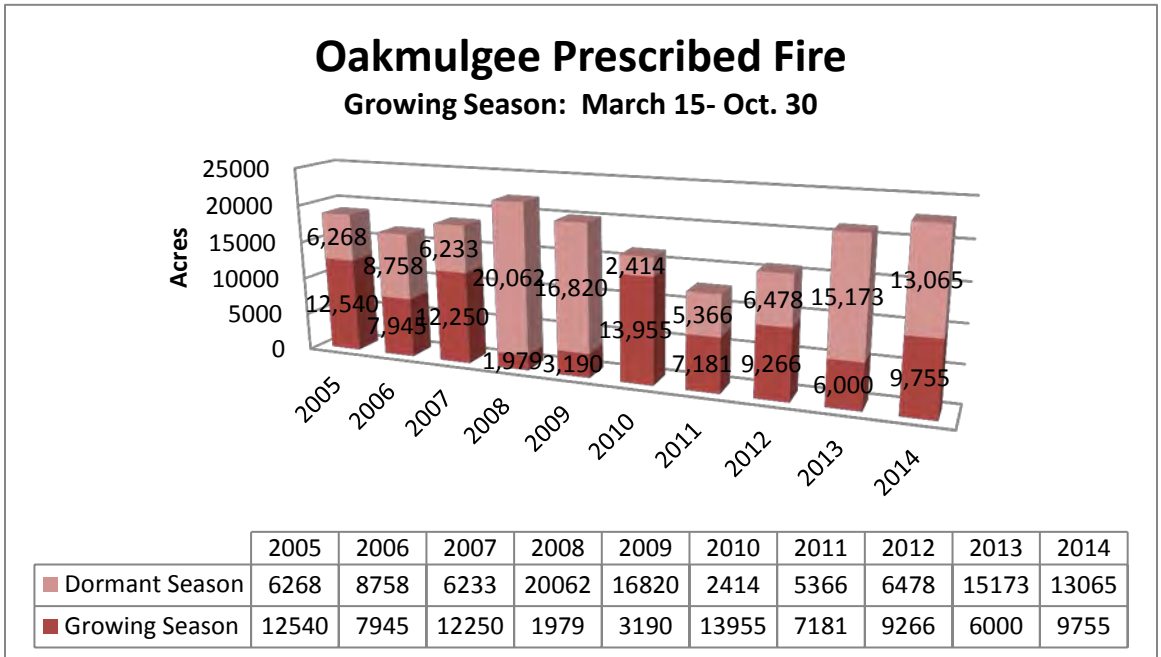
OBJECTIVES

18.1 Strive to burn, using a combination of growing season and dormant season burning, approximately 55,000 acres annually.

Table 19: Total acres(thousands) burned by year forest-wide during the period 2010-2014.

Year	2010	2011	2012	2013	2014
Acres Burned(thousands)	85	70	98	116	120

Figure 20 - Oakmulgee Prescribed Fire (2005-2014)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Dormant Season	6268	8758	6233	20062	16820	2414	5366	6478	15173	13065
Growing Season	12540	7945	12250	1979	3190	13955	7181	9266	6000	9755

GOAL 19 Reduce hazardous fuels through use of wildland fire, prescribed fire, and mechanical fuels treatment.

Talladega

Fire personnel on the Talladega Division also provide primary support to the Tuskegee National Forests for prescribed burning.

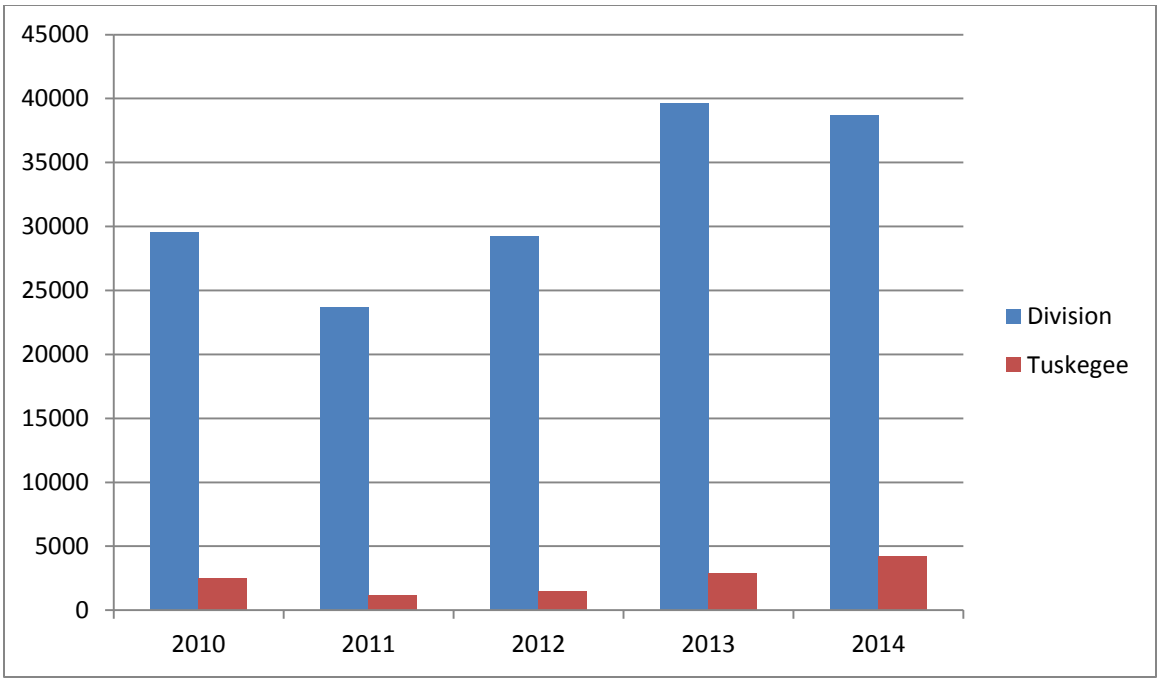


Figure 21 - Acres Prescribed Burned by Year for the Talladega Division and the Tuskegee NF

