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Project: Athens 2006 Prescribed Burning Decision

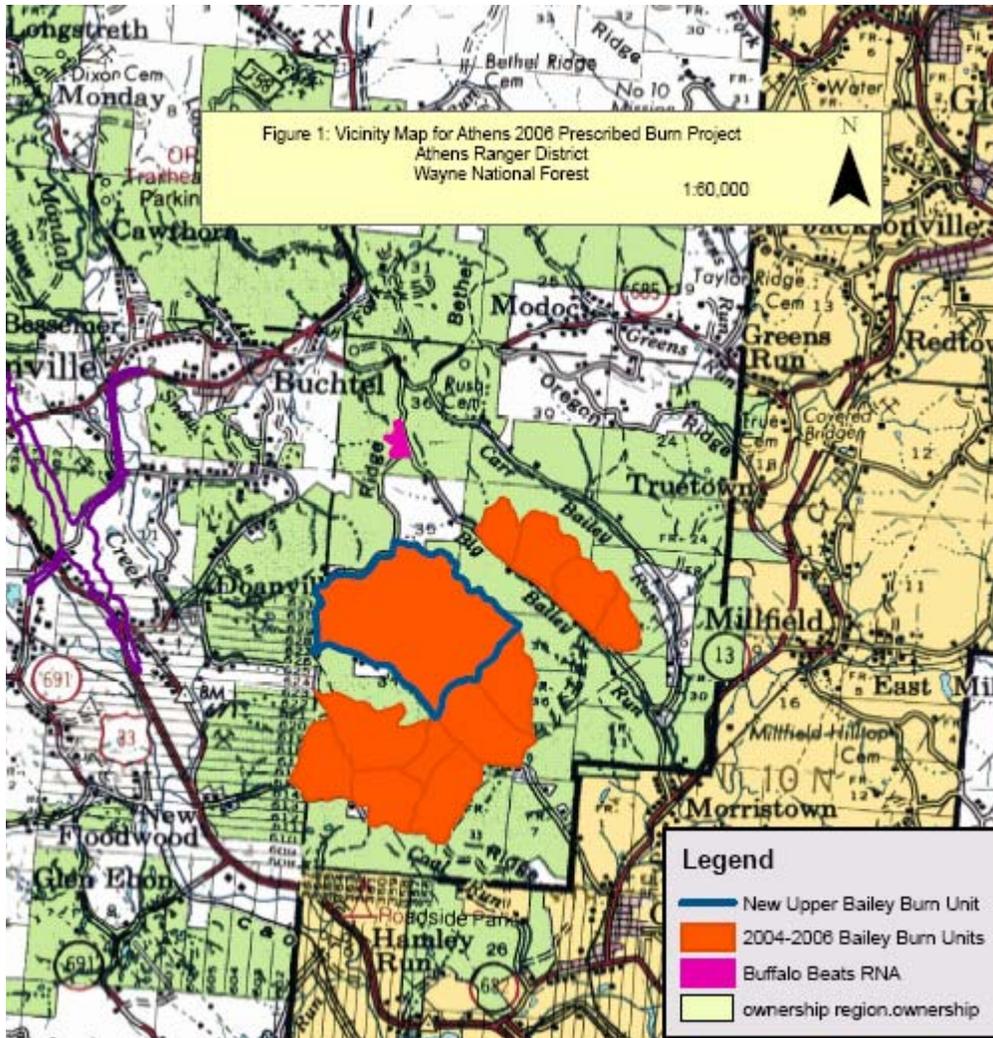
Administrative Unit: Athens Ranger District  
Wayne National Forest  
USDA – Forest Service

United States  
Department of  
Agriculture

Geographic Location: Dover and York  
Townships  
Athens County, Ohio

January 2007

Map 1: Vicinity Map for 2006 Athens Prescribed Fire Decision



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### **I. DECISION TO BE IMPLEMENTED**

#### **A. Description of Decision**

My decision is to implement the following prescribed burning activities in Dover and York Townships, Athens County, as follows:

- ✓ increase the burning intervals on the Buffalo Beats RNA and the 11 burn units originally covered by the 2003 Athens Prescribed Burning Decision, subject to regular monitoring to assess need;
- ✓ add the 712-acre Upper Bailey burn unit to the Baileys burning project;
- ✓ include two small parcels of private land in the Upper Bailey burn unit, for which Participating Agreements have been signed.

