



United States
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Agriculture

Forest
Service

Eastern
Region



Initial Project Proposal for the Cane Ridge Project Area

***POPLAR BLUFF RANGER DISTRICT,
Mark Twain National Forest***



Healthy Oak-pine savannah maintained by prescribed fire

June 10, 2004

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Document Structure

The Forest Service has prepared this proposal in compliance with the National Environmental Policy Act (NEPA), Forest Service regulations for notice, comment and appeal of projects (36 CFR 215) and other relevant federal and state laws and regulations. This document provides the basis for obtaining substantive comments on a project located on the Poplar Bluff Ranger District, Mark Twain National Forest. Comments received during this initial scoping period will be used to develop a final proposal for the project area that will be processed under the revised NEPA regulations effective June 2003. The document is organized into five parts:

- **Background and Location:** This section includes information on the history of the project proposal.
- **Purpose and Need:** This section provides a rationale for the proposal, focusing on its relationship to the goals and objectives contained in the Land and Resource Management Plan for the Mark Twain National Forest.
- **Proposed Action:** This section describes the elements of the proposal organized by activity (for example, prescribed burning, old growth designation, etc.). The focus of the descriptions is on activities that may have environmental effects, to facilitate identification of issues regarding the environmental effects, identification of alternatives to the proposed action, and to facilitate identification of potentially significant environmental effects.
- **Decision Framework:** This section describes how the Responsible Official will review the proposed action in arriving at a decision, and describes the nature of the decision to be made.
- **Public Involvement:** This section provides more detailed information on proposal development, how the public can most effectively comment on the proposal, and how those comments will be considered in arriving at a decision.

Additional information, including more detailed analyses of project-area resources, may be obtained from Bill Paxton, Integrated Resource Analyst, or Megan York-Harris, Wildlife Biologist, at (573) 785-1475, or (573) 785-0267 (FAX), or in person at the Poplar Bluff Ranger District, 1420 Maud Street, P.O. Poplar Bluff, MO 63901. The project proposal is available on the Mark Twain National Forest website at <http://www.fs.fed.us/r9/marktwain/publications.htm>.

Project Background and Location

The project area is located in Management Area (MA) 3.4-2 on the Poplar Bluff Ranger District of the Mark Twain National Forest. Land management decisions in MA 3.4 areas emphasize wildlife habitat diversity to maintain and enhance populations of native and naturalized vertebrates (LRMP, pages IV-115-123).

The Cane Ridge Project area is located within Wayne and Butler Counties, Missouri, within Township 26N Range 6E, 26N Range 5E, 26N Range 4E Township 27N Range 5E, and Township 27N Range 5E. The area is located west of U.S. Highway 67, north of US Highway 60, and south of the Black River. The nearest community is Williamsville, approximately 1 mile north of the project area.

The project area consists of 17 compartments. They include compartments 73-75, 107-116, 137-139, and 176, containing approximately 31,803 acres total. Of this total, an estimated 19,644 acres are National Forest System managed lands, and 12,159 acres private lands. Proposed resource management activities would occur on National Forest System lands only.

Summary of the Proposed Action for the Cane Ridge Project Area

Please note that we are in the process of updating our data, and are transitioning into use of the latest Geographic Information System (GIS) data available. However, some data are only available in the older format, and are not compatible with GIS. Overall, the difference in the two data formats is generally less than 1%. Acreages used in this document and the Environmental Assessment (EA) for this project will reflect this information update transition phase.

Purpose

The 1986 Mark Twain National Forest Land Resource Management Plan (LRMP), as amended, provides general guidance and direction for the Proposed Action (Initial Project Proposal). The proposed activities are needed to meet the general direction provided in the LRMP. Specifically, there is a need to move existing conditions in the management area (MA 3.4-2) to conditions that more closely resemble the Desired Future Conditions in the Forest Plan. As stated earlier, the prescription in 3.4 management areas is to emphasize the wildlife habitat diversity to maintain and enhance populations of native and naturalized vertebrates (LRMP, pages IV-115-123).