OBJECTIVES

19.1 Burn approximately 15,000 acres annually, using both growing and dormant season burning, to reduce hazardous fuels.

Oakmulgee

On April 27, 2011, an EF 4 tornado impacted the Oakmulgee District leaving a 13 miles swath of heavy fuels transecting the western portion of the District. The resulting heavy fuels were of considerable concern given the juxtaposition of the tornado impact area to population centers and the prevailing winds.

Fuels reduction in the Tornado path has been accomplished by two means: salvage and prescribed burning. Initial fuels loads were estimated greater than 35 tons per acre. In these areas were classified as Fire Behavior Fuel Model 13. In this fuel model, large quantities of material larger than 3 inches are present. Fire is generally carried across the area by a continuous layer of slash (dead, down, woody material). Fires spread quickly through the fine fuels and intensity builds more slowly as large fuels start burning. Active flaming is sustained for long periods and numerous firebrands are generated, contributing to spotting problems as weather conditions become more severe. Estimated fire behavior using BEHAVE indicates rates of spread of 14 chains per hour and flame lengths of 10 feet under moderate burning conditions. Under extreme conditions, the ROS increases to 24 chains per hour and flame lengths to 13 feet.

In addition, smoke production is greater due to large amounts of fuels and consumption time. It is estimated at that PM 2.5 particulate emissions could reach up to 2 tons per acre

in these fuel loads. Any ignition to these areas when fuels were cured had the potential to cause health and safety concerns.

Eight hundred and eleven acres were salvaged removing the majority of heavy fuels in the area. The removal of canopy structure by the tornado and the subsequent removal of heavy logs from salvage resulted in open areas with a variety of logging debris, and a variety of fuels sizes. Post salvage, there was response from grasses and longleaf pine where longleaf was the previous ridge top overstory. This corresponds to Fuel Model 2 where grass and needle litter are the primary carrier of fire. In areas of lower slopes, drainages and other soil types deciduous-pine mix Fuel Model 9 represents the hardwood leaves and needles. These fuels models have lower smoke emissions and intensity levels.

To date, 811 acres have been salvaged and 317 have been treated with prescribed fire. An additional 33 acres will be burned for a second time in 2015. Heavy fuels consumption was varied across the units that were burned. It is estimated that 30-50 % of the larger diameter fuels greater than 3 inches were consumed after the initial fire entry. The remaining areas that were salvaged are slated for entry in FY 2016 after adjacent timber sales are complete. It is anticipated that two fire entries and further decomposition will return the forest to a traditional fuel models associated to this forest type.

Table 20: Acres Salvaged and Burned by Project Area Oakmulgee District

Project Name	Salvaged Acres	Rx Burn Acres
Clary	211	0
Pine Flat	202	0
Cow Pen East	169	169
Friendship	229	129
Total	**811**	**298**

GOAL 20 Emissions from prescribed fire will not disproportionately hinder State progress towards attaining air quality standards or visibility goals.

GOAL 21 The Forest Service will annually review the status of counties near the National Forest regarding their attainment of the NAAQS. Where a non-attainment area is formally recognized, the Forest Service will participate in SIP modification to bring the area back into attainment status.

The only area in Alabama that is in non-attainment with the National Ambient Air Quality Standards (NAAQS) is the metropolitan area of Birmingham, which does not encompass any portion of the National Forests in Alabama.

Recreation – Developed, Dispersed, and Backcountry

GOAL 22 Provide a spectrum of high quality, nature-based recreation settings and opportunities that reflect the unique or exceptional resources of the Forest and interests of the recreating public on an environmentally sound and financially sustainable basis. Adapt management of recreation facilities and opportunities as needed to shift limited resources to those opportunities.

Talladega

The Forest Service must continually evaluate safety. After a flood event occurred at Lake Chinnabee on May 17, 2013, flooding the access road with over six feet of water obstructing campers' access to exit, the area the camping area was closed.

Figure 22 - Asphalt Damage - Lake Chinnabee

Figure 23 - Asphalt Repair at Lake Chinnabee

The district is also working to re-route about a 500 foot section of the Kentuck OHV Trail due to a hazardous rock outcropping.

OBJECTIVES

22.1 Evaluate recreation quality using health, cleanliness, setting, safety, security, and the condition of facilities as rating categories.

22.2 Strive to be responsive to deficiencies.

NFsAL continues to prioritize limited resources towards activities that strengthen the indentified niches of the National Forests in Alabama. Dispersed uses such as trails are

recognized as the most suitable activities of National Forests in Alabama lands. We have responded by increasing emphasis on trails. A concentrated effort is ongoing to reduce deferred maintenance and operations and maintenance costs at developed recreation sites. This is primarily by replacing obsolete restrooms with accessible vault buildings.

GOAL 23 Provide a wide variety of dispersed and developed recreation opportunities within the capabilities of the land.