It is proposed to burn the 712-acre Upper Bailey unit and 2003 burn units as possible beginning in the spring of 2007. The burning period would continue to be the early spring dormant season, ending in late April to early May, and late fall, from mid-October until the end of November, weather dependent. The end of the spring season depends on the arrival of warm spring weather conditions and concurrence from the biologists. The burning interval for all units in this decision

is approximately every three to six years. This is a change from the 8-10 year interval used in the 2003 Athens Prescribed Burning decision, which does not allow us to re-burn more frequently and treat a larger area with cumulative burns.

The 2003 Athens Prescribed Burning Decision cleared 1200 acres in the Baileys for burning on approximately a 6 to 8-year rotation (see USFS 2003 Decision Memo, Project File 6-4). Burning was completed on 120-500 acre blocks in 2004, 2005 and 2006. Observations from these initial burns have driven the proposed action for this project in which we are increasing the burning interval to approximately 3 times within 10 years for the initial 1200 acres and adding an adjacent 712-acre unit to the proposed action (see enclosed map for locations of all burn units).

Following is a table of all units and acreage covered by this decision:

**Table 1: Proposed Action for 2006 Athens Prescribed Burning Decision on Upper Bailey, Buffalo Beats, and Re-burn of Bailey Units**

Burn Unit	Acreage	Past Burning	Proposal
Buffalo Beats	17	1987 1996 1998	This ridge-top prairie will be burned again, but not in the next rotation of Bailey Burns.
Upper Bailey	712	None	Burn at 3-6-year intervals.
Big Bailey Burn Units			
A	67	Spr 2004	
B	120		
C	112		
D	66		
<b>Total</b>	<b>365</b>		
Middle Bailey/Utah Ridge Burn Units			
1-A	131	Spr 2005	
1-B	178		
1-C	146		
1-D	59		
1-E	193		
1-F	128		
1-G	122	Spr 2006	
<b>Total</b>	<b>957</b>		
Total acres in this analysis	<b>2052</b>		

Lengths of fire line have been calculated to satisfy requirements for reporting to the US Fish and Wildlife Service (USFWS). Starting at the northwest corner near the cemetery, we will use the township access to the cemetery and continue on an old ridge top road (which is also an oil and gas access road) to the conjunction with Unit 1-A. We will re-use firelines established for previous burns on 1-A and 1-B, then use West Bailey Road and Utah Ridge Road for the remainder. There are some oil and gas holdings in the Upper Bailey unit. Each well will be



**Table 2: Upper Bailey Fireline Type and Length**

<b>Upper Bailey Fireline Type and Length</b>			
<b>Segment</b>	<b>Type</b>	<b>Length</b>	
0	Mechanical Line	402	
1	Mechanical Line	191	
2	Mechanical Line	213	
3	Mechanical Line	47	
4	Mechanical Line	197	
		1050	
5	Existing Road	516	
6	Existing Road	592	
	Total Feet	1108	

Burning pattern and behavior is based on moisture in the fuel. In our driest spring weather we can not get the north faces to burn. Burning will be in a mosaic pattern based on moisture content and heavily influenced by slope and aspect. Flame length will be variable – from one foot to seven feet. Will use a combination of all types of lighting, including backing, head, strip. All firing will be done with drip torches. In the future some areas could be burned using heli-torch ignition.

Fire will include public notification of burning prior to burning near Utah Ridge Pond. Crew will set up a drop tank at Utah Ridge Pond and draw water from the pond.

**Photo 1: Early spring dormant season burns have low flame lengths and burn only ground fuels**



## Mitigations

Standards and Guidelines are common to all projects, but a proposed action is complete only when mitigations are applied to it. To assure the accomplishment of project objectives and the protection of resources, the following mitigations have been recommended by resource specialists and will be followed during project implementation.

### **Mitigations for Wildlife (see Project File 5-5)**

Additional avoidance measures to protect potential roost trees have been incorporated into the proposed action. They include roost tree identification training, fire line relocation to avoid potential bat roost trees, removal of fuel from around potential roost trees, and protection of potential maternity trees at all times throughout the project.

Following future re-introduction and sampling for presence of the American burying beetle (ABB), areas determined to be known occupied ABB habitat should not be burned in late April or in September, when beetles are likely active, to minimize potential mortality.

Avoid whenever possible burning during the bird nesting period (May through July). (No burning is anticipated during this period.)

If rattlesnakes are determined to be present in the project area, avoid conducting burns after mid-April or prior to mid-October around den sites when rattlesnakes may be active. If any rattlesnakes are encountered during the project activities, every effort should be made to avoid the snake but protect it from fire, and any sightings should be reported immediately to a Forest Service Biologist. Note that many personnel including the biologist have traveled extensively within the project area and no rattlesnakes have been sighted.

