

## DECISION MEMO

### Prescribed Burning – FY06 Armuchee Unit Armuchee-Cohutta Ranger District Chattahoochee National Forest

#### Decision

I have decided to approve the proposal to prescribed burn 8,869 acres in 34 areas over the next 3 to 6 years on the Armuchee Unit of the Armuchee-Cohutta Ranger District.

#### Purpose and Need

The Armuchee-Cohutta Ranger District conducts prescribed or controlled burning each year on a portion of the total District acreage for several reasons:

- **Fuel reduction:** to reduce the amount of fuel build-up from southern pine beetle-killed trees, storm damage, and other natural events. Forest stands where fire has been actively suppressed have accumulated heavy fuels that can pose a serious wildfire threat under certain weather conditions. Forest stands and adjacent private property are vulnerable to catastrophic wildfire if fuel levels are not reduced. The area where private property and forests intersect is called the wildland-urban interface (WUI).
- **Restoration of fire-dependent ecosystems:** applying fire in a controlled manner in forests where it has been largely excluded, where ecosystems are dependent upon it, such as the restoration of shortleaf pine-oak and longleaf pine-oak on our drier ridge sites. The majority of these sites are currently dominated by dense stands of Virginia pine, a fire-intolerant species.
- **Wildlife habitat improvement:** using fire to create more open conditions in the understory and stimulate new plant growth. Both herbaceous and woody growth will increase and be more nutritious and palatable. Seed-bearing plants also bear more fruit and insect numbers increase. Long-term benefits are gained because fire favors oaks rather than other less fire-tolerant and less wildlife-friendly hardwood species.

#### Compliance with Land and Resource Management Plan

Prescribed burning on the Armuchee-Cohutta Ranger District accomplishes several goals and objectives of the revised Land and Resource Management Plan:

Goal 2. A diversity of habitat will be provided for the full range of native and other desired species.

Goal 3. Enhance, restore, manage and create habitats as required for wildlife and plant communities, including disturbance-dependent forest types.

Goal 8. Contribute to maintenance or restoration of native tree species whose role in forest ecosystems: (a) has been reduced by past land use; or (b) is threatened by insects and disease, fire exclusion, forest succession, or other factors.

Objective 8.1, 8.2. Reduce hardwood midstory on 7,400 acres per year.

Goal 58. Reduce the risks and consequences of wildfire through fuel treatments that restore and maintain conditions of fire regime Condition Class 1 to the extent practicable.

Objective 58.3. Prescribed burn an annual average of 30,000 acres each year on the Chattahoochee-Oconee National Forest.

The 34 burning units fall within four different Management Prescriptions (MRx) delineated in the Land and Resource Management Plan; prescribed burning is compatible with all of these: 7.A (Scenic Byway Corridor), 7.E.1 (Dispersed recreation), 7.E.2 (Dispersed recreation with vegetation management), and 9.H (Management, maintenance, and restoration of plant associations to their ecological potential). Twenty four of the units (6,365) or 71% of the total acreage to be burned are located in 9.H.

This decision would result in the prescribed burning of 8,869 acres in 34 areas over the next 3 to 6 years. The primary objective(s) for burning each unit is listed in the table below; however, there are usually multiple objectives and benefits associated with each unit. As a result of the suppression or exclusion of fire, the majority of these units can be categorized as Condition Class 2 or 3, characterized by: (a) fire regimes moderately to significantly altered from their historical range, (b) moderate to high risk of losing key ecosystem components, (c) departure from historical fire frequencies, and (d) moderate to significant alteration from the historical range of vegetation attributes.