Talladega

In 2012 the division finished the last section of the Pinhoti National Recreation Trail across the Talladega Division of the Talladega National Forest through a cooperative agreement with the Alabama Department of Conservation and Natural Resources. Now hikers can venture from Sylacauga to Piedmont enjoying the natural beauty of the national forest and view our progress on longleaf restoration.

OBJECTIVES

23.1 Annually evaluate existing opportunities to determine if they meet carrying capacity, demand, and financial ability to maintain in the future for maintenance, expansion or closure.

23.2 Conduct annual assessments of existing OHV roads and trail crossings in relation to aquatic ecosystem condition and species of concern. Prioritize road and trail maintenance and reconstruction projects in accordance with threatened, endangered, and sensitive species recovery and conservation efforts. If new impacts to threatened and endangered species are discovered, consult with U.S. Fish and Wildlife Service to develop a plan to avoid and/or mitigate further impacts.

GOAL 24 The National Forests will manage areas to provide for "backcountry" (semi-primitive/remote) recreation experiences.

Wilderness and Wild and Scenic Rivers

GOAL 25 Wilderness, roadless, and other unroaded areas are managed to provide their full range of social and ecological benefits.

Talladega

In 2014 after a major ice storm on Cheaha Mountain, Forest Service employees and volunteers spent several days clearing trails to remove downed trees and limbs. The trails in the wilderness were cleared with traditional tools which took considerable effort since access on some trails was completely blocked.

OBJECTIVES

25.1 Develop a Limits of Acceptable Change inventory and monitoring system for each wilderness. LAC will address invasive species, fire plan, visitor education, and other resource issues.

Through the Chief's 10 year wilderness challenge we have consistently increased compliance with the 7 criteria over the past 5 years. The Dugger, Cheaha, and Sipsey Wilderness areas all meet the definition of managed to standard.

GOAL 26 **Wild, Scenic and Recreation Rivers which are designated by Congress, recommended for designation, or are eligible for designation, will be managed to protect their outstandingly remarkable values.**

The Sipsey Fork Wild and Scenic River is currently managed to standard as per agency criteria.

OBJECTIVES

26.1 Complete the suitability study for Five Runs this plan period.

Scenery

GOAL 27 **Protect and enhance the scenic and aesthetic values of National Forest lands through application of the Scenery Management System and assigned Scenic Integrity Objectives.**

OBJECTIVES

27.1 Maintain a current inventory of scenic classes and scenic integrity objectives.

The forest has a vigorous restoration program for restoring the longleaf pine forest. This includes mitigation protecting scenic integrity during the early stages of the restoration. The forest also has an aggressive treatment program for non-native, and invasive species.

GOAL 28 **The National Forests will be managed to provide a variety of Landscape Character Themes with the predominant themes being Natural Appearing, Natural Evolving, and variations of these themes.**

The forest continues to be managed for a variety of landscape character.

GOAL 29 **In areas where the inventoried existing scenic integrity condition is Low, Very Low or Unacceptably Low, strive to improve the scenic integrity.**

Ecosystem restoration and nonnative and invasive species plant treatment have helped improve areas with low scenic integrity.

Heritage Resources

In order to achieve a better balance between compliance work (Section 106 surveys) and other aspects of the Heritage Resources Management Program, each region 8 Forest is assigned a target by the Regional Office. To meet this target, points are awarded for activities that preserve America's heritage through "responsible stewardship activities that recognize, preserve, protect, enhance, and use cultural resources for the greatest public benefit." Those activities fall into three primary categories:

1. protect historic properties
2. share their value with the public, and
3. contribute information and perspectives to land management

For Fiscal Year 2014, the National Forests in Alabama Heritage Program was assigned a target of 15 points. We scored 25 points, reaching 166% of our assigned target.

The National Forests in Alabama added five archeological sites to our Priority Heritage Assets (PHA's) list, bringing our total to eight PHA's. Our archeologists conducted "condition surveys" on the PHA's in order to have up-to-date (within five years) monitoring on these sites. A point is scored for every 10% of the total PHA's under current condition surveys. During FY 2014, site condition surveys were conducted on Sites 1La625 and 1La102, bluff shelter sites on the Bankhead National Forest with prehistoric occupations, and on Site 1Wi50, an open terrace site on the Bankhead National Forest with a prehistoric occupation. On the Talladega Division, site condition surveys were conducted on Site 1Cy244, a prehistoric stone mound and wall complex, on Site 1Cy77, an early 20th century turpentine still, and on Site 1Cy275, a 19th century placer gold mine. On the Tuskegee National Forest, a site condition survey was conducted on Site 1Mc110, an early 19th century Creek Indian site. This was the second condition survey done for this site as it had been inspected in 2009. Due to a technical glitch with the database, we were given credit for seven of eight PHA's for a score of 8.75 points.

Jean Allan, district archeologist, organized a cemetery clean-up day on the Bankhead National Forest using volunteer labor. The Forest received 2.5 points for the stewardship activity of maintaining the resource as well as 4.2 points for the volunteer hours donated.

Our archeologists gave five public education programs during the course of the Fiscal Year. Jean Allan gave a talk on "Leave No Trace" on Heritage sites for the 50th anniversary of the Wilderness Act at the Bankhead National Forest. Marcus Ridley gave a presentation at the "To Bridge a Gap" Conference in Fayetteville, Arkansas on the Heritage Resources Management Program. Bob Pasquill gave presentations to mark the 100th anniversary of the Alabama Purchase Unit at the Oakville Indian Mounds in Lawrence County, and for the Sipsey Wilderness Hiking Club in Double Springs. He also gave a presentation at the Tuskegee History Center on the "History of the Tuskegee Land Utilization Program." This program was made possible through an Alabama Humanities Foundation Grant and through partnership with Auburn University, Tuskegee University, and the Tuskegee History Center. We received two points for each of the five programs for a total of 10 points.