Prescribed fires should be planned when convection patterns would lift smoke relatively straight up, never allowing it to reach the vicinity of the mine openings, or when winds are blowing from the west, southwest, or northwest, which would push smoke away from the numerous portals located to the west, outside the boundaries of the project. Coordination with biologists should occur prior to commencement of any burn to ensure that known or suspected hibernacula would not be jeopardized. The preparation of a burn plan is a normal procedure in a prescribed fire program and these concerns will be taken into account. See smoke management mitigations.

### **Mitigations for Plants (see Project File 5-6)**

To reduce the likelihood of introduction and invasion by non-native invasive species (NNIS), all equipment shall be cleaned of all vegetation debris and soil before entering the project area. Equipment cleaning can be done at any commercial car wash facility or other facility with a high-powered water hose. Inspection of the rigs should be done on-site by the contract administrator.

Favor hand line construction over mechanical fire line construction whenever possible to avoid spreading NNIS. This was taken into account during project design by utilizing old roads whenever possible.

Rake berms created by mechanical fire line construction back across the fire line to re-introduce native plant seed, to help prevent NNIS germination, and to reduce potential erosion.

Plant native seed along mechanical constructed lines to compete with NNIS. Consult with Forest Botanist on approval for seed mixture.
Monitor burn areas for Japanese stiltgrass infestations for the first and second years after project implementation to determine if NNIS treatments are needed.
<p><b>Mitigations for Smoke Management (see Project File 4-24)</b></p> <p>Public notification will take place prior to ignition of the burn by WNF employees. Public residences within close proximity to the burn area will be notified both before the burn and the day of the burn. They will be provided with information on prescribed burning as well as information on how to minimize impacts. WNF employees will ask each household if any resident within the house has health problems that may be impacted by smoke emissions in the area. If there is a resident that has health-related issues in close proximity to the burn unit, the WNF may give the option to stay in a hotel during the day of the burn. A copy of the public contact verification form is in the project file, 4-32.</p>
County Emergency Services will also be notified the day of the burn, and the appropriate media will be contacted by the Forest Public Affairs Officer.
The WNF will remain in compliance with the current Ohio EPA Open Burning Standard by meeting the standards set forth by the Ohio Administrative Code Rule 3745-19-04 for Open Burning in Unrestricted Areas. WNF will use preferred meteorological conditions to ensure adequate smoke dispersion, taking into account the National Weather Service predicted winds, mixing heights, and atmospheric stability during the day of the burn.
Burning will occur during the dormant season with biologist's concurrence and will conclude no later than 6:00 p.m. on any burning day.
Smoke monitoring equipment will be placed down-wind of the burn unit in order to monitor smoke emission rates during the day of the burn, and the following 2-3 days after the burn.
"Smoke Ahead" signs will also be located on roads surrounding the burn unit. In addition, smoke patrols will be conducted by vehicles on nearby public roadways to monitor smoke dispersal and visibility.

**Photo 2: The burning prescription sets dispersion conditions to lift smoke up into the atmosphere**



## **B. Purpose of this Decision**

Forest conditions have always varied over space and time, due to natural processes and changes in climate as well as natural and man-made disturbances. Forest and fire ecologists believe current conditions of the central hardwood forests lie outside their historic range of variability (USFS 2005, pg 3-11). Ohio is undergoing a conversion from its oak-hickory forests to primarily maple and tulip poplar forests. This change is typical among many mid-west and eastern states. Data from the USDA Forest Service forest inventories between 1968 and 1991 indicate that the proportion of total volume in oak and hickory declined substantially relative to maple, tulip poplar, and black cherry. The relative importance of several oak and hickory species in Ohio declined by

at least 22 percent during this same period while maples and tulip poplars increased by at least 38 percent in total volume. A large scientific effort is assessing the problem and searching for management solutions (Iverson et al 2005). Please see references cited in Iverson et al 2005 in the bibliography to the Fire Prescription, Project File 4-1.

Conditions as cited in Iverson's research exist across the Wayne National Forest. While the disturbance history may vary from one economic/cultural community (i.e. coal mining communities to agricultural communities) to another across the Forest, the eventual ecological condition of the Wayne's hardwood stands mimics the conditions as cited in the research. As Iverson has described the current state of the forest, several factors contribute to the decline of oaks in eastern forests. Oaks do not regenerate well under closed canopies and thus are declining, while more shade-tolerant species are thriving. The success of oak regeneration after a canopy-changing disturbance seems to follow a moisture gradient. Regeneration of oak is adequate only

under xeric conditions in situations where it can successfully compete with more mesic species (Iverson and others 1997).

