

Chapter 1 – Purpose & Need for the Proposed Action

Armuchee Ridges Thinning & Restoration Project

Environmental Assessment



Chapter 1 : Purpose and Need for the Proposed Action

INTRODUCTION

This environmental assessment (EA) documents the results of a study of the potential environmental impacts of actions proposed by the United States Department of Agriculture (USDA), Forest Service, to thin timber stands and restore ecosystems on the Conasauga Ranger District of the Chattahoochee-Oconee National Forests in Georgia.

The Armuchee Ridges analysis is within Forest Service Region 8 (Southern Region) and is part of the Chattahoochee-Oconee National Forests which is comprised of approximately 865,000 acres in Georgia. The Armuchee Ridges project is located on the Conasauga Ranger District which contains 172,297 acres of National Forest lands. The Armuchee Ridges analysis area contains approximately 64,700 acres previously managed as the Armuchee Ranger District.

This EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code (USC) 4321 et seq.), which requires an environmental analysis for federal actions having the potential to impact the quality of the human environment; the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations (CFR) 1500 through 1508) for implementing NEPA; Forest Service Procedures for Implementing CEQ regulations (Forest Service Manual (FSM) Chapter 1950); and the Forest Service Policy and Procedures Handbook (Forest Service Handbook (FSH) 1909.15).

This Chapter 1) describes the project area, 2) discusses Forest Plan Direction related to this project, 3) explains why the proposed action is needed, 4) describes the proposal, referred to as the “proposed action”, 5) defines the scope of the analysis, and 6) lists the decisions to be made with this project.

While every effort has been made to assure accuracy, acres and mileages may vary slightly throughout this document due to rounding and measuring differences.

1.1 BACKGROUND

In November 2005, the Forest initiated an effort to identify opportunities across the Conasauga Ranger District, previously known as the Armuchee-Cohutta Ranger District, which would be consistent with vegetation management objectives identified in the Chattahoochee-Oconee National Forests Land and Resource Management Plan (Forest Plan). Referred to as the Armuchee-Cohutta Large Scale Assessment (LSA), this effort focused on identifying forest health and ecosystem restoration activities with a dual outcome of improving or maintaining wildlife habitats.

The public was invited to participate in a collaborative process in order to complete the LSA in April 2006. Several public meetings were held, including field trips. Interest generated at the field trips resulted in additional trips to Experimental Forests to discuss topics such as oak regeneration, silvicultural treatments, riparian area management, prescribed fire, and water

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quality. Additional public meetings were held in September 2006 to present the results of the LSA.

The opportunities identified in the LSA were scoped with the public as the Armuchee-Cohutta Thinning and Restoration projects in December 2006. The proposed action presented in this EA includes only a portion of the activities included in the December 2006 scoping notice because it was determined by the District Ranger that the proposals on the eastern portion of the District needed further examination before they could be considered “ripe for decision”.

1.2 PROJECT AREA DESCRIPTION

The project area is an estimated 64,700 acres and is located west and southwest of Dalton, Georgia and due west of Interstate 75 within Chattooga, Floyd, Gordon Walker and Whitfield Counties, Georgia. The general boundaries of this area are Taylor Ridge to the west and GA Highway 136 to the north and east. There are a few treatment areas south of US Highway 27. The major roads of the project area are West Armuchee, East Armuchee, Hammond Gap, and Pocket roads. The Ridge and Valley Scenic Byway and the Pinhoti Trail traverse the project area. The area is contained with drainages of the Coosa-Tallapoosa river basins. A Vicinity Map has been included in Appendix 1.

1.3 PURPOSE AND NEED FOR ACTION

The purpose and need for action was developed through an assessment of the current conditions of the project area in relation to the desired conditions described in the Chattahoochee-Oconee National Forests Plan.

In the early 1900s, areas that are today found on the Conasauga Ranger District were once cleared for agricultural lands or harvested for timber products. Many of these areas that were once mountain longleaf pine, shortleaf pine, oak, or oak-pine forest types were then re-forested with offsite loblolly pine. In the case of bottomland hardwood areas, some were left to regenerate to the species that were left on site after disturbance.

In addition, fire was suppressed in these areas allowing fire-intolerant species, such as Virginia pine, to grow in areas it would not likely have grown prior to the land use disturbances of the early 1900s. As a result, Virginia pine is now found in higher densities and on sites that would not be expected with frequent fires.

Today, some stands are extremely dense and crowded. These conditions result in reduced growth from water and soil nutrient competition. This competition stresses trees, which then become more susceptible to insect and disease infestation, such as southern pine beetle attack. In addition, dense forests cause decreased sunlight on the ground, resulting in insufficient forage, fruiting, insect production, and nesting cover for wildlife. There is a need to thin these stands to allow them to become more resilient to epidemic levels of insect and disease and to improve wildlife habitat.