Figure 24 - Site 1Cy77, Turpentine Still in Clay County, Talladega NF

Figure 25 - Public Education Program at the Oakville Indian Mounds, Lawrence County

GOAL 30 Manage areas with special paleontological, cultural, or heritage characteristics to maintain or restore those characteristics.

GOAL 31 Use a systematic program of heritage resource inventory, evaluation, and preservation aimed at the enhancement and protection of significant heritage resource values in compliance with Sections 106 and 110 of the Historic

Preservation Act of 1966 as amended (1980). Emphasize integration of heritage resource management concerns and coordinate with the public, scientific community, appropriate Native American and other ethnic groups.

Talladega

A Historic American Buildings Survey/Historic American Engineering Record is being conducted on Horn Mountain Fire Tower as a new telecommunications tower is added to this designated communications site.

31.1 Inventory heritage resources with priority given to proposed project areas.

Table 21: Summary of Heritage Resources Acres Surveyed	
In-house:	1,325 acres
Participating Agreement:	13,560 acres
IDIQ:	4,060 acres
Total:	18,945 acres

Table 22: Acres of Survey for Heritage resources by district and method.		
Bankhead:	1,159 acres surveyed	In-house
Conecuh:	2,510 acres surveyed	Participating Agreement
Oakmulgee:	8,285 acres surveyed	Participating Agreement
Shoal Creek:	1,770 acres surveyed	Participating Agreement
	4,060 acres surveyed	IDIQ(contract)
Talladega:	995 acres surveyed	Participating Agreement
Tuskegee:	166 acres surveyed	In-House

During the above surveys 146 historic properties were investigated. Of those 81 historic properties were discovered during the above surveys, 85 were re-investigated. Twenty-one (21) of these new properties are eligible for inclusion to the National Register of Historic Places.

OBJECTIVES

31.2 Inventory heritage resources with priority given to proposed project areas.

Findings: All historic properties that are eligible for or listed on the National Register that may suffer an adverse effect from one of our undertakings are protected. Our standard protocol is to leave the property *in situ* (in its proper or original place). We then create a special exclusion zone where personnel and equipment are prohibited from entering. In the event that an undertaking cannot be adjusted, and the eligible or listed historic property will suffer an adverse effect, a MOA

(Memorandum of Agreement) is written by the NFA with invited consulting parties to determine the best way to mitigate the affect upon the site.

As it pertains to Objective 31.2 a case example is the Talladega District Horn Mt. Fire Tower. As of October 2014 an MOA is in effect between the NFA, the Alabama Historical Commission, the Forest Fire Lookout Association, and the CCC Legacy to offset the intrusion of a new communications tower on the 1930s CCC constructed property. Certain provisions within this MOA are recording the site to HAER (Historic American Engineering Record) levels for National Archives curation, and performing a PIT (Passport In Time) project at this property to stabilize the property.

The National Forests in Alabama Heritage Unit is developing a new Forest Heritage Plan that covers all aspects of the Heritage Program. This plan should be completed internally later in Fiscal Year 2015, and sent to the SHPO and consulting Tribes for comments per the sections of it that are applicable to them (i.e. NAGPRA issues).

Recommendations: The continued inclusion of NFA Heritage personnel at the planning and implementation stage of an undertaking to determine how the undertaking will potentially affect the known historic properties, and potential historic properties, located within the NFA. Continuous inspection of eligible and listed historic properties to make sure they are not suffering and adverse impact from district personnel, contractors, permittees and the general public.

31.3 Develop preservation/maintenance plans for historic properties.

Minerals and Geologic Resources

GOAL 32 **Administer mineral resource program to meet demands for energy and non-energy minerals consistent with management prescription, multiple use objectives and in accordance with Washington Office policies and existing laws.**

The Forest has met this goal by submitting to the Bureau of Land Management Area by Area Title Reports that provide detailed mineral ownership information with stipulations as set forth in the Final Environmental Impact Statement (FEIS) and the Final Land and Resource Management Plan, also, by timely processing applications (within 120 days) for Federal Mineral leases, licenses, and permits, as directed by the Code of Federal Regulations 36 228.102.

The Bureau of Land Management has issued 59 Oil and Gas leases for the National Forests in Alabama from 2010 -2014. Fifty leases have been issued on the Conecuh Ranger District and 9 leases have been issued on the Talladega National Forests (Oakmulgee Ranger District). Total active leases on the NFsAL is 100 (41 issued prior to 2010). NFsAL has one producing well.

OBJECTIVES

32.1 Applications for federal mineral leases, licenses, and permits are processed within 120 days.

32.2 For mineral material authorizations, emphasize authorizations of minerals needed for environmental protection, public infrastructure, flood protection, erosion control, and watershed restoration.

32.3 Reclaim mineral sites at the appropriate stage of the mineral operation. Identify opportunities for reclamation to achieve post-mine land uses that complement the desired condition of the appropriate management prescription.

GOAL 33 On National Forest System tracts where mineral rights are outstanding or reserved, the exercise of private mineral rights to explore and develop mineral resources will be respected.

OBJECTIVES

33.1 Operations proposed under outstanding and reserved mineral rights are processed within 60 days and 90 days, respectively.

GOAL 34 Manage geologic resources to provide multiple public benefits. Manage geologic hazards to protect public safety and facilities while integrating the keystone role of these natural disturbances in riparian and watershed management. Integrate geologic components (processes, structures, and materials) in management of riparian areas, watersheds and ecosystems.