The oak-hickory community is particularly important to forest managers because of its importance to wildlife. The oak-hickory forest produces an annual crop of acorns and other nuts that are a primary fall and winter food source for species like the blue jay, red-headed woodpecker, wood duck, raccoon, black bear, white-tailed deer, wild turkey, and northern bobwhite (Dickson, 2004). Acorns have a high lipid content, which serves as an energy source that becomes important for winter survival and successful reproduction. The furrowed bark and short-petioled leaves characteristic of oak trees also offer increased feeding opportunities to bird species that glean insects from crevices in their bark. Rodewald and Abrams' (2002) study of oak-dominated and maple-dominated forest stands in Pennsylvania suggests that tree species composition influences avian community structure. They found that the majority of species and guilds that were consistently less abundant in maple than in oak stands over multiple seasons were bark-gleaning or resident species that regularly consume and cache acorns. Patterson and James (2004) found that birds foraging during the summer in closed-canopy oak-hickory forests used oaks in greater proportion than their abundance at the site, and that other tree species were used less than their abundance at the site (USFS 2005c, 3-39).

The exfoliating bark of certain oak and hickory trees also provides the roosting structure needed by the Indiana bat. Fifty percent of the Indiana bat's Class I roost trees include oaks and hickories (Romme et al., 1995 in USFS 2005c, 3-39).

Historically, fire has been a component of oak forests in southern Ohio. Dendroecological studies have shown that fires were frequent from the time of Euro-American settlement ca. 1800 to ca. 1930. After 1930, fires usually were suppressed, resulting in a dramatic increase in recruitment of maples and other non-oak species (Iverson et al 2005). Fire was a disturbance process that historically occurred in oak-dominated ecosystems in Ohio (Hutchinson et al., 2003; Sutherland et al., 2003). For example, fire scar analysis of Vinton County, Ohio, oaks that originated in the mid-1800s, after European settlement but prior to fire suppression efforts, suggested that fires occurred when the tree cambium was dormant, from August to mid-April, but most fires occurred during March and April (Sutherland, 1997). The fire scars indicated that annual fires were unusual and low intensity fires occurred at this site every 3 to 4 years. It was unusual for more than 12 years to pass between fires. Major fires occurred about every 7-8 years at this study site. (From WNF Revised Forest Plan 2005, pg 3-183.)

Over 90 years of fire suppression has resulted in changed ecological conditions, less forest cover in fire-tolerant species (oaks and hickories), and increasing presence of fire-intolerant and shade tolerant species (maples, yellow poplar, etc).

While research cannot at this time point conclusively to a direct correlation between fire and oak and hickory sapling development, research can point to the historic presence of fire in our forests through the dominance of oak in historic forests, the differences in understory composition between moisture gradients, and the importance of canopy disturbance to the development of advanced regeneration. This evidence has driven the importance of fire in the management strategies in the Forest Plan

## Forest Plan Goals

Fire was incorporated into all seven of the management alternatives evaluated in the revision process for the Wayne National Forest Revised Land and Resource Management Plan (USFS 2005) to help control non-native invasive species, maintain or improve herbaceous and shrubland habitat, regenerate oak and hickory and to reduce hazardous fuels. The re-introduction of fire is a major management strategy in the Historic Forest Management Area in the Revised Wayne National Forest Land and Resource Management Plan (Forest Plan).

The Forest Plan's preferred alternative, E-Modified, targets the fewest acres for purely hazard fuel reduction, but projects the most acreage for vegetative management through prescribed burning (Plan 3-193). Implementation of the Forest Plan through the first decade will move thousands of acres into Fire Regime Condition Class 1 and toward the historic range of variability (see Table 3-42. Predicted fuels reduction activities for the first decade, Forest Plan 3-192 and Project File 6-3). For a discussion of Fire Regime Condition Class and the existing condition of vegetative structure in the project area, please see the Fire and Vegetation Management Prescription, Project File 4-1.

The Forest Plan includes objectives to meet the goal of sustaining favorable terrestrial habitat conditions for both wildlife and plants on page 2-15:

Objective 4.1b – Promote restoration and maintenance of the oak-hickory ecosystem by improving conditions for oak regeneration in the Historic Forest and Historic Forest ORV Management Areas.

Objective 4.1c – Encourage the establishment of all-aged hardwood forest and hardwood-pine forest communities with structurally diverse canopy layers to maintain forest health and increase structural diversity.

The applicable standards and guidelines (S & Gs) for the Historic Forest management area cover harvest, mid-story control, and burning practices appropriate to establish the desired condition. Applicable S & Gs are listed below. Variations from the guidelines are substantiated by research on timing of fire in the following discussion. This area is scheduled for additional vegetation management planning in 2009-2010.