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Agricultural and commercial timber practices of the past paid little attention to protection of riparian corridors. These areas were logged and planted in the same manner as adjacent uplands. Some of these riparian areas now consist of planted loblolly pine with scattered remnant hardwoods. The hardwood riparian communities, lost through past practices, provided complex structure for nesting habitat, provided mast for forage, denning sites, and other features important to riparian associated species. The current pine-dominated riparian corridors provide little habitat for riparian associated species. There is a need to remove a portion of the pine component in the riparian corridors to allow for the establishment of hardwoods, which would improve the habitat for riparian associated species.

Longleaf pine forests originally covered almost 100 million acres in the southeastern United States. Now, less than 3 million acres remain, and longleaf pine forest in its natural fire-maintained condition is recognized as the rarest community type in the southeast (Moss et al. 1995). Mountain longleaf pine is even rarer, comprising only 2% of overall longleaf pine remnant acres. It exists only on isolated forested ridges in northeast Alabama and northwest Georgia. In the Armuchee Ridges area, relic mountain longleaf pine occurs in combination with other yellow pine and dry site oak species. Considering past practices and the suppression of fire, there is likelihood that longleaf pine communities were found within the Armuchee Ridges area across more acres than where it is presently found. Given the importance and scarcity of the longleaf pine, there is an opportunity to restore areas to longleaf pine in the Armuchee Ridges area.

Forest communities on this District converted from historic composition by land uses are typically very dense in that they have a high number of trees per acre, which allows little sunlight to the forest floor. They are considered less diverse in that they provide limited wildlife habitat, are typically more susceptible to insect and disease infestations, and are susceptible to fire in that a higher number of species found on these sites are considered fire-intolerant. There is currently a decline in the populations of wildlife species which are dependent upon open stands of native yellow pine and oak-oak pine forests.

Considering this, there is a need to restore or maintain stands with components of native forest types to improve wildlife habitat, to make areas more resilient to insect and disease infestation, and to move these areas back into more fire-tolerant plant communities.

The purpose and need for action for the Armuchee Ridges projects is to:

- Improve forest health in over-crowded pine stands to decrease the risk of insect and disease infestation, particularly southern pine beetle, and to improve wildlife habitat;
- Restore and/or maintain native mountain longleaf pine and native shortleaf pine forest types in areas that are ecologically suitable,
- Restore and/or maintain native oak and oak-pine forest types in areas that are more suitable to these forest types but are currently dominated by pine;

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- Improve habitat for riparian associated species by encouraging hardwood growth in riparian corridors currently dominated by loblolly pine;
- Restore riparian hardwood old growth communities in hardwood stands located along streams; and
- Improve wildlife habitat through native plant community restoration.

1.4 PROPOSED ACTION DESCRIPTION

Proposed activities have been developed to achieve the purpose and need. The proposal includes 7,186 acres of treatments and 23.2 acres of temporary road construction. Table 1-1: Armuchee Ridges Proposed Action provides a summary of the treatments that would take place under the proposed action. Chapter 2 provides a more in-depth description.

Table 1-1: Armuchee Ridges Proposed Action

Proposed Activity	Total
Mountain Longleaf and Shortleaf Pine Restoration	669 acres
Oak and Oak/Pine Forest Restoration and Maintenance	676 acres
Pine Thinning for Improved Forest Health	5,787 acres
Riparian Hardwood Restoration	54 acres

1.5 FOREST PLAN DIRECTION

The Chattahoochee-Oconee National Land and Resource Management Plan (Forest Plan) was completed in January 2004. The Forest Plan, and accompanying Final Environmental Impact Statement (FEIS), and Record of Decision specify the overall direction for managing the natural resources for the Forest, and consists of both Forest-wide and area-specific goals, objectives and standards that provide for land uses with anticipated resource outputs. This EA documents the site-specific analysis of implementing the Forest Plan in the Armuchee Ridges Project Area.

The Forest Plan identifies Forest-wide goals and objectives. The Armuchee Ridges project is designed to support the following goals identified in the Forest Plan:

- **Goal 2** states that, “A diversity of habitat will be provided for the full range of native and other desired species...” (Forest Plan, page 2-4);
- **Goal 3** provides direction to, “Enhance, restore, manage and increase habitat as required for wildlife and plant communities, including disturbance-dependent forest types.”(Forest Plan, page 2-6);
- **Goal 4** provides direction to, “Maintain and restore natural communities in amounts, arrangements, and conditions capable of supporting viable populations of existing native and desired nonnative plants, fish, and wildlife species...” (Forest Plan, page 2-6);

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- **Goal 8** provides direction to, “Contribute to the maintenance or restoration of native tree species whose role in forest ecosystems...has been reduce by past land use, or... is threatened by insects and disease, fire exclusion, forest succession, or other factors.” (Forest Plan, page 2-7);
- **Goal 21** provides direction to, “Restore formerly existing old-growth community types (composition, not structure) where ecologically appropriate.” (Forest Plan, page 2-17); and
- **Goal 40** states, “Through appropriate management, reduce populations of native and non-pest species or vulnerability to them.” (Forest Plan, page 2-39).

The Forest Plan identifies Management Prescriptions (MP) for each piece of National Forest System lands across the Chattahoochee-Oconee National Forests. The Armuchee Ridges 7,186-acre proposed action is located in areas which are designated as several different MPs. Table 1-2: Armuchee Ridges Management Prescriptions identifies the MPs for the Armuchee Ridges projects, including Forest Plan page references. Please note that the acres provided for MP 11-Riparian Corridors in Table 1-2 are also imbedded within the other MPs.