<b>Unit</b>	<b>Compartment</b>	<b>Acres</b>	<b>MRx</b>	<b>Primary Objective(s)</b>
1	902	190	7.E.1	Fuel reduction (WUI)
2	902	40	7.E.1	Fuel reduction (WUI)
3	902	75	7.E.1	Fuel reduction (WUI)
4	902	50	7.E.1	Fuel reduction (WUI)
5	903	615	9.H	Restoration
6	904	195	9.H	Restoration
7	905	115	9.H	Restoration, fuel reduction
8	916	144	9.H	Restoration, fuel reduction
9	907	60	9.H	Wildlife habitat improvement
10	927	529	7.E.2	Wildlife habitat improvement
11	916	190	7.A	Fuel reduction (WUI)
12	916	470	7.A	Wildlife habitat improvement

13	943	400	9.H	Restoration
14	931/932	280	9.H	Restoration
15	931	480	9.H	Restoration
16	931	295	9.H	Restoration
17	931/932	445	9.H	Restoration
18	933	355	9.H	Restoration
19	923	335	9.H	Restoration
20	924	215	9.H	Restoration, fuel reduction
21	924	295	9.H	Restoration, fuel reduction
22	925	175	9.H	Restoration, fuel reduction
23	925	195	9.H	Restoration, fuel reduction
24	924	100	9.H	Restoration, fuel reduction
25	918	325	9.H/7.E.1	Restoration, fuel reduction
26	915/927	675	7.A	Wildlife habitat improvement
27	927	706	9.H	Wildlife habitat improvement
28	950	265	9.H	Fuel reduction, wildlife habitat improvement
29	926	30	7.A	Fuel reduction (WUI)
30	929	130	7.E.2	Restoration, wildlife habitat improvement
31	937	40	9.H	Restoration
32	928	205	9.H	Restoration
33	940	135	9.H	Restoration
34	948	115	9.H	Fuel reduction (WUI)

\* Maps of individual burn units are available at the District Office.

Prescribed burning will be done during the dormant season (November to early April) in the next 3-6 years (2006-2012). An individual burning plan will be prepared and approved for each of the 34 units. Areas may be ignited using aerial or ground ignition sources. Ignition will be initiated on ridge tops and the fire will be allowed to back down slopes (using strip head fires, if necessary) and into riparian and moister areas, reducing or eliminating fire intensity in these areas and creating a mosaic of burned and unburned areas. Control lines that are uphill from the fire will be fired by hand to ensure that the fire does not overrun and cross the control lines. Roads, existing firelines, and streams will be used as boundaries to the extent possible. Bladed, rather than plowed firelines will be used because they are much less prone to erosion.

## **PROJECT EFFECTS AND MITIGATION MEASURES**

### **Resource Protection**

Prescribed burning will be conducted only under an approved burning plan to meet specific resource objectives, and under supervision of a qualified burning boss. The plan will plot the

trajectory of the smoke plume, identify smoke-sensitive areas, predict fire behavior, and set parameters for burning conditions to minimize risk of resource damage or fire escape. Burns will not be initiated if the smoke plume will impact a smoke-sensitive area, or when the mixing height is less than 1,640 feet (500 meters) or transport wind speed is less than 9 mph. To control fire intensity, burning is implemented under specific fuel and weather conditions. Burning is allowed when the KBDI (drought index) is 350 or less, fuel test stick moisture (10 hour) is between 7 and 15 percent, relative humidity is higher than 25%, air temperature is less than 75 degrees and the 20 foot wind speed is less than 16 mph.

### Soil and water quality protection

Each burning unit has been analyzed regarding soil erosion potential. Research indicates that increased sedimentation following burning or other management practices is generally related to the amount of bare soil exposed. Low intensity, dormant season burning has little effect on soil erosion, if any, even on relatively steep slopes (Coweeta Hydrological Lab). Low intensity fire removes a small amount of leaf layer (typically 1/2" or less), leaving the humus and upper soil layers unburned and thereby not fully exposing the soil. Burning plans are designed to retain litter and/or duff material on at least 85% of the burn area. When a post-burn evaluation determines that more than 15% of an area has exposed soils, the site will be evaluated regarding the appropriate type of revegetation to mitigate erosion effects.