G-HF-VEG-5: Favor oak regeneration by controlling non-oak species (particularly red and sugar maple) in the understory. Control may be a combination of mechanical removal, herbicide, and/or prescribed burning, whichever is best suited to individual stand conditions.

G-HF-VEG-6: After stand conditions are established through the treatments listed above, maintain these conditions through periodic spring or fall prescribed fires (every 3-10 years) in order to

- \* Control maple, poplar, and cherry reproduction
- \* Allow oak regeneration to develop
- \* Diversify the herbaceous plant community.

Although the guidelines encourage the use of herbicides to meet the objectives if the prescribed burns do not adequately control the maple, poplar, and cherry reproduction, this decision does not include the use of herbicides.

In order to create the desired condition described in the Forest Plan, prescribed burning is being undertaken to prepare a seedbed or to eliminate an overabundance of understory species while encouraging seedlings, sprouts, or germination of selected species. Prescribed fire is used to reduce fuels, prepare sites for natural or artificial regeneration, control competing vegetation in mid-rotation stands, control certain insects and diseases, and restore desired plant species composition in the mid- to late-seral mesic forest commonly occurring in the Central Appalachians (Wigley 2002).

In many stands, the most important reason for burning is to reduce litter and duff layers to prepare a seed bed for oak and hickory seed to germinate. A site preparation burn would have the same characteristics as the understory control burn. Site preparation burns might need to occur more than once in a 10-year period until coincidence with a good acorn crop occurs and adequate seedlings can be counted. A second reason as described below is to reduce understory stem density to increase light levels in the understory for both germination and growth of intermediate tolerance species.

The decision I have made for the 2006 Athens prescribed burning project meets the above purpose and need by adding more acres to the burning program from the Historic Forest Management Area in the Baileys and increasing the frequency of burning in forested stands cleared in the 2003 Athens Prescribed Burning Decision from 6-8 years to 3-6 years, allowing up to three burns in 10 years. This frequency is considered important because, as we monitor our past burns, we find extremely variable burn conditions and results and feel that repeated treatments are important to achieve the desired results of decreased stem density and improved development of desirable regeneration. For the future, fire is not the only management strategy to be employed in this management area. The use of preparatory uneven-aged cuttings in this area will be analyzed in several years. Due to the uncertainty of the timing or location of these treatments, they are not being analyzed at this time.

I recognize that prescribed fire is not the solution to the lack of oak reproduction in our oak-hickory forest, however research supports prescribed fire (see Fire Prescription, Project File 4-1) at the scale of this project as an important step in the regeneration process for oak, along with future treatments to the mature canopy.

### **Monitoring**

Monitoring on the proposed Upper Bailey unit was done in preparation for the vegetation management prescription and in preparation of the wildlife and plant biological evaluations. Monitoring using FIREMON was completed in the Upper Bailey units in order to obtain accurate fuel-loading and green vegetation information for input to V-SMOKE, a smoke dispersion modeling analysis. Smoke monitoring equipment will be placed down-wind of the burn unit in order to monitor smoke emission rates during the day of the burn and 2-3 days after the burn. Additional vegetation monitoring will occur following the burn in order to assess the need and timing of additional burning based on the vegetation and wildlife habitat objectives.

## **II. SCOPING AND PUBLIC INVOLVEMENT**

Scoping for this project included review of the management direction for this area in the 2005 Wayne National Forest Land and Resource Management Plan, review of the National Forest

Management Act, and consultations with various Forest Service and other agency resource specialists. A scoping report was sent to over 230 members of the public on November 15, 2006, and was published on the Wayne National Forest website at that time. A legal notice for the 30-day notice and comment period was published in *The Athens Messenger* on November 15, 2006. Thirteen comments were received and have been considered in the project file, item 2-27.

Some commenters were concerned about the impact of prescribed burning on water and air quality and human health, on non-native invasive species, and on threatened and endangered species. These comments were used to further analyze project effects. The results of this analysis are in the project file, items 2-27, 4-14 through 4-24, and 5-11 through 5-14. Responses are summarized below.

#### **Burning will impact water quality**

Monitoring has shown no direct or indirect impacts to water quality (see Project File 4-16, 5-11 through 5-14). Numerous site visits to the prescribed burn area have shown no evidence of erosion. In successive fall seasons, litter now covers the forest floor. Total Maximum Daily Loads (TMDLs) set for Sunday Creek are based on biological data collected in 2001 by Ohio EPA. There are no regulations in the Clean Water Act which will be violated by this prescribed burning project (Project File 2-27).