The purpose of this project is to:

- Restore and re-establish natural vegetative communities, including open pine forest and old growth natural pine woodlands where appropriate;
- Emphasize wildlife habitat diversity by maintaining and enhancing populations of native and naturalized vertebrates, Threatened and Endangered species (TES), and the habitat for management indicator species;
- Provide for forest health, especially in areas of high mortality and/or risk for red oak borer;
- Protect and maintain old growth;
- Reduce fuel loading;
- Emphasize recreational opportunities based on consumptive and non-consumptive use;
- Provide dispersed recreation opportunities featuring a roaded natural recreation environment;
- Provide for moderate to high production of other resources such as timber products, recreation, forage, and minerals;
- Reduce non-native, invasive species, and;
- Maintain only those roads needed for resource management purposes, while providing for reasonable public access.

The Forest Plan provides general guidelines for conserving biological diversity on National Forest System lands. Vertical diversity of plants and animals are maintained by managing for natural communities in varying stages of development or vegetative age classes (LRMP, Wildlife Management Goals, Page IV-2; Management Direction Forest-wide, pages IV-49-65; and Management Prescription 3.4, pages IV-115-123). These stages, or habitat conditions, help provide a diversity of habitats and ecosystems necessary to sustain healthy populations of plants and animals in the Cane Ridge Project area.

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The Forest Plan also provides general direction and guidance for restoring ecosystem health, providing improved forage and habitats for wildlife, dispersed recreation opportunities for the public, wood products for the marketplace, as well as reducing the risk of catastrophic wildfire on forest resources and private lands.

The resource management activities identified within the Proposed Action are needed to meet Forest Plan guidance (LRMP, pages IV-1-85; Management Prescription 3.4, pages IV-115-123): They include, among others:

- Re-establishing natural vegetative communities, including old growth open pine forest and old growth natural pine savannahs where appropriate.
- Maintaining/improving forest health and diversity.
- Addressing early successional stage habitat conditions (vegetation 0-9 years of age), not well distributed across the project area as a whole.
- Protect existing special forest areas, including old growth, unique habitats, Regional Forester Sensitive species (RFSS), and Threatened and Endangered species.
- Reducing excessive fuel loading conditions in order to limit the possibility of catastrophic wildfires.
- Creating and maintaining an adequate amount of open/semi-open land.
- Keeping open road density of the 3.4-2 Management Area near or below the Forest Plan standard of 2.0 miles of open road per square mile of National Forest System land, and maintaining only those roads needed for forest management purposes.
- Maintaining existing National Forest System roads to standard, and mitigating potential safety concerns.
- Maintaining Forest Plan standard of 1-2 water sources per square mile of National Forest System land.
- Providing firewood.

Desired Future Conditions

The following discussion provides a general overview of the Desired Future Conditions for the project area. The Proposed Action section carries this general DFC forward, and provides actual discussion regarding other resource areas, such as recreation and forest health, for example.

Forested Areas

In pine stands, the forest would be thinned to approximately 60-70 square feet of basal area per acre. Oak stands that are in decline would be selectively salvage harvested and treated with periodic applications of prescribed fire to maintain long-term forest health and diversity. The resulting conditions would look almost “park-like”. When determining which pine stands to thin, trees of various ages would be selected so older pines are retained, as well as younger pines. This would ensure that the older trees would be replaced as they die and fall.

Prescribed Burning

Prescribed burning will be used as a tool to re-establish natural vegetative communities, including old growth open pine forest and old growth natural pine savannahs as well as accomplish and maintain the objectives set for wildlife habitat. The Cane Ridge Project Area is one of the largest remaining areas of shortleaf pine in Missouri. The absence of fire in pine forests has created unnatural conditions (Roth, 2002). Frequency, intensity, and season of the year are second only to precipitation’s influence on vegetation (Bidwell, Engle,

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Masters, and Weir, 2001). Summer burning would be incorporated into this landscape not only to maintain the herbaceous/grass/forbs layer of vegetation on the forest floor and provide temporary browse, but also to keep low-value, poor quality hardwoods from becoming established. After burning, native warm-season grasses will be re-established in areas where they are currently scarce. Some of these grasses already exist in the area, and the prescribed burning that has been completed in the recent past is enhancing this grass. It is documented in numerous studies that prescribed burning increases the crude protein of vegetation in the stand and makes the vegetation more palatable for browsers (Masters and Waymire, 2001).

