



Decision Notice and Finding of No Significant Impact

United States Department
of Agriculture

Forest
Service
April 2016

Lee Creek Fuels Treatment Project

Boston Mountain Ranger District
Ozark-St. Francis National Forests

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Introduction

This Decision Notice and Finding of No Significant Impact for the Lee Creek Fuels Treatment Project documents my proposal for selecting management activities within the project area as analyzed in Alternative 1 of the Environmental Assessment (EA). The project area is located in the Ozark National Forest on the Boston Mountain Ranger District within the 100,000 acres proclamation boundary of the Lee Creek Unit in Crawford and Washington counties in Arkansas.

The purpose of this project is to reduce the buildup of fuels and the dominance of early successional trees in order to promote overstory diversity, and increase the quality of open areas for wildlife forage. Restoration of native ecological systems and improvement of wildlife habitat are the highest priorities in managing our natural resource base in order to have a lasting effect on future conditions of the forest.

The EA documents the analysis of the proposed action and the “no action” alternative. Alternative 1 is the proposed action, designed to meet the purpose and need for the project.

Final Decision

As Responsible Official, I have considered several factors during my evaluation of this project. I have reviewed the project file documentation, including the purpose and need for action (EA pp. 6-7), the comments received during the project’s comment period (project file); and the direction outlined in the 2005 Revised Land and Resource Management Plan (Forest Plan). I propose to implement Alternative 1 as described in the EA (pp. 13-17).

The proposed action is to improve habitat for threatened, endangered and sensitive species (e.g., the Indiana bat) as well as other wildlife; create forest conditions that are more resilient to outbreaks of insects, disease and wildfire; and to provide for sustainable watershed conditions.

Design Criteria (EA pp. 17-22) are part of the proposed action. They were developed to minimize potential impacts associated with the proposed activities. Analysis of effects presented in the EA is based on the implementation of these non-discretionary features.

Proposed activities will be authorized as described below.

Prescribed Burning and Mechanical Fuels Reduction

The entire project area will not be burned all at one time. Burn areas will be subdivided into more manageable burn units usually ignited on separate days. On a rotational basis, specific units will be identified to burn each year based on Forest Plan objectives and guidelines as well as fuel and weather conditions. For example, for some areas the goal is improving wildlife habitat and particular seral stages rather than

bringing back the full array of historical vegetation. Burn units may be burned more than once to mimic the natural fire regime and meet management objectives. Burn frequency following initial burns will also be based upon monitoring, but will likely be every three to five years. The management activities in this alternative will start in 2016.

Post burn evaluations will be conducted to determine treatment effectiveness and to determine the return interval and burning season most likely to lead toward accomplishment of management objectives. Past post-burn evaluations in this area have indicated that burning meets objectives by reducing hazardous fuels, opening the understory, and temporarily reducing competition for mast bearing hardwoods from red maple, eastern red cedar, black gum and other fire-intolerant pioneer species. Objectives specific to particular burn units include restoring ecosystems, reducing fuels, reducing small stem densities (in the one and two-inch size classes) by 60 to 80%, reducing the cedar component in pine stands by 50%, and improving aesthetics.

Dormant season prescribed burns will be conducted to restore and maintain forest and special communities and reduce burnable fuels (litter, slash, down timber, standing snags). Growing season burns will be conducted to promote understory growth of fire tolerant species and diversity as well as reduce mid-story stem density which can serve as ladder fuels and block diffuse light reaching the forest floor. The dormant season for burning in the South generally runs from October 1st through April 14th while a growing season burn generally runs from April 15th through September 30th. However, this varies based on climatic conditions that influence "leaf out" for the start of the growing season and "hardened off" that signal the start of the dormant season. To reduce competition from woody shrubs and other tree species, some burning will occur after the spring flush of foliage. Growing season burns will be applied in areas being restored and maintained for woodland conditions over the long term.

The burns will reduce the existing litter layer. This is the layer of materials on the forest floor that has not yet begun to decompose significantly and can readily be distinguished as twigs, leaves and other living or recently living materials. However, the majority of the duff layer will remain intact. The duff layer is between the uppermost soil mineral horizon and the litter layer. Material in the duff layer is decomposed to the point at which there are no identifiable organic materials (leaves, twigs, etc.).

There are a variety of methods commonly used to ignite burn units. Some of the methods used most often by the Forest Service are: hand ignition with drip torch, flare guns, and aerial ignition. All of these will likely be used for this project. Ignition of separate units may be done with the use of a helicopter and/or hand crews.