Infrastructure

GOAL 35 Provide a transportation system that supplies safe and efficient access for forest users while protecting forest resources.

The NFsAL has completed Transportation Analyses for each district. Additionally during the project NEPA process, project level transportation analyses are completed to assure that the transportation system needs are met.

Talladega

The Talladega has repaired and re-installed gates on several roads. We also installed a gate on NFSR's 608D to reduce trash dumping and allow seasonal use.

OBJECTIVES

35.1 Within 5 years, complete an assessment of existing road crossings in relation to aquatic species passage.

In 2005 and 2006 the USFS Southern Research Station and the Center for Aquatic Technology Transfer (CATT) assisted the National Forests in Alabama with the task of inventorying and assessing for aquatic organism passage (AOP) all road crossings over perennial streams within our boundaries. During that time 221 road/stream crossing sites were visited, inventoried, and assessed for AOP.

The CATT culvert inventory crew used protocols developed by the USFS San Dimas Technology and Development Center (SDTDC) to measure physical parameters at each culvert site. This information was applied to fish passage assessment models designed specifically for Region 8 species to determine the passage status of each road crossing.

Of all the crossings inventoried and assessed in 2005 and 2006, 61% were classified as 'impassable' to upstream fish migration. Areas with impassable road crossings were overlaid with aquatic species distribution information in order to identify and prioritize crossings for replacement or removal. These priorities along with engineering priorities and district needs helped outline and acquire funding for roads projects including Transportation Bill, Legacy Roads, CIP, ERFO, and ARRA.

To date, 10 'impassable' stream crossings have been replaced, 1 removed, and 2 retrofitted to provide for AOP and habitat connectivity. An additional 2 AOP projects have had NEPA analysis and design completed and have been submitted for funding.

Figure 26 - Before(left) and after crossing replacement (right) at Little Creek and FS Hwy 37 (CR29), Oakmulgee

35.2 Prioritize road maintenance and reconstruction projects in accordance with threatened, endangered and sensitive species recovery and conservation efforts.

See objective 35.1 above.

35.3 Institute seasonal closures on roads and trails over the 10 to 15 year period of the plan to provide additional acreage of remote habitats during spring and summer months.

35.4 Annually complete site safety inspection of all facilities, bridges and open roads. Correct high-risk conditions prior to use.

All facilities are inspected for safety annually by the Forest Safety Officer accompanied by forest engineer as needed. Bridges are inspected bi-annually in accordance with the National Bridge Inspection Standard (NBIS) Regulations. Inspectors have the authority to immediately close bridges to traffic in the case of high-risk conditions.

GOAL 36 Accelerate the pace of decommissioning unneeded roads (classified and unclassified).

Talladega

The Talladega has decommissioned many short roads or sections of roads which were no longer needed to include 9.7 miles of road decommissioning.

GOAL 37 Improve the condition of forest roads/bridges that are adversely effecting surrounding resource values and conditions.

Talladega

The Talladega has completed an environmental assessment to replace a low water crossing on NFSR 637 with a bridge to improve safety and to improve threatened and endangered mussel habitat. Also on NFSR 607,replacing a damaged bridge with a single span structure which will improve safety, increase accessibility and enhance threatened and endangered mussel habitat is proposed. Environmental documentation has also been completed for a low water crossing on NFSR 601 to install a large bottomless culvert to improve safety and aquatic organism passage.

GOAL 38 Identify and acquire easements and/or rights-of-way for existing forest roads and access needs.

Rights-of-way and/or easements have been obtained for existing roads, during the execution of road maintenance and road improvement projects,

Land Acquisition

GOAL 39 Achieve a consolidated forest ownership pattern that reduces management costs and meets ecosystem management objectives.

GOAL 40 Acquire lands containing sites critical to the conservation of rare communities, federally listed threatened or endangered species, or species deemed at risk of losing viability within the planning area including, but not limited to, riparian areas, wetlands and land to connect large tracts to maintain biological and hydrologic linkages.

GOAL 41 Locate and maintain forest boundaries so that they are visible to forest users and neighbors.

OBJECTIVES

41.1 Maintain boundary lines on an eight-year rotation.

The Forest receives funding to accomplish about a third of the miles needed to meet the rotation schedule. However due to damage from Hurricane Ivan the Forest received additional funding to maintain damaged landlines. The Forest also received funding to maintain landlines as part of the stimulus program(ARRA). Because of this, the Forest is currently on rotation schedule.

41.2 Achieve 100% establishment of boundary lines by the end of the plan period.

The Forest is currently about 95% complete with establishment. Current rate of funding does not allow for establishment just maintenance. Additional establishment will occur as funded.

GOAL 42 Identify and resolve illegal trespass and occupancy of National Forest lands.

Talladega

Resolved cases of illegal trespass by working with adjacent landowners to remedy and remove items from national forest lands to include: removing barbed wire, multiple signs, and a garden.

GOAL 43 Consolidate National Forest ownership along riparian corridors in order to allow greater protection of water quality and provision of habitat for riparian dependent species.

GOAL 44 Public lands are easily accessible.

Talladega

The Talladega issued reciprocal easements in several situations where it would benefit both the Forest Service and the adjacent landowner.

OBJECTIVES

44.1 Acquire right-of-way or fee simple title in lands, as appropriate, to meet access needs.

Rights-of- Ways are acquired as needs are identified and funding is available.

GOAL 45 National Forest System (NFS) lands are consolidated to improve management effectiveness and enhance public benefits.