Fireline construction will be conducted without mechanical equipment on steep slopes (above 40%) and in riparian corridors, using hand tools. Equipment is prohibited within 80 feet of streams where slopes are 21% and higher; 40 feet of streams where slopes are 20% or lower. Bladed firelines will be constructed or reconstructed with water bars when slope exceeds 30%. Water bars will be placed from 30 to 250 feet apart using Best Management Practice techniques. Immediately following usage, firelines will be seeded with a non-invasive grass mixture, fertilized, and mulched.

### Air quality

Each prescribed burn will be conducted to adhere to internal Forest Service guidance for air quality and the pollution control methodologies prescribed by federal and state agencies, including adherence to the State Implementation Plan to meet the National Ambient Air Quality Standards.

### Vegetation including rare plants

Backing fires will be used in order to maintain the desired low fire intensity. This type of fire is quickly extinguished when it enters moist conditions in cove or riparian habitat. Backing fires also prevent the fire from gaining size and strength in higher fuel loads and on steep slopes. Individual burning plans are reviewed by the District wildlife biologist prior to implementation to ensure that all protective measures are in place and that no new information has surfaced that would require further analysis.

Botanical surveys have been conducted in areas where firelines are to be constructed

(summer of 1997-2003). No TES plants were found during these surveys. A biological evaluation to document any potential effects of this project on Endangered, Threatened, or Sensitive (TES) species or their habitats was completed by the District biologist. There will be no negative effects or impacts to any federally listed or forest listed plant species as a result of this project (see Biological Evaluation for details). Beneficial effects to vegetation dependent upon disturbance are expected as a result.

#### Terrestrial and aquatic fauna including rare species

Fire has the potential to adversely affect individual animals, especially those with low mobility, but most can escape fire by fleeing, finding unburned shelter, or burrowing. Direct mortality of animals from a fire on a population or landscape scale is negligible, especially a low intensity, dormant season fire. Known den trees will be protected during burning by raking away from the tree or removal of a portion of the unit. Many species are actually attracted to the heat and smoke of fires, or to the burns shortly thereafter, including a great number of North American birds such as mourning doves, wild turkeys, owls and other raptors, eastern bluebirds, other songbirds and woodpeckers. The many beneficial effects of burning on wildlife habitat are well documented, such as increased sprouting, fruiting, palatability, and nutritional value of browse species and increased insect production.

Terrestrial TES species such as Rafinesque's big-eared bat and Diana fritillary (butterfly) were considered in the evaluation; both species have a potential to occur almost anywhere in the forest and are not known to occur in the burn areas, but due to the potential occurrence, analysis was necessary. No negative impacts to either species is expected as a result of this project (see Biological Evaluation for details).

Aquatic fauna such as fish, mussels, crayfish, and aquatic insects should be unaffected by prescribed burning due to adherence to mitigation measures and Best Management Practices protecting water quality and soils. The effects to aquatic TES such as Alabama rainbow and Tennessee heelsplitter (mussels), trispot darter, lined chub, popeye shiner, and 4 rare dragonflies were analyzed. These species and their habitats should be unaffected by this project (see Biological Evaluation for details).

#### Cultural resources

A cultural resource inventory has been conducted for this project. Establishment of firelines is the only ground disturbing activity. No cultural resource sites will be disturbed during construction or reconstruction of the firelines. A Memorandum of Understanding between the Forest Service and the Georgia State Historic Preservation Office concerning the management of historic properties on the Chattahoochee-Oconee National Forests states that: "Prescribed burning in areas which have been previously burned or in areas of predicted low site probability will not likely affect prehistoric sites". In the event that historic or prehistoric cultural resources are discovered during the construction or reconstruction of firelines, work within the immediate vicinity of the discovery will cease and the Forest Archeologist will be notified.

## Public impacts

The Forest Supervisor's office, Georgia Forestry Commission, County Sheriff's office, County 911 office, local radio stations, and adjacent landowners will be notified prior to ignition of any prescribed burn. The burning parameters in the burning plan are designed to prevent safety problems on highways due to smoke. Prior to ignition, reasonable efforts will be made to ensure that no forest visitor are within the burn unit.