In addition, prescribed burning can benefit songbirds and game birds where southern pines are the primary timber species. Burning can increase the yield and quality of herbage, legumes, and browse from hardwood sprouts and create natural openings for feeding, traveling, and dusting (Roth, 2002; and Masters and Waymire, 2001).

Wildlife Fields/Openings

The current conditions of approximately 121 acres of existing permanent wildlife openings consist primarily of fescue and other non-native, invasive species, such as Japanese honeysuckle, sericea lespedeza, and multiflora rose. An approved herbicide would be applied to all wildlife openings and native, warm season grasses or nonnative, noninvasive plants, such as partridge pea and clover, for example, would be planted that can be maintained with prescribed burning.

High visibility wildlife openings along Cane Ridge Road would be treated with herbicide and converted to wildflower planting areas to enhance habitat for hummingbirds and butterflies. Bluebird boxes would be placed on the edges of some of these openings. Other fields and wildlife openings would be allowed to grow for 3-5 years, providing brushy-type habitat for various songbirds, rabbits, and other species. All wildlife fields and openings would be maintained by prescribed burning; sometimes bush hogging with a small tractor may be required. Any or all of these areas may be periodically mowed with a brushhog if burning treatments are not establishing the desired condition.

Roads

This area is a walk-in turkey hunting area, managed to provide a quality hunting experience. Walk-in turkey hunting areas are a result of requests from turkey hunters for places to hunt free of disturbance from motor vehicles. In cooperation with the Missouri Chapter, National Wild Turkey Federation, and the Missouri Department of Conservation, the Mark Twain National Forest established areas where hunters walk into the woods to hunt free from disturbance.

There is extensive system of open roads in existence within the project area that provides motor vehicle access. There are over 44 miles of open National Forest System roads. There are another 47 miles of Non-system road not needed for resource management activities and not maintained to acceptable public use standards. Also, almost every one of these roads has one or more illegal trash dumps along them. Unless under special use permit, all Non-system roads directly adjacent to Cane Ridge Road (FR 3110) would be closed. Many old road ruts previously created on these Non-system roads would be left as vernal pools so they can continue to provide habitat for amphibians.

Ponds

Water is a limiting factor for all wildlife species; there are no perennial streams or large bodies of water in the Cane Ridge Project area. Many man-made ponds do, however, exist in the project area. There are 82 man-made ponds within the project area. Most of these are still holding water, but many are in need of maintenance. Amphibian eggs (Spotted salamander) have been found in these areas, as well as various adult frog species (Spring peepers, cricket frogs, and Southern leopard frog). Those needing maintenance would

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be re-developed. Wood duck, bat, and/or bird boxes would be erected at these ponds to provide nesting structures, and various types of native vegetation may be planted in the ponds to provide food for wood ducks and other species.

Proposed Action

The Proposed Action consists of a variety of site-specific resource management activities directed toward maintaining a diverse, healthy, productive, and sustainable forest area that meets the needs of present generations without compromising the ability of future generations to meet their needs from these lands.

All proposed resource management activities would be implemented on lands deemed appropriate and/or suitable for such purposes as identified in the Forest Plan for the Mark Twain National Forest (1986, available on the Internet at:

http://www.fs.fed.us/r9/marktwain/managment/planning/forest_plan_documents_1986.htm, and that are capable of meeting the specific needs identified in this document. These needs were established by comparing Current Conditions with Desired Future Conditions for the project analysis area, specific Management Area (MA 3.4-2) Standards and Guidelines (S&G) and general forest S&G further described in the Forest Plan.

Given the general description of the Desired Future Condition provided above, proposed resource management activities within the project area would include:

Re-establishing natural vegetative communities in the Cane Ridge Project Area, including old growth open pine forest and old growth natural pine savannahs (open woodlands) where appropriate, maintaining/improving forest health and diversity, and providing for wildlife.