OBJECTIVES

45.1 Through purchase, donation, exchange, rights-of-way acquisition, transfer, interchange, and boundary adjustment; consolidate NFS ownership pattern.

45.2 Acquire lands or interests in lands needed to support specific resource management objectives.

45.3 Exchange or transfer lands or interests in lands that consolidate or provide public benefits.

Special Uses

GOAL 46 Evaluate special-use applications to determine if they are in the public interest, cannot be accommodated on private land, and comply with the Forest Plan, laws, regulations and statutes. Special uses are administered to compliment other resource values.

The Special Use Proposal checklist is utilized to determine if special uses are in the public interest and comply with Forest Plan Goal 46. For a proposal to be accepted as an application, all first level and second level screening criteria must be met. As directed by the 36 CFR 251.54(e), FSM 2703.1 and FSM 2703.2. The Forest has met this goal by using the screening checklist for all proposals.

Talladega

The Talladega issued multiple special uses which include commercial shoots for tourism and mountain bike and foot race events which should increase knowledge of the natural resources available for the public to enjoy.

Natural Resource Interpretation and Education

GOAL 47 Increase public awareness, knowledge, understanding, appreciation, and involvement in Forest Service natural resource management activities.

OBJECTIVE

47.1 Develop a Forest-wide strategy for interpretive opportunities and facilities within five years.

GOAL 48 Engage the public and other agencies in cooperative, collaborative efforts that win their trust and support while helping to meet desired future conditions.

GOAL 49 Encourage cooperation and partnerships with individuals, non-profit organizations, other agencies, special interest groups, clubs and others to achieve the Forest's interpretive activities.

Bankhead

In 2002, the Bankhead National Forest partnered with the US Institute for Environmental Conflict Resolution who hired the Natural Resources Leadership Institute and RESOLVE to create a more collaborative decision-making process and public involvement strategy for the Bankhead Forest Health & Restoration Project (FHRP). The NRLI-Resolve Team worked with Bankhead staff and the Bankhead Liaison Panel, a stakeholder group representing various interests who had been working together since early 2000.

Reports, meeting summaries, and decision making tools from this time period with NRLI are available at

http://www.ces.ncsu.edu/depts/agecon/nrli/bankhead.html.

The Bankhead Liaison Panel is made of individuals that represent a diverse cross section of public interests on the Bankhead National Forest. The goal of the panel is to:

1) Learn about forest service projects, plans, health and status of the Bankhead National Forest,

2) Communicate clearly with other Liaison Panel members about each other's preferences and interests,

3) Consider, discuss, act as a sounding board and provide possible solutions to a variety of issues on the Bankhead National Forest".

The Liaison Panel aspires to develop solutions that are acceptable to all panel members or at least to a large majority of the members. The Panel meetings are open to the public and the meetings provide a forum for the public to come together to learn, discuss and help resolve difficult land management issues.

BNF and the Liaison Panel meet quarterly. Additionally, the Restoration Monitoring Team of the Panel conduct field reviews of projects (citizen monitoring) several times each year.

The staff at Bankhead actively participates in a number of informal working groups and organizations to promote and achieve interpretive activities. Some of these include the Alabama Bat Working Group, the Winston County Natural Resources Council, the Alabama Chapter of the Wildlife Society, the local chapters of the National Wild Turkey Federation, the local Quail Forever chapter, the SE Bat Diversity Network, and Winston County Smith Lake Advocacy Inc. Additionally the staff work with Universities including AAMU, UA, AU, UWA, Bevill State Community College, and MSU and with local schools to get students out in the Forest and learning about natural resources and management. Bankhead partners with AAMU and Southern Research Station on active research of Bankhead management practices. Researchers share findings at the Bankhead Liaison Panel and at professional conferences.

Bankhead participates in the North Alabama Birding Trail to promote watchable wildlife on the National Forest. Bankhead's efforts include an orientation kiosk and four birding sites with interpretive kiosks. Each site is being entered into the Nature Watch database. A birding brochure to complement the trail was developed and produced by Bankhead staff. Staff worked with the National Wild Turkey Federation through a stewardship project to purchase a sign and brochures at the Walston Ridge site on the North Alabama Birding Trail.

Other sites that have been developed to encourage nature watch type activities with interpretive opportunities include the Capsey Creek Nature Watch Site with accompanying signs and brochure and the Flint Creek Botanical Area, a celebrating wildflowers site. Working with Alabama A&M University and the Alabama PARC group, a Herptofauna a brochure was developed and produced for Bankhead.

Again through a stewardship project, Bankhead is working with National Wild Turkey Federation(NWTF) to produce a video highlighting Bankhead's restoration projects and partnerships.

Working with the Alabama DCNR – Wildlife & Freshwater Fisheries, Bankhead distributes "Wildlife Habitat Improvement Fact Sheets" annually during deer hunts while working at the checking station. Additionally, we work together to host at least two hunter education and safety courses annually.

Working with the Winston County Natural Resources Council and many other partners, the Bankhead participates and/or hosts annual Forestry Field Days for landowners and loggers; the Forestry Awareness Week Now (FAWN) outdoor classroom for all Winston County 6th graders; the Kids Fishing Derby, and Archaeofest.

Partnering with Southern Research Station on American Chestnut research. Chestnut seedlings established at six research sites to measure growth response in under plantings and in openings.

*All of these accomplishments, plus many others in the conservation education area are reported in the WFRP database annually.