## **MONITORING**

Before, during, and after the implementation of the burns, the potentially affected resources will be monitored to determine whether the project objectives were met, with the predicted effects on the environment. Monitoring will provide feedback that may lead to modifications, corrections, or supplements to this decision, and will provide important information for future prescribed burning projects. Some important monitoring that will be done under this decision are listed below:

1. Post burn evaluations will be conducted following all prescribed burns to evaluate whether management objectives were met and if follow-up action is needed.
2. Establish two soil-depth test plots in each unit to determine the results of the burn on soils.
3. All bladed fire lines will be re-inspected periodically after burning to assure adequate erosion prevention. Follow-up dozer work, seeding, mulching and fertilizing will be used when needed.
4. Establish four photo monitoring points in each unit in conjunction with soil-depth test plots for evaluating the pre- and post-burn effects.

## **PUBLIC INVOLVEMENT**

A scoping letter in which I proposed to prescribed burn approximately 18,000 acres of the Armuchee-Cohutta over the next 3-5 years was mailed to the district mailing list on July 8, 2004. The comment period ended on August 6, 2004. Three responses were received from the public. Two responses were in favor of the proposed burning program and the other response was not supportive. Beyond the need for additional information the respondents raised issues concerning the appropriateness of fire in the forest communities of north Georgia, using fire to create early successional browse, use of exotic grass species to control erosion on fire lines, burning in Pink Knob Roadless Area, monitoring needs, negative effects on flora and fauna and the judicious use of government funds. I determined that more analysis was needed before issuing a decision.

Prior to the signing of that decision, a Federal Court decision in Earth Island v. Ruthenbeck in the Eastern District of California invalidated the provisions of 36 CFR Part 215 that excluded categorical exclusions such as prescribed burning from notice, comment, and

appeal. The District Court order was applied nationwide affecting decisions signed after July 7, 2005. The decision for that project was not signed prior to that date, causing it to be subject to a formal notice and comment period. After further analysis by the ID team, I decided to request comment on 8,869 acres (34 burning units) on the Armuchee Unit at this time. A legal notice requesting comment was placed in the local paper on December 7, 2005. Individuals and organizations which responded during the original scoping were sent a summary of the proposal to burn 8,869 acres on the Armuchee Unit on December 7, 2005; those interested in commenting or wishing to be eligible to appeal this decision were given a 30-day comment period. This ended January 6, 2006. One favorable comment was received.

## **REASONS FOR CATEGORICALLY EXCLUDING THE PROJECT**

I have determined that this action falls under categories in the Forest Service Handbook 1909.15 that exclude it from documentation in an Environmental Impact Statement or an Environmental Assessment. Specifically, this project falls within Category 6 of section 31.2, "Timber stand and /or wildlife habitat improvement activities which do not include the use of herbicides and do not require more than one mile of low standard road construction (level D)".

## **FINDING OF NO EXTRAORDINARY CIRCUMSTANCES**

I have also considered the following resource conditions and determined that there are no extraordinary circumstances existing that may cause the project to have significant effects. The mere presence of one or more of these resource conditions does not preclude use of a categorical exclusion. It is the degree of the potential effect of a proposed action on these resource conditions that determines whether extraordinary circumstances exist. The resource conditions are:

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species -
  - a. The Endangered Species Act requires that federal activities do not jeopardize the continued existence of any species federally listed or proposed as threatened or endangered, or result in adverse modification to such species' designated critical habitat. The Biological Evaluation indicates that there are no known threatened or endangered species in the vicinity of the project area(s).
  - b. Forest Service Manual 2670 direction requires analysis of potential impacts to sensitive species, those species for which the Regional Forester has identified population viability is a concern. Potential effects of this decision on sensitive species (Regional Forester approved the sensitive species list) have been analyzed and documented in a Biological Evaluation (Planning Record). This decision will have "no impact" on

sensitive species population viability.