- Prescribed burning treatments, on a landscape scale, coupled with salvage harvest treatments, would serve to re-establish this Desired Future Condition. Creating these conditions and adding sunlight to the forest floor will benefit species such as eastern wild turkey, white-tailed deer, bobwhite quail, red-cockaded woodpecker, and Bachman's sparrow. The latter three are in decline, endangered, and on the Regional Forester's Sensitive Species List, respectively. Many plant species would benefit from this activity.
- **Providing an estimated 1,346 acres of Early Successional Stage habitat conditions for both non-game and game species would be provided and better distributed across the project area utilizing salvage harvest over the course of the next ten years.** Sanitation salvage harvest treatments on 77 stands totaling an estimated 1,346 acres would provide woodland habitat in the 0-9-age class (early successional stage [ESS]), temporary forage for wildlife, reduce the risk of wildfire by reducing fuel-loading conditions, and provide wood products for the marketplace. Treatments, closely resembling a shelterwood harvest treatment, would be staged over the next ten years to ensure that ESS habitat conditions are near the Forest Plan standard and guideline for this habitat type each year. These treatments would remove high risk Scarlet and Black oak and thin other species. Residual stand basal area would range from 40-60 square feet of trees per acres in a mosaic pattern. No clearcutting treatments are proposed. Treatment compartment and stands are identified in the attached spreadsheet and Resource Management Activities Map.

Many of these 77 stands proposed for treatment are dying Scarlet and Black oak hardwood stands that are in decline. They have a high incidence of, or at risk for, insect, disease, and dieback problems.

Generally, these stands are hardwood Forest Types 53, 57, and 59, respectively, about approximately 70 years old with high basal areas (BA) of 100 BA or more. A mix of all species would be retained in these stands following harvest treatment. However, emphasis would be on retention of white oak and pine.

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Several other hardwood forest types (Forest Type 51 and 54) with a greater component of White oak and Post oak would also be treated to provide 0-9 year age class vegetative conditions. Early Successional Stage habitat conditions in the project area would be created consistent with the Forest Plan and will be distributed as evenly as possible across the landscape. For estimation purposes on this specific project, the entire stand will be considered as providing Early Successional Stage in estimating 0-9 year age class habitat.

Per the Biological Opinion for Indiana bat, a minimum of 15 square feet of basal area must be retained; the proposal would retain 60-70 square feet per acre. Retained trees would be in clumps or along intermittent drainages to provide snags, den trees, or live trees with characteristics that provide habitat for bats, woodpeckers, and songbirds. Shagbark hickory would be retained in all stands whenever possible for Indiana bat. Specifically, a minimum of 23 suitable roost trees would be retained per forested acre. Examples of suitable roost trees include live shagbark and shellbark hickories greater than or equal to 9 inches diameter at breast height (DBH), lightning struck trees greater than or equal to 9 inches dbh, dead or dying trees greater than or equal to 9 inches dbh with at least 10% exfoliating or defoliating bark, den or cull trees, and live trees greater than or equal to 26 inches dbh. To the maximum extent possible, dead trees greater than or equal to 20 inches dbh and live trees greater than or equal to 26 inches dbh would be retained unless they are an immediate safety hazard. This would provide potential maternity colony habitat and roost sites for Indiana bats.

New constructed firelines would also provide an estimated 89 acres of additional wildlife habitat. The estimated 25 miles of new fireline to be constructed, and the estimated 11 miles of existing fireline already constructed for the 2002 tornado would be planted in an approved native and/or non-native, non-invasive low ground cover. This would reduce recurring fireline maintenance costs, as well as benefit both non-game and game wildlife species.