#### **Burning will impact air quality and human health**

Smoke from prescribed burning can affect human health, especially the health of the elderly, the young and the sickly. Best management practices are implemented to 1) burn only when atmospheric and fuel conditions minimize the amount of smoke to be generated, 2) disperse the smoke in a direction to minimize impacts, and 3) communicate with affected individuals and communities of potential impacts. Additionally, all burning is coordinated with Ohio EPA and conducted to comply with the National Ambient Air Quality Standard for particulates – a standard designed to protect human health. Analysis of air quality related to prescribed burning is in the Project File 4-15, 4-17, 4-18, 4-19, 4-23, 4-24, and 4-25. Graphs are available to show the amount of particulates produced at the site of the burning, and how they taper off as distance increases from the site.

#### **Burning will increase spread of non-native invasive species**

Prescribed burning and the associated activities which cause ground disturbance, mainly the construction of fire lines, can increase the spread, germination and survivability of Japanese stiltgrass. Mitigations to control populations of stiltgrass before and after prescribed burning are included as part of the project design (see Mitigations for Plans, Section I.A. above) are designed to retain or decrease current stiltgrass populations and not cause the spread of this species within the burn areas (Botanical BE, Project File 5-6, pg 2).

#### **Burning will impact threatened and endangered species, especially the Indiana bat**

The Biological Analysis (BA) for the 2006 Plan addresses Forest-wide cumulative effects (USDA 2005c, Appendix F1-67 to F1-75). See also the Biological Evaluation for this project, Project File 5-5, pg 16-20 for a project-specific *Myotis sodalis* cumulative effects analysis. Part of the process required for TES management (see Project File 5-5, pg 4) requires that the Forest Service provide a project-specific Biological Evaluation (BE) for each proposed project disclosing any potential effects to federally listed species, which is reviewed by the USFWS. The BE for this project was sent to FWS on 11/14/2006. A Tier 2 Biological Opinion (BO) was received back

from USFWS on 12/14/2006 indicating: (1) concurrence with the biologists' determinations, (2) the project is consistent with all provisions in the 2006 Forest Plan and the Programmatic (Tier 1) BO (PBO), and (3) we fulfilled our requirements under Section 7(a)(2) of the ESA.

The prescription for the Historic Forest management area, in which the proposed project is sited, calls primarily for the use of uneven-aged vegetation management combined with prescribed fire to create oak and hickory dominated forest communities with more open conditions. These management areas were formulated, in part, to provide habitat conditions beneficial for the Indiana bat.

Responses to other comments can be found in the Response to Comments, Project File 2-27.

### **III. REASONS FOR CATEGORICALLY EXCLUDING THE DECISION**

Decisions may be categorically excluded from documentation in an environmental impact statement or environmental assessment when they are 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 31.1b or 31.2, and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

In 2003, the federal agencies with prescribed burning programs, primarily the Bureau of Land Management and the Forest Service, analyzed prescribed burning activities across the country in preparation for the issuance of new categories to include burning. It was determined during this study that there were no significant cumulative effects from projects up to 4500 acres. This project falls well within this acreage limitation, although it is using a category defined by earlier regulations.

This proposed action is similar in design and scope to previous prescribed burn projects conducted on the Wayne National Forest, and continues implementation of the burning program begun in the Baileys by the 2003 Athens Prescribed Burning Decision. The environmental analyses for these projects did not reveal any potential for significant effects from the proposed activities. Post-implementation monitoring of these projects has verified that no adverse effects resulted from these projects (see Project File 4-1, 5, 12, 16, 5-5 and 5-6). My conclusion is based on information presented in this document and the entirety of the record.

I have concluded that this decision is appropriately categorically excluded from documentation in an environmental impact statement or environmental assessment as it is a routine activity within a category of exclusion and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment. I have reviewed the analyses for wildlife, plants, water and air quality in the project file and find that, while there are impacts, they can be successfully mitigated as described in the proposed action.

#### **A. Category of Exclusion**

The proposed action falls into the category described in USDA Forest Service Handbook 1909.15, Chapter 30, Section 31.2; Category 6 which states "Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one

mile of low standard road construction. Examples include (d) Prescribed burning to reduce natural fuel build-up and improve plant vigor. (Forest Service Handbook 1909.15, Environmental Policy and Procedures)

The Council on Environmental Quality (CEQ) regulations at 40 CFR 1507.3 provide that agencies may, after notice and comment, adopt categories of actions that do not normally have significant impacts on the human environment and that do not require preparation of an environmental assessment or an environmental impact statement. Agency procedures must, however, provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect. The Responsible Official must consider potential impacts on Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species; floodplains, wetlands or municipal watersheds; Congressionally designated areas such as wilderness, wilderness study areas, or national recreation areas; inventoried roadless areas; research natural areas; American Indian and Alaska Native religious or cultural sites; archaeological sites, or historic properties or areas.