Fire will be allowed to back down from ridge-tops into hollows and drains; vegetated buffers will be maintained along perennial streams as directed by the Forest Plan.

Existing roads, streams and control lines established for previous prescribed burns within the proposed project area will be used as control lines where practicable.

Where suitable firebreaks are not already in place, construction of new prescribed fire control lines may be required. There may be as much as thirty miles of new fire line needed throughout the entire project area to protect timber regeneration areas. Fire line construction varies greatly in ground disturbance potential. For example, dozer lines compact and erode soils to a greater degree than hand line which in turn is more disturbing than broadcasting water along a burn perimeter.

Prescribed fire control lines may be constructed with a bull dozer or similar equipment to clear dead vegetation and expose bare mineral soil. Handtools or leaf blowers will be used where mechanically constructed line is unsuitable in unstable soils. Some lines may be used repeatedly over the course of years while some may be used just once. As soon as possible after completion of a burning operation, prescribed fire control lines will be seeded with a Forest-approved seed mixture to help speed natural recovery processes and reduce the potential for erosion.

Prior to mechanical construction of any new prescribed fire control line, surveys for sensitive resources will be required and the locations will be approved by Forest Service resource specialists.

To limit the potential for a burn to escape and to facilitate safety of prescribed burn personnel, existing snags and some live trees inside the burn unit or within 50 – 100 feet of burn unit perimeters may need to be felled or pushed over in advance of a scheduled burn date, during or immediately following a prescribed burn operation.

Protection measures for the controlled burns include burning within Forest Service guidelines and protecting travelers on major forest roads from reduced visibility due to smoke. The area will be monitored after burning by Forest Service personnel to assess the effectiveness of the prescribed burn.

Mechanical fuels treatments will include using mechanical equipment in conjunction with or in place of prescribed burning to help meet management and restoration goals. Mechanical fuels treatment, also known as mulching, shredding, mastication, or chipping, is a method of fuels treatment in which ladder fuels are chopped into smaller pieces, and standing live or dead fuels are converted to more compact surface fuels.

Treating fuels mechanically in conjunction with prescribed burning typically allows fuels to burn more easily under controlled conditions. This may involve using an application-specific tractor called a forestry mulcher which has a rotary drum with steel teeth to shred vegetation. It may also include the use of a more general machine such as an excavator, or bulldozer with a mulching attachment. Mechanical fuels treatment

increases the amount of coarse woody debris on the forest floor and can protect soils from erosion and help to retain nutrients.

Chemical Treatments

For all the application methods listed below, no more than 1,000 acres per year will be treated with herbicide in the course of a year.

Chemical Spraying for Non-native Invasive Species Eradication in Forested Areas, Roadsides and Trails: Eradication of NNIS along roadsides or trails (seresia lespedeza, tree of heaven, fescue, multi-flora rose, Japanese honeysuckle, Johnsongrass, silk tree, stiltgrass, non-native privets) will be accomplished by directed foliar application of Accord (glyphosate, isopropylamine salt formulation at four pints of active ingredient/acre). Rodeo (aquatic herbicide) will be used near any streams or rivers. Treatments will occur between May and September with July-August being the optimum period. Herbicide treated areas cannot be prescribed burned for at least 30 days after treatment. The following trees, shrubs, and plants – regardless of size and of treatment method – will not be treated: black cherry, dogwood, French mulberry, persimmon, serviceberry, plum, Ozark chinquapin, Kentucky lady slipper, royal catchfly, Ozark Trillium, Ozark spiderwort, and Ouachita leadplant.

Chemical Spraying for Fescue and Serecia Lespedeza Eradication in Pastures and Wildlife Openings: Direct foliar application of glyphosate (Rodeo or Accord) (glyphosate, isopropylamine salt formulation at 4 pints of active ingredient/acre) with tractor boom sprayer. Rodeo (aquatic herbicide) will be used near any streams or rivers. Treatments will occur between May and September with July-August being the optimum period. Herbicide treated areas cannot be prescribed burned for at least 30 days after treatment. The following trees, shrubs, and plants – regardless of size and of treatment method – will not be treated: black cherry, dogwood, French mulberry, persimmon, serviceberry, plum, Ozark chinquapin, Kentucky lady slipper, royal catchfly, Ozark Trillium, Ozark spiderwort, and Ouachita leadplant.