- **An estimated 1,346 acres of site preparation for natural regeneration and other stand tending measures in all Sanitation Salvage harvest treatment stands.** This would involve using handtools and/or prescribed burning on an as needed basis to establish conditions conducive to regeneration of native hardwoods and short leaf pine. This work would be done in the period between October 15 and March 15, and involves removing only those trees between 2-8 inches in diameter at breast height. If 2nd and 3rd year stand checks determine there is inadequate regeneration, hand planting of native shortleaf pine may be required. If planting were to occur, it would be done in these areas in fiscal year 2005 and/or 2006 if Fall 2005 stocking surveys reveal inadequate stocking rates. No site prep would be done in areas with less than 30% canopy closure so as to provide suitable foraging habitat for the endangered Indiana bat.
- **Removal of non-native invasive plant species in wildlife openings.** There are an estimated 121 acres of wildlife openings within the project area. The district biologist has recommended that these areas be selectively treated with approved herbicides to eradicate non-native invasive and competing plant species (fescue, sericea lespedeza, multiflora rose, and Japanese honeysuckle) that have taken over these openings. Following herbicide treatment, these areas would be disked, re-planted with native warm season grasses such as Little Bluestem, Big Bluestem, switch grass, and/or Indiangrass, and fertilized if needed to restore the areas to more naturally appearing conditions. In future years, these areas would be maintained by periodic applications of prescribed fire. Several openings may require additional closure measures in addition to signing. This may include using a dozer or backhoe to create dips or “egg crates” in traditional access routes to deter vehicular access and unauthorized camping use. A dozer or backhoe digging out patterns in the road creates “egg crates”.

Six openings along Cane Ridge Road (FS Road 3110) would be planted in native wildflowers and grasses following herbicide treatment. The wildflower mixture would benefit hummingbirds and butterflies, and provide additional recreational opportunities (driving for pleasure). These areas would be maintained through prescribed fire.

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Protecting existing special areas, unique habitats, and Threatened and Endangered species.

- **Designation of an estimated 2,367 acres of Old Growth.** No harvest activities are prescribed for Old Growth areas. This includes 15 acres total of existing wildlife openings and eight ponds estimated at less than 8 acres total within proposed Old Growth areas. They would be restored to the Desired Future Condition with multiple, periodic prescribed burning treatments. Stands designated as Old Growth stands would be allowed to grow and develop characteristics such as large diameter, old trees, with an abundance of canopy gaps, snags, cavity and den trees, and a variety of understory plant species and structural conditions (Missouri Department of Conservation, 1986; LRMP IV-64, and Forest Service Handbook 2609.21). Proposed Old Growth stands are identified in the attached spreadsheet and Resource Management Activities Map.
- **Brushy Creek Fen, approximately 1 acre in size, would be restored and protected in Compartment 107, Stand 14.** Woody invasion of fens should be controlled through hand cutting and felling. Dead stems would be removed from the fen to reduce perches for predator insects. Hines emerald dragonfly larvae have been documented here. Actions would be coordinated by the district wildlife biologist to ensure that this species is protected.
- **An estimated 869 acres of permanent/semi-open land and open woodland habitat would be maintained.** There are several stands that are classified as savannah, but do not currently exhibit the characteristics of this vegetation type. Proposed prescribed burning treatment stands for both of these habitat types (semi-open and open woodland) are included in the 17,890 acres of prescribed burning treatments identified in the attached spreadsheet.

Maintaining/improving forest health and diversity.

- **Commercial thinning on an estimated 5,849 acres of dense short-leaf in 297 pine stands.** Commercial Thinning is proposed in Forest Type 32 (Pine) and Forest Type 44 (Oak-Pine). Commercial thinning would reduce the density of trees in overstocked or densely stocked stands of pine and improve overall forest health. Generally, these stands are now between 40-100 years of age and have a basal area of over 80 BA. The BA would be reduced to 60-70 square feet per acre. High risk Black and Scarlet oak and other species would be removed as needed. Also, suppressed, poorly formed, or excess trees (trees not needed to maintain full stocking) would be removed. Well-formed (healthier) and larger trees would remain in a more open, but well-stocked, more naturally appearing savannah, or park-like, condition. Larger trees, would dominate the landscape. Opening up of these stands would allow increased light to reach the forest floor, allowing native grasses to re-establish themselves. Most hardwoods in predominantly pine stands need to be harvested, but it would be beneficial for many wildlife species if small clumps (4-5 trees in small groups) were left to provide additional hard mast. Proposed treatment stands are identified in the attached spreadsheet and Resource Management Activities Map.
- **1,161 acres, more or less, of hand planting of native short leaf pine in tornado-damaged areas.** Approximately 1,161 acres of planting in the tornado-damaged area to speed forest restoration and move these areas into closer compliance with the LRMP. The 2002 tornado event blew down almost all of the seed sources in these stands. Planting would not be done if stocking surveys determine there is adequate natural regeneration. If planting were to occur, it would be done in these areas in fiscal year 2005 and/or 2006 if Fall 2005 stocking surveys reveal inadequate stocking rates. Specific compartments and stands are identified on the attached spreadsheet.
- **An estimated 2,365 acres of site prep in tornado-damaged stands.** Site prep would be used to establish better growing conditions for residual timber resources on an estimated 2,365 acres within the tornado-damaged area within the Cane Ridge Project area. Approximately 1,161 acres of this total is the hand planted areas described above. Site preparation involves hand felling of undesirable trees and/or