Forest Service procedures for complying with and implementing the National Environmental Policy Act (NEPA) are set out in Forest Service Handbook (FSH) 1909.15. Chapter 30 establishes types of categorical exclusions. A categorical exclusion is not an exemption from the requirements of NEPA, rather it is an administrative tool to reduce the need for excessive paperwork for those actions that, based upon extensive practice and experience, are determined to not have (individually or cumulatively) a significant environmental effect.

Category #6 was developed by the Forest Service, as allowed by the Council on Environmental Quality, for activities that do not normally have significant impacts on the human environment and therefore do not require preparation of an environmental assessment or an environmental impact statement. It is my determination that the Athens 2006 Prescribed Burning Decision clearly and unequivocally fits within the categorical exclusion of FSH 1909.15, Section 31.2(6).

## **B. Relationship to Extraordinary Circumstances**

### **1. Threatened and Endangered Species or Their Critical Habitat**

The Endangered Species Act requires that federal activities 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. As required by this Act, potential effects of this action on listed species have been analyzed and documented in a Biological Evaluation (Project Record 5-5).

The Forest Plan incorporates conservation approaches or measures (see USDA 2005c, Appendix F1-75) to proactively protect and conserve federally listed species, like Indiana bats and American burying beetles. Appendix D of the Forest Plan is called the Conservation Plan for Federally Listed Species. It incorporates measures to proactively manage for T&E species, including protection of individuals, habitat protection & improvement, education & awareness, and inventory, analysis & monitoring for species that occur in the Wayne NF, or are likely to be reintroduced to the Wayne NF in the near future. The foundation of the Conservation Plan is the allocation of Wayne lands into management areas that contain the ecological conditions needed

by particular species. These management areas were formulated, in part, to provide habitat conditions beneficial for the Indiana bat and American burying beetle.

We also provide future habitat through implementation of specific actions, depending on species. Specific Standards and Guidelines (S&Gs) were developed and are implemented where appropriate in all projects. S&Gs specifically related to Indiana bats and fire include (TES-2 & 3) buffer zones around hibernacula and swarming sites, (TES-2 & 11) limitations on when burns may be conducted to avoid impacting bats, and (TES-4) development of burn plans specifying appropriate weather conditions to promote smoke dispersal away from hibernacula.

Additional S&Gs and avoidance & minimization measures (see BE, Project File 5-5 pg 9-10) meant to protect Indiana bat and potential roost trees have also been incorporated into the proposed action. Our projects tier to the Forest Plan and implement all S&Gs, as appropriate. This decision is in compliance with the Act, per the concurrence letter in Project File 5-10.

## **2. Floodplains, Wetlands, or Municipal Watersheds**

### **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 including 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."

Floodplains, consisting of those valley bottom areas, which are typically inundated by storm floodwaters, do not exist in the project area. The proposed burn area is on upper slopes, primarily in the upper reaches of the Big Bailey watershed.

### **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." None of these topographic features exist in the project area.

### **Municipal Watersheds**

There are no congressionally designated municipal watersheds on the Forest, therefore this decision will not affect municipal watersheds.

## **3. Congressionally Designated Areas**

There are no wilderness, wilderness study areas, or national recreation areas on the Forest, therefore this decision will not affect any congressionally designated areas.

## **4. Inventoried Roadless Areas**

There are no inventoried roadless areas (RARE II or Forest Plan) in the project area, therefore this decision will not affect any roadless areas.

## **5. Research Natural Areas**

The designated Buffalo Beats Research Natural Area is within this project area and is designated for further prescribed burning in this decision. Burning was analyzed as a management activity in the environmental analysis designating the RNA. This decision further implements the management plan (see Project File 6-1).

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

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 of Historic Places. 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 on agency undertakings. The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered on federal lands. It affords protection of archaeological resources and sites that are on public and Indian lands.

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 (Project Record 5-7 and 5-14). A “No Adverse Effect” determination was made based on the results of these surveys. Consultation was accomplished with the State Historic Preservation Office and a concurrence letter dated January XX, 2007, (Project File 5-17) was received by the District.

I am satisfied that no other extraordinary circumstances related to this project were identified.