Chemical Spraying for Woody Vegetation Eradication in Pastures and Wildlife Openings: Eradication of encroaching woody vegetation in pastures and wildlife openings will be accomplished through direct foliar/stem application of triclopyr (Garlon 4) at no more than two quarts/acre of active ingredient. Applications will occur from May through September, with July-August being the optimum time period. Herbicide treated areas cannot be prescribed burned for at least 30 days after treatment. The following trees, shrubs, and plants – regardless of size and of treatment method – will not be treated: black cherry, dogwood, French mulberry, persimmon, serviceberry, plum, Ozark chinquapin, Kentucky lady slipper, royal catchfly, Ozark Trillium, Ozark spiderwort and Ouachita leadplant.

Reasons for the Final Decision

My criteria for making this Final Decision was based on how well the management actions analyzed in the EA meet the purpose and need of the project, and address issues raised during the scoping process and the comment period. We considered how the proposed treatments in the Lee Creek Fuels Treatment Project respond to the goals and objectives of the Forest Plan. In evaluating the effects of the proposed activities as described in the EA, it is my judgment that Alternative 1 achieves the stated purpose and need and brings the project area closer to the Forest Plan desired condition.

The focus of the proposed action is to protect resources from the threat of wildfire and to create and enhance habitat diversity for animals and plants, including threatened, endangered, and/or sensitive species in a way that protects resources, meets the purpose and need and does not conduct management activities above and beyond what is needed to meet those goals.

In making this Final Decision, I took into account the interests and values of the public, and carefully considered the appropriate type and level of treatment needed to achieve Forest Plan goals and project objectives. Alternative 1 provides adequate benefits to the public within the framework of existing laws, regulations, policies, public needs, and capabilities of the land, while meeting the stated purpose and need for this project. Based on all of these factors, it is my judgment that Alternative 1 best provides for the greatest net benefit to the public.

My Decision is based on a review of the record that shows consideration of relevant scientific information, including responsible opposing views, and as appropriate, the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

It is for these reasons I am proposing Alternative 1, the Proposed Action as my Decision.

Consideration of Public Comments

I considered all comments and opinions that have been received to date on this project in making this Decision. We invited Federal, State and local government agencies, the general public, and other groups and individuals potentially interested in or affected by the project to review and comment on our proposed action. All comments received and documentation of how those comments or concerns were addressed is included in the project record and in the EA on pages 11-12.

Alternatives Considered

Two alternatives were considered in detail: Alternative 1 – the proposed action as described in the EA (pp. 13-17) and Alternative 2 - no action. The analysis, as documented in the EA (pp. 23-84), used current and desired conditions as comparison to determine effects. These alternatives provided a reasonable range of alternatives based on the issues identified and the scope of the proposal.

I have not proposed the selection of Alternative 2 because it will not meet the purpose and need for action identified for this project. Alternative 2 will not move us toward the desired goals and objectives stated in the Forest Plan to the degree of Alternative 1.

Public Involvement and Scoping

The Project was listed in the Schedule of Proposed Actions. In July 2014 a "scoping" letter and activity map was posted on the Ozark-St Francis National Forests website. In all, over 1200 letters were mailed to local landowners plus tribal and local governments and persons on the all-mail list.

The key issues associated with this project were identified through this public scoping process, which included input from Forest Service specialists, other government agencies, and private individuals. The comments and Forest Service responses are part of the project file and may be viewed at the district office. Seven comments were received in response to the proposal. Two commenters voiced concerns about burning near private property and structures. These comments were addressed in telephone calls to the commenters from the district Fire Management Officer (FMO). One mentioned the possibility that the Forest Service will be '*taking down 63% of the forest's natural foliage areas.*' We assured the commenter that this was not the case. The City of Fort Smith requested notification prior to burns of over 200 acres in the watershed. The Forest Service is committed to the maintenance and improvement of water quality in this area. Part of the City's concern is that after burns, Total Organic Carbon (TOC) concentrations in streams downstream of the burns may become elevated. The FMO has agreed to notify the city before the burns so that remote monitors may be employed. Another person was concerned about the possibility of disturbance to turkey nests which was addressed in a letter from the District Wildlife Biologist. While it is possible that some burning may occur during nesting season and could destroy individual nests, the overall effect to the turkey population will be beneficial from landscape level burns. A Forest Service Interdisciplinary Team (ID Team) reviewed the comments received during the scoping period and determined that there were no issues that could not be addressed through project design or mitigation measures, and therefore no alternatives to the proposed action were developed to respond to issues that were identified in the scoping process. The comments and Forest Service responses are a part of the project record and may be viewed at the district office.