Table 1-2: Armuchee Ridges Management Prescriptions

Management Prescription	Acres	Reference
6.D- Core Areas of Old Growth Surrounded by Areas with Extended Forest Rotations	179	Forest Plan, Chapter 3, Pages 3-109 to 3-113
7.A – Scenic Byway Corridors	1371	Forest Plan, Chapter 3, Pages 3-114 to 3-118
7.E.1 – Dispersed Recreation Areas	551	Forest Plan, Chapter 3, Pages 3-123 to 3-125
7.E.2 – Dispersed Recreation Areas with Vegetation Management	391	Forest Plan, Chapter 3, Pages 3-126 to 3-129
9.H – Management, Maintenance, and Restoration of Plant Associations	4,694	Forest Plan, Chapter 3, Pages 3-167 to 3-170
11 – Riparian Corridors	(528)	Forest Plan, Chapter 3, Pages 3-171 to 3-3-182

The proposed action supports the implementation of the Forest Plan. Table 1-3: Proposed Action and Forest Plan Comparison displays the relationship between the Forest Plan, the Purpose and Need, and the Proposed Action.

Table 1-3: Proposed Action and Forest Plan Comparison

Desired Condition “Objective”	Existing Condition	Site Specific Need	Management Activity
Enhance, restore, manage and create habitats as required for wildlife and plant communities, including disturbance-dependent forest types. (Forest Plan, 2004, Goal 3, pg 2-6)	<u>Objective 3.5</u> – Native mountain longleaf pine and shortleaf pine communities have almost disappeared from the Armuchee Ridges area due to insect damage and loss of suitable habitat	Restore sites ecologically suitable to mountain longleaf or shortleaf in mixtures with hardwood species (639 acres of longleaf restoration, 30 acres of shortleaf restoration)	Commercial timber harvest, prescribed burning, planting, mechanical release
Enhance, restore, manage and create habitats as required for wildlife and plant communities, including disturbance-dependent forest types. (Forest Plan, 2004, Goal 3, pg 2-6)	<u>Objective 3.6</u> – Oak and oak-pine sites are occupied by pines or undesired hardwoods	Restore oak and oak-pine in off-site pine stands by enhancing oak composition (676 acres of Oak and Oak/Pine)	Commercial timber harvest, pre-commercial thinning, prescribed burning, natural oak regeneration
Enhance, restore, manage and create habitats as required for wildlife and plant communities, including disturbance-dependent forest types. (Forest Plan, 2004, Goal 3, pg 2-6)	Objective 3.7 – oak/pine forests contain too much Virginia or loblolly pine	Reduce density of pine stands of pines (5,787 acres of pine thinning)	Commercial timber harvest, pre-commercial thinning
Restore formerly existing old-growth community types (composition, not structure) where ecologically appropriate. (Forest Plan, 2004, Goal 21, pg 2-17)	Existing hardwood stand in riparian corridor needs species selection to enhance habitat and restore old growth type - riverfront forest	Release of bottomland hardwood trees in riparian stand (54 acres of riparian restoration)	Release of desired hardwoods through the use of hand tools
Through appropriate management, reduce populations of native and non-native pest species or vulnerability to them (Forest Plan, 2004, Goal 40, pg 2-39)	Over-crowded pine stands at risk for insect and disease attack, particularly southern pine beetle.	Improve forest health by thinning of loblolly pine stands (5,787 acres of pine thinning)	Commercial timber harvest, pre-commercial thinning

1.6 SCOPE OF THE ENVIRONMENTAL ANALYSIS

National forest planning takes place at several levels: national, regional, forest, and project levels. The Armuchee Ridges EA is a project-level analysis; its scope is confined to addressing the purpose and need of the project, possible environmental consequences of the proposal, and alternatives. It does not attempt to address decisions made at higher levels. It does, however, implement direction provided at higher levels.

The Forest Plan embodies the provisions of the National Forest Management Act, its implementing regulations, and other guiding documents. The Forest Plan sets forth in detail the direction for managing the land and resources of the Chattahoochee-Oconee National Forests. Where appropriate, the Armuchee Ridges EA tiers to the Forest Plan Final Environmental Impact Statement (FEIS) (40 CFR 1502.20).

This EA evaluates and documents the effects caused by the proposed activities and various alternatives. The site-specific proposed action and alternatives to it are identified in Chapter 2. The administrative scope of this document can be defined as the laws and regulations that provide the framework for analysis.

1.7 RESPONSIBLE OFFICIAL AND DECISIONS TO BE MADE

The responsible official for the decision will be the District Ranger for the Conasauga Ranger District, Chattahoochee-Oconee National Forests. The responsible official will answer the following three questions based on the environmental analysis:

1. Will the proposed action proceed as proposed, as modified by an alternative, or not at all?
2. If it proceeds, what mitigation measures and monitoring requirements will be implemented?
3. Will the project require an Environmental Impact Statement (EIS)?