## **IV. FINDINGS REQUIRED BY AND/OR RELATED TO OTHER LAWS AND REGULATIONS**

My decision will comply with all applicable laws and regulations. I have summarized some pertinent ones below.

### **Forest Plan Consistency (National Forest Management Act)**

This Act requires the development of long-range land and resource management plans. The Wayne National Forest Plan was approved on December 14, 2005, as required by the Act. The plan provides for guidance for all natural resource management activities and requires all projects to be consistent with the Forest Plan. The Forest Plan has been reviewed in consideration of this project. This decision implements the Historic Forest and Research Natural Area management area goals, subject to standards and guidelines for all resources as evidenced in the Project File.

**Endangered Species Act** - See discussion in III. B. 1 in this document.

### **Sensitive Species (Forest Service Manual 2670)**

This Manual 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 have been analyzed and documented in a Biological Evaluation (Project File 5-5). Black bear, bobcat, cerulean warbler, timber rattlesnake, and southern grizzled

skipper are the only RFSS species considered to have suitable habitat and the potential to occur within the project area.

The proposed project will have no impact on black bear or bobcat, and may impact individuals but is not likely to cause a trend towards federal listing or the loss of viability for the cerulean warbler, timber rattlesnake, or southern grizzled skipper.

The inclusion of the following measures would help avoid direct effects to listed species:

- Avoid whenever possible burning during the bird nesting period (May through July).
- If rattlesnakes are determined to be present in the project area, avoid conducting burns after mid-April or prior to mid-October around den sites when rattlesnakes may be active.
- If any rattlesnakes are encountered during the project activities, every effort should be made to avoid the snake but protect it from fire, and any sightings should be reported immediately to a FS Biologist.

### **Clean Air Act**

Under this Act areas of the country were designated as Class I, II, or III air sheds for Prevention of Significant Deterioration purposes. Class I areas generally include national parks and wilderness areas. There are no Class I air sheds on the Wayne National Forest. The Forest, by default, is a Class II air shed, along with the rest of the US not classified as Class I. Air quality effects from prescribed burning are considered temporary in nature. Burn plans are approved by the Ohio EPA for each project. Mitigations for weather conditions and notifications are listed elsewhere in this decision.

**National Historic Preservation Act** – See III, Item B. 6 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 is not expected to adversely impact minority or low-income populations, and therefore complies with this Act. Public involvement occurred for this project, the results of which I have considered in this decision-making. Previous prescribed burns occurring in this area have not caused any impacts to local residents, based on monitors touring the area, local notification, and contact with the District during and after the burns.

### **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.

## **V. ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES**

Judge James K. Singleton, Federal District Court for the Eastern District of California issued an order on July 2, 2005, in the case of Earth Island Institute v. Ruthenbeck, case number CIV F-03-6386 JKS. In this ruling Judge Singleton struck down the provisions of 36 CFR Part 215 that excluded categorical exclusions from notice, comment and appeal. This decision is therefore subject to appeal pursuant to 36 CFR 215. A written Notice of Appeal must be postmarked or received within 45 days after the date of publication of legal notice of this decision in the newspaper of record. The Notice of Appeal must be sent to:

USDA Forest Service, Eastern Region  
ATTN: Appeal Deciding Officer (ADO), Mary O. Reddan  
626 E. Wisconsin Ave, Suite 700  
Milwaukee, WI 53202-4616

Or E-mail: [appeals-eastern-regional-office@fs.fed.us](mailto:appeals-eastern-regional-office@fs.fed.us) Subject: Athens 2006 Prescribed Burning Decision

Or Fax: 414-944-3963 ATTN: Appeal Deciding Officer, USDA Forest Service, Eastern Region

Normal business hours (for hand-delivered appeals) are 7:30 am – 4:00 pm, Monday through Friday. Electronic appeals should be in TXT, RTF, DOC, PDF, or other Microsoft Office-compatible formats. Appeals must meet the content requirements of 36 CFR 215.14.

## **VI. IMPLEMENTATION DATE**

If no appeal is received, implementation of this decision may occur on, but not before 5 business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 business days following the date of appeal disposition.

## **VII. CONTACT PERSON**

Further information about this decision can be obtained from District Ranger DeVela J. Clark during normal office hours (weekdays, 8:00 am to 4:30 pm) at the Athens Ranger District, 13700 US Hwy 33, Nelsonville, OH 45764; Phone (740)753-0101; Fax: (740)753-0119.

## **VIII. SIGNATURE AND DATE**

*DeVela J. Clark*

*1/22/2007*

\_\_\_\_\_  
DeVela J. Clark  
District Ranger  
Responsible Official

\_\_\_\_\_  
Date