2. Floodplains, Wetlands, or Municipal Watersheds -

- a. Floodplains: Executive Order 11988 is to avoid adverse impacts associated with the occupancy and modification of floodplains. Floodplains are defined by this order as, “. . . the lowland and relatively flat areas adjoining inland and coastal waters include flood prone areas of offshore islands, including at a minimum, that area subject to a one percent [100-year recurrence] or greater chance of flooding in any one year.”
- b. The project will not result in the occupancy or modification of a floodplain. This decision will not affect floodplains.
- c. Wetlands: Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as, “. . . areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.”
- d. The project will not affect wetlands. No prescribed burning is planned in any wetland.
- e. Municipal Watersheds: There are no source water/municipal watersheds on National Forest lands on the National Forest. This decision will not affect municipal watersheds.

3. Congressionally Designated Areas -

- a. There is no designated wilderness, wilderness study areas, National Recreation Areas, or Wild and Scenic Rivers designated within the decision area.

4. Inventoried Roadless Areas -

- a. There are no inventoried roadless areas in the decision area (Forest Plan FEIS & ROD 2004). This decision will not affect inventoried roadless areas.

5. Research Natural Areas -

- a. There are no Research Natural Areas in the decision area (burn units). This decision, with impacts limited to the immediate area of activity, will not affect Research Natural Areas.

6. Native American Religious or Cultural Sites, Archaeological Sites, or Historic Properties or Areas -

- a. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in the National Register. Section 106 of the National Historic Preservation Act also requires federal agencies to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered in federal lands. It affords lawful protection of archaeological resources and sites that are on public and Indian lands. The Native American Graves Protection and Repatriation Act cover the discovery and protection of Native American human remains and objects that are excavated or discovered in federal lands. It encourages avoidance of archaeological sites that contain burials or portions of sites that contain graves through “in situ” preservation, but may encompass other actions to preserve these remains and items. This decision complies with the cited Acts. Surveys were conducted for Native American religious or cultural sites, archaeological sites, and historic properties or areas that may be affected by this decision (Planning Record). A ‘no properties affected’ determination was made. Consultation on this finding occurred with the State Historic Preservation Office (Planning Record).
- b. Additionally, the Federal government has trust responsibilities to Tribes under a government-to-government relationship to insure that the Tribes reserved rights are protected. Consultation with tribes helps insure that these trust responsibilities are met. The Forest consulted with potentially affected tribes (Planning Record). The intent of this consultation has been to remain informed about Tribal concerns.
- c. No tribal concerns were identified for this project (Planning Record).

7. Other

- a. No other extraordinary circumstances related to the project were identified (Planning Record).

## **FINDINGS REQUIRED BY OTHER LAWS**

**Forest Plan Consistency** - As required by the National Forest Management Act, I have determined that this project is consistent with the Forest-wide standards and guidelines for all affected Management Areas. Prescribed burning will not lead to any violations of federal, state, or local laws imposed for the protection of the environment. This will be assured by carrying out the burns consistent with the standards and guidelines, management requirements, and mitigating measures established in the Land Management Plan for the Chattahoochee – Oconee National Forests (2004).

**Clean Water Act** - This Act is to restore and maintain the integrity of waters. The Forest Service complies with this Act through the use of Best Management Practices and Forest Plan standards. This decision incorporates Best Management Practices and Forest Plan standards to ensure protection of soil and water resources.

**Wetlands (Executive Order 11990)** - See extraordinary circumstances section of this document.

**Floodplains (Executive Order 11988)** - See extraordinary circumstances section of this document.

**Endangered Species Act** - See extraordinary circumstances section of this document.

**Clean Air Act** - Under this Act areas of the country were designated as Class I, II, or III airsheds for Prevention of Significant Deterioration purposes. Class I areas generally include national parks and wilderness areas. Class I provides the most protection to pristine lands by severely limiting the amount of additional human-caused air pollution that can be added to these areas. The entire Oconee National Forest is classified as Class II airshed. A greater amount of additional human-caused air pollution may be added to these areas. Georgia Department of Environmental Quality regulates prescribed burning in the state in accordance with the State Implementation Plan (SIP). The State has been involved in the planning process (Planning Record). Prescribed burning in this decision will coordinate with the State and follow the SIP to protect air resources, including obtaining and following air quality permits, if needed.