Conecuh

Forest Service employees on the Conecuh constantly strive to work with partners to advance restoration goals for the forest, including the provision of historically native habitat conditions, expansion and, where appropriate, introduction of rare species populations, and to increase knowledge and awareness through the scientific community as well as the general public. The following list details much of the CNF efforts that contribute to Plan Goals 47, 48, and 49.

- Founding Member of the Gulf Coastal Plan Ecosystem Partnership
- Provide Regional Rep. for NRIS and the CCA Gopher Tortoise committee
- A multiyear longleaf restoration monitoring project with Troy University
- Member of the Covington County Forestry Planning Committee
- Work with Covington County Forestry Planning Committee to host an annual outdoor classroom for all local elementary schools
- Member of the Escambia County Soil & Water Conservation District
- Partner with AL DNR to maintain wildlife openings and improve wildlife habitats on the Blue Spring WMA
- Partner with NWTF on various habitat improvement projects
- Partner with Quail Forever and Quail Unlimited on habitat projects
- Partner with AL DNR and others to develop a handicap hunting area
- Partner with local groups to host an annual Youth Fishing Derby
- Work with local volunteer fire departments on wildfire strategies
- Provide Smokey Bear appearances and prevention materials on a routine basis to local schools and community groups
- Meet with local EMA authorities concerning hurricane preparedness
- University of Southern Mississippi – Gopher Tortoise DNA Research
- University of Florida – wiregrass genetics study
- Indigo Snake Reintroduction – Auburn University, USFWS, Zoo Atlanta, Georgia DNR, AL DNR, and project Orianne
- Pennsylvania University - Fence Lizard Project
- Fresh Air Family – Spring Outdoor Education Program
- Andalusia City Lifestyles Expo – Outdoor Recreation Opportunities
- Andalusia and Brewton annual Christmas parades
- Participated in FS booths for NWTF and Buckmasters Expo
- Covington County Extension Service – assistance with evening outdoors presentations (night creatures, frog field trips, flying squirrels)
- Conducted presentations for local community college (LWBCC), Auburn University, local schools (pre-K, elementary, and high school)

- Conducted field presentations for Iowa University and Harvard University
- Provide booth at Covington County Fair

Talladega

Figure 27 - JAKES Event - Talladega National Forest

The Talladega Ranger District has several valued partnerships which aid us to share our success with restoration efforts, to increase educational awareness, to provide knowledge about recreational opportunities and to aid us in caring for the natural resources. These partnerships and alliances include:

- Annual kids fishing derby and Annual persons with disability fishing derby with the City of Sylacauga
- Get Outdoors Day Event with Munford Schools, Talladega County Board of Education (TCBOE), and town of Munford
- Annual Jakes Event
- Smokey Bear participating in the Spring and Fall Talladega 500 pre-race Parade then sharing prevention materials with race enthusiasts
- Open Air Classroom (environmental education) at Lake Chinnabee with local schools
- Munford Schools (TCBOE) environmental education efforts
- Partnering with Munford Schools on their annual Science Camp
- Assisting with the Munford Bio Blitz
- Partnership with AL DWFF to maintain wildlife opening and improve wildlife habitat on the Hollins WMA
- Partnership with Auburn University and Alabama Power Company to enhance Georgia Aster habitat along powerlines
- Hunter education classes provided by the Forest Service and AL DWFF at our office
- Professional Logging Manager class instruction provided by Forest Service employees
- Provide Smokey Bear appearances and prevention materials to local schools, scout troops, malls and community groups
- Member of the Clay County Forestry Planning Committee and have worked with them on a forestry auto tour which includes stops on the national forest.

Figure 28 - Bio Blitz at Munford School

VI. Social and Economic Conditions and Trends

The annual budget continues to fluctuate over time. These fluctuations impact our ability to adequately manage the forest in many ways. Many monitoring activities are accomplished using agreements and partnerships that may have to be reduced in the future should there be budget shortfalls.

Table 23: NFsAL Annual Budget	
FY 2010	$14,305,521
FY 2011	$13,316,683
FY 2012	$14,413,394
FY 2013	$13,936,221
FY 2014	$16,346,049

There are a large number of new and important issues facing the forest including increasing urban interface, non-native invasive species, increased public interest, new policies, litigation and others. Budget fluctuations create new challenges and opportunities for the forest.

Over the course of Revised Plan implementation there have been numerous changes in national and regional policy and direction.

Planning Rule - In 2008 the Forest Service issued a new planning rule for developing, amending or revising forest land and resource management plans. The 2008 rules was challenged and overturned in court. At the 5-year review in 2010 the 2000 planning rule, including its transition provisions was in effect. On April 9, 2012, the Department of Agriculture (USDA) adopted the final planning regulations for National Forest System (NFS)[2012 Planning Regulations] found at 36 CFR part 219 (77 FR 21161).

Travel Management Rule - In November 2005, the National Travel Management Rule was issued significantly impacting the management of forest roads. The NFsAL issued its first Motor Vehicle Use Map(MVUM), designating which roads and trails would be open to public motor vehicle use in January 2007. In preparation of the MVUM, the NFsAL decided to include all currently open roads and trails in the first edition of the map resulting in a no change situation. However, several drivable roads, not on the system were not included on the map resulting in some confusion with the public. Since then the forest has mounted an extensive public notification process including developing the "Know Before you Go" program to provide the public with the most up-to-date information. Additionally the forest has completed the travel analysis for each district.

VII. Evaluation of Need For Change

The National Forests in Alabama has completed a review of the 2004 Revised Land and Resource Management Plan. This document provides some key information on the current activities associated with the implementation of the Forest Plan. It provides a status of the progress toward achieving the goals and objectives of the plan. It also provides the Forest Supervisor's overall determination relative to the first period (10 years) of implementation of the Forest Plan.