The Final Environmental Assessment was made available for public comment beginning 12 March 2016, the day after the legal notice of its availability in the *Southwest Times Record* the newspaper of record for projects on the Boston Mountain Ranger District of the Ozark National Forest). We received no comments within the comment period.

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that

Alternative 1, the proposed action, will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Therefore, I propose that an environmental impact statement not be prepared. I base my findings on the context and intensity of the project as analyzed and documented in the EA and project file.

Context means that the significance of an action must be analyzed in several contexts (i.e. local regional, worldwide), and over short and long time frames. For site-specific actions, significance usually depends upon the effects in the local context rather than in the world as a whole. This project is limited in scope and duration. The project was further designed to minimize short- and long-term environmental effects through the application of project design criteria (EA pp. 35-38). It is my determination that the effects of implementing Alternative 1 will not be significant locally, regionally or nationally.

Intensity refers to the severity of the expected project impacts and is defined by the 10 points below.

- 1. Effects may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.**

Effects associated with the proposed project are discussed in the EA. The actions will not have significant impacts on resources identified and described in the Environmental Consequences section of the EA (pp. 23-84). The effects of the decision to be made are not significant in the long and short terms.

- 2. The degree to which the proposed action affects public health or safety.**

Herbicides are proposed to be used to control invasive plants in the project area. The EA discusses use of herbicides and documents the risk assessments for herbicides considered in the EA (pp. 19-20, 34, 36, 41-47, 61-83). The herbicide risk assessment evaluated the potential for harm to non-target plants, wildlife, human health, and aquatic organisms.

Project design criteria are incorporated into the proposed action to minimize or eliminate potential risks of herbicide use (EA pp. 19-20). The EA concludes that based on the best available science, herbicide exposure from this project will not measurably affect human health (pp. 80-82), sensitive plants (18,23-24), fisheries and aquatic habitat (pp. 20,24,57-59,77,79), and wildlife (pp. 42-79).

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

In accordance with Section 106 of the National Historic Preservation Act, 36 CFR 800, FSH 2360, and the Programmatic Agreement between the U.S. Forest Service, relevant federally-recognized Tribes, and State Historic Preservation Offices (SHPO) of Arkansas and Oklahoma, the Forest archaeologist reviewed the scope and scale of the proposed project and determined the proposed project will cause no effect to historic properties (EA pp. 82-84). When specific burns are planned, effects on cultural resources will be analyzed and subject to consultation under Section 106 of the National Historic Preservation Act.

Wetlands and floodplains occur within the project area. Implementation of project design criteria will minimize impacts to wetlands and floodplains and ensure no significant effects to those resources (EA pp 10, 30).

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the herbicide treatments proposed in this project area are known and they are not unique. Glyphosate is one of the most widely used herbicides in the country and has been extensively studied. The original Risk Assessment for glyphosate (SERA 2003) was updated in 2011 (SERA 2011) in order to incorporate the extensive literature available and the availability of numerous formulations. These Risk Assessments reference hundreds of studies and provide some of the most thorough and comprehensive information for these herbicides. The literature and assessments applicable to this project did not indicate project treatments will be highly controversial (EA pp. 34, 36, 42-79). Concerns regarding herbicide use were identified through the project's public comment opportunities. While some commenters have concerns about the use and unknown effects of herbicide treatments, no evidence has been presented showing environmental effects of these activities within the project area are different than has been disclosed in EA (detailed responses are included in the project record).

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

Possible effects on the human environment are generally known and understood. The EA (pp. 23-84) discloses potential environmental impacts supported by accepted techniques and reliable data. The analysis discloses incomplete and unavailable information (EA pp. 65, 83). The recognized potential effects resulting from the proposed activities are supported by literature and assessments and do not involve unique or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The actions proposed will not lead to another future action or actions that will have significant effects either individually or in combination with each other or with this action. The Lee Creek Fuels Treatment Project EA represents a site specific analysis. Any future proposals will need to consider all relevant scientific and site-specific information available at the time and will require full compliance with NEPA. Neither the alternatives analyzed here, nor any of their individual components will establish a precedent for future actions with significant effects, nor will they represent a decision in principle about future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Cumulative effects are analyzed in the EA for each resource area potentially affected (pp. 23-84). As part of the proposed action, design features are incorporated to minimize potential direct and indirect effects (EA pp. 35-38) and bring the proposed activities into compliance with Forest Plan standards and other relevant laws and regulations, thereby reducing any potential cumulative impacts. Consideration of potential cumulative effects included past, present and reasonably foreseeable future activities. The analysis disclosed in the EA and supporting documents determine this project will not cause significant cumulative effects on biological or physical resources when considered in relation to other actions.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural resources or historical properties.