**Federal Cave Resources Protection Act** - This Act is to secure, protect, preserve, and maintain significant caves, to the extent practical. No known cave resources will be affected by this decision.

**National Historic Preservation Act** - See extraordinary circumstances section of this document.

**Archaeological Resources Protection Act** - See extraordinary circumstances section of this document.

**Native American Graves Protection and Repatriation Act** - See extraordinary circumstances section of this document.

**Wild and Scenic Rivers Act** - See extraordinary circumstances section of this document.

**Environmental Justice (Executive Order 12898)** - This Order requires consideration of whether projects would disproportionately impact minority or low-income populations. This decision complies with this Act. Public involvement occurred for this project, the results of which I have considered in this decision-making. Public involvement did not identify any adversely impacted local minority or low-income populations. This decision is not expected to adversely impact minority or low-income populations.

**National Environmental Policy Act** - This Act requires public involvement and consideration of potential environmental effects. The entirety of documentation for this decision supports compliance with this Act.

The actions are designed to comply with all management requirements in the Record of Decision for the Final Environmental Impact Statement for Vegetation Management in the Appalachian Mountains, which was an amendment to the Forest Plan.

This project complies with the seven requirements of the National Forest Management Act related to vegetation management (36 CFR 219.27(b)):

1. It is best suited to the multiple-use goals established for the area based on the Forest-wide direction. This suitability is based on the potential environmental, biological, cultural resource, aesthetic, engineering, and economic impacts.
2. The areas will remain adequately stocked after treatment.
3. This action has not been chosen primarily due to cost considerations, although this was taken into consideration.
4. This action has been chosen after considering potential effects on residual trees and adjacent stands.
5. The action will avoid permanent impairment of site productivity and ensure conservation of soil and water resources.
6. The action will provide the desired effects on water quality and quantity, wildlife and fish habitat, woody regeneration, forage production, recreation uses, aesthetic values, and resource needs.
7. The project area is adequately roaded and no new permanent or temporary roads are necessary to implement this decision. This proposal is practical in terms of transportation requirements, and the total costs of preparation and administration. This project does not require a project-level roads analysis because there are no permanent changes in access into the area, road standards will not change, and the project includes only maintenance activities.

## **ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES**

A recent Federal Court decision in Earth Island Institute v. Ruthenbeck invalidated the provisions of 36 CFR Part 215 that excluded categorical exclusions from notice, comment and appeal. The District Court further clarified that its order is to be applied prospectively after July 7, 2005 nationwide. Since this project is now subject to the Court order, I made this project subject to a formal notice and comment period. A legal notice, describing the project and initiating a 30 day comment period was published in the Chatsworth Times on December 7, 2005. A letter containing similar information was also sent to individuals and organizations that provided scoping comments. Since only favorable comments were received, this decision is not appealable.

## **IMPLEMENTATION**

Will be implemented during the dormant season in 2006-2012.

## **CONTACT PERSON**

For additional information concerning this decision, contact Ruth Stokes in the Chatsworth office at 706-695-6736(x105), or by email at [rbstokes@fs.fed.us](mailto:rbstokes@fs.fed.us).

## **RESPONSIBLE OFFICIAL**

I have concluded that this decision may be categorically excluded from documentation in an environmental impact statement or environmental assessment as it is within one of the categories identified by the U.S. Department of Agriculture in 7 CFR part 1b.3 or one of the categories identified by the Chief of the Forest Service in Forest Service Handbook (FSH) 1909.15 sections 31.12 or 31.2, and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative environmental effect. My conclusion is based on information presented in this document and the entirety of the Planning Record.

/s/ Debra Whitman  
DEBRA WHITMAN  
District Ranger

January 17, 2006  
DATE