A. Forest-wide multiple-use goals, objectives, and standards for the Forest, including estimates of the goods and services expected.

Goals are concise statements describing desired conditions to be achieved in the future. They are often expressed in broad general terms and are timeless, having a firm accomplishment date (36 CFR 219.3)[1982 Planning Rule]. Objectives express measurable steps needed during the life of the plan, ten to fifteen years, in order to achieve the forest goals and are linked to them forest monitoring plan. Standards are specific technical resource management direction and often preclude or impose limitations on management activities

or resource uses, generally for environmental protection, public safety or to resolve an issue. Adherence to forest plan standards is monitored during project implementation.

During implementation of the forest plan it was noted by reviewers that not all standards conform to the ideal for how standards should be written and that some are too general in nature or simply restatements of a management goal. Several forest-wide standards have been found to be unclear or confusing. As these are found appropriate changes are suggested and if necessary pursued. Two forest plan amendments have been signed adding forest-wide standards. In 2014 Plan Amendment #4 was initiated to remove and replace several forest-wide standards related to the management of habitat for the Indiana Bat.

Finding: The review team identified no need to change existing plan direction in regard to multiple-use goals, objectives and standards. As plan implementation continues should the need arise to change forest-wide standards appropriate processes will be followed. This is not critical for continued implementation of the forest plan.

B. Multiple-use management prescriptions and management areas containing desired conditions, objectives and standards.

Management areas are related to physiographic regions and the major divisions of land found on the National Forests in Alabama. Each management area has a certain emphasis that directs management activities on that piece of land and is reflected in the management prescription applied. Each management prescription includes an emphasis, desired condition, and standards.

Finding: The review team identified no need to change existing plan direction in regard to multiple-use management prescriptions and management area direction.

C. Identifying land that is suitable for timber production.

During Forest planning the Forest Service is required to identify lands unsuited for timber production (16 USC 164(k); 36 CFR 219.4). This identification process involves three stages of analysis. Stage 1 analysis identifies lands tentatively suitable for timber production. Stage 2 analysis is designed to explore financial attractiveness of varying intensities of timber management on lands identified as tentatively suitable for timber production. Stage 3 analysis identifies lands as unsuited for timber production under the alternative selected as the Revised Forest Plan.

Finding: The review team identified no need to change existing plan direction in regard to the acres suitable for timber production.

D. Determining the allowable sale quantity (ASQ) for timber and the associated sale schedule.

The Allowable Sale Quantity (ASQ) is the calculated amount of timber that can be sold for the available land base over the next decade at a rate that is sustainable over the long term. While there have been some additions to the acreage of the forest during the review period the change is not significant, resulting in no substantial change in suitable acres.

Finding: The review team identified no need to recalculate the ASQ for the Forest Plan.

E. Recommending wilderness areas.

Two areas were recommended as additions to existing wilderness. No other acres have been identified as potential wilderness areas.

Finding: The review team identified no need to re-evaluate wilderness recommendations.

F. Recommending wild and scenic river status.

Portions of two rivers, the Cahaba and Five Runs, were recommended as eligible of Wild and Scenic river designation. No other rivers have been identified as potentially eligible wild and scenic rivers.

Finding: The review team identified no need to re-evaluate wild and scenic rivers recommendations.

G. Determining monitoring and evaluation requirements.

Specific monitoring questions are identified and directly linked to the Revised Forest Plan goals, desired conditions, objectives, standards and specific regulatory requirements. As identified in the introduction of this document, the 2012 Planning rule(36 CFR 219.12(c) requires that "a monitoring program for the revised Forest Plan must be developed to meet the requirements of the 2012 planning regulations within 4 years of the establishment of the regulation."

Finding: In accordance with the 2012 Planning rule(36 CFR 219.12(c)(1), a monitoring program for the revised Forest Plan must be developed to meet the requirements of the rule prior to May 2016.

H. Identifying the lands that are administratively available for mineral development (including oil and gas), and consent to lease the available lands.

The Revised Forest Plan, signed January 2004, determined the availability of 543,047 acres for oil and gas leasing for the National Forests in Alabama and consented to the leasing of those available lands with the exception of 122,664 acres where leasing is legally withdrawn. On the available lands, the Forest Plan specified leasing stipulations offering varying levels of surface restrictions on areas requiring special protection.

During FY 2006 and FY 2007 Forest Supervisor Miera Nagy assigned an interdisciplinary team to review the mineral direction in the revised forest plan. As a result of that review, a plan amendment was completed adding an additional forest-wide standard for minerals leasing operation. However no changes were suggested to the land administratively available for minerals development or the consent to lease.

Finding: The review team finds no need to change the existing mineral direction.

VIII. List of Preparers/Reviewers

Dagmar Thurmond – Staff Officer, Natural Resources and Planning.
Odell Sanders – Staff Officer, Lands, Minerals, Engineering, Recreation
Tammy Truett – Staff Officer, Public Affairs, State and Private Forestry
Anthony J. Edwards – Fire/Heritage Staff Officer
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Art Goddard – Soil Scientist(Retired)
Eugene Brooks – Silviculturist
Ryan Shurette – Biologist
John Moran – Fisheries Biologist
Seth Tiffner - Timber Contracting Officer
Erika Davis – Engineer
Bob Pasquill – Archaeologist
Marcus Ridley - Archaeologist
Debra Duncan – Special Uses

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