Project design features (EA pp. 17-22) for treatment areas within the Lee Creek Fuels Treatment Project Area ensure compliance in implementing Section 106 of the National Historic Preservation Act, 36 CFR 800, FSH 2360, and the Programmatic Agreement among the U.S. Forest Service, relevant federally-recognized Tribes, and State Historic Preservation Offices (SHPO) of Arkansas and Oklahoma. No significant effects to historical properties were identified (EA pp. 84-87).

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.

A Biological evaluation was completed for threatened, endangered, proposed, and sensitive plant and animal species. Alternative 1 does not contribute to loss of viability of any native or desired non-native plant or animal species or contribute to trends toward Federal listing of any species (EA pp. 42-80). This includes the recently listed as Federally Threatened Northern Long-Eared Bat (50 CFR 17).

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Actions to be implemented under this Decision are fully consistent with the Forest Plan. The proposed alternative will not threaten a violation of federal, state, or local law, or requirements imposed for the protection of the environment; see the section below for further details regarding applicable laws and regulations. This action is also in full compliance with the National Environmental Policy Act and is consistent with the National Forest Management Act and its requirements detailed in 36 CFR 219.

Findings Required by Other Laws and Regulations

National Forest Management Act (NFMA)

The Decision to authorize the actions proposed in the Lee Creek Fuels Treatment Project is consistent with the intent of the Forest Plan's long-term goals and objectives.

Management practices and activities in Alternative 1 are consistent with Forest-wide and management area direction. The project was designed in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines. The Forest Plan complies with all resource integration and management requirements of 36 CFR 219 (219.14 through 219.27).

Endangered Species Act of 1973, as amended

Biological evaluations were completed for threatened, endangered, proposed, and sensitive plant and animal species. Alternative 1 does not contribute to loss of viability of any native or desired non-native plant or animal species or contribute to trends toward Federal listing of any species (EA pp. 42-80).

National Historic Preservation Act of 1966

Section 106 of the National Historic Preservation Act requires that all Federal undertakings follow the regulations found at 36 CFR 800 to identify cultural resources and protect historical properties that are within project areas and which may be

adversely affected by projects. My Decision is consistent with the Programmatic Agreement among the Ozark-St. Francis National Forests, the Ouachita NFS, the State Historic Preservation Offices (SHPO) of Arkansas and Oklahoma, and relevant federally recognized Tribes.

Executive Order 11988 – Wetlands

Wetlands occur in the project area. If my Decision were implemented, project design criteria will minimize the impact to wetlands in accordance with E.O. 11988.

Executive Order 11990 – Floodplains

Floodplains occur in the project area. If my Decision were implemented, project design criteria will minimize the impact to floodplains in accordance with E.O. 11990.

Executive Order 12898 - Environmental Justice

This project is not anticipated to cause disproportionate adverse human health or environmental effects to minority or low-income populations. My Decision is consistent with Executive Order 12898.

Clean Air Act

If my Decision were implemented, anticipated emissions will be of short duration and will not exceed State of Arkansas ambient air quality standards.

Final Decision and Implementation

The Draft Decision was subject to an objection period pursuant to 36 CFR 218, subparts A and B (Pre- Decisional Administrative Review). A written objection must have been submitted within 45 calendar days following the publication date of the legal notice of the opportunity to object in the newspaper of record, for this project in the *Southwest Times Record*. No objections were received, therefore the responsible official may sign the final Decision Notice and implement the project without further legal notice of the decision. Interested and affected parties will be informed of the decision. The signing of the Decision Notice in accordance with 40 CFR 1506.10, may occur on, but not before, the 5th business day following the end of the objection- filing period.

Contact

For further information concerning this Decision or the USDA Forest Service objection process, contact Jobi Brown during normal business hours at 479-667-2191 (2175).

William Dunk April 5, 2016
WILLIAM DUNK,

District Ranger

Date