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prescribed burning to establish better growing conditions for remaining trees. Treatment involves felling undesirable broken, crooked, and/or diseased trees 2-8” in diameter with handtools within 6” of the ground so the remaining trees have less competition for water and nutrients. However, no new regeneration that has occurred since the 2002 tornado event, and any subsequent salvage harvest, would be removed. Prescribed fire is then used over the course of the next ten years to reduce or eliminate any residual slash created as a result of site prep treatment and recycle carbon back into the soil.

Reducing excessive fuel loading conditions in order to limit the possibility of catastrophic wildfires and maintaining/improving forest health and diversity.

- **Prescribed burning of the project area.** The Mark Twain National Forest is an ecosystem containing plants and animals that have adapted to the periodic occurrence of fire (Thompson, Degraaf, and Trani, 2001; Guyette, and Dey 2000; Lorimer, 2001). Prescribed burns would be implemented over the next ten years on the project area to reduce the potential for catastrophic wildfire, improve general ecosystem health, create a diversity of plant species and wildlife habitat, and help create conditions conducive to natural regeneration of both pines and hardwoods.

Specific compartments and stands proposed for treatments are identified in the attached spreadsheet and Prescribed Burning Map. Although all of the project area is proposed for treatment one or more times over the course of the next ten years, logical burn units (six proposed) would be used to reduce the number of miles of constructed firelines and provide for employee and public safety. As stated earlier, there is currently an estimated 11 miles of previously constructed fireline in place, most of which was built in a tornado-damaged area within the project. Approximately 1.2 miles of creeks, roads, and trails would also be used. An estimated 25 miles of new fireline construction is proposed.

The project area would be divided into 6 major burn units, varying in size from just under 1,800 acres to approximately 4,500 acres. Two units - Victory and Goose Creek - are in an intermix area of private homes and public land. These would be the highest priority prescribed burning treatment areas initially due to heavy fuel loading conditions created in parts of these two units by the 2002 tornado event. These two areas would receive the first prescribed burning treatments.

Burn units are identified on the Prescribed Burning Map. Units and estimated treatment acres include:

Victory	2,771 acres
Goose Creek	1,852 acres
Essman Spring	1,772 acres
Wylie King/Dry Branch	4,471 acres
Miller Creek	4,065 acres
<u>Upalika</u>	<u>2,333 acres</u>
Estimated Total:	17,264 acres

Note that these burn acres do not equal the total acres (19,644 acres) within the project area. Several scattered areas totaling an estimated 2,378 acres not within these six burn units may also be treated during the next ten years if needed.

Hazardous fuel conditions would be addressed in heavy fuel accumulation areas.

- **There is heavy fuel accumulation, especially in an area damaged by a tornado in April 2002.** Fuels such as grasses, weeds, pine needles, and leaves accumulate rapidly in stands of all ages. They increase the threat of destruction of young stands by wildfire and are a hindrance to regeneration in older ones. Prescribed burning is a swift, effective, and inexpensive means of reducing this hazard. More than 80

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years of fire research have shown that physical setting, weather, and fuels combine to determine wildfire intensity and severity. Of these three factors, fuels are the only ones that can be treated (Graham; McCaffrey, S, and Jain, T. B., 2004).

In 2002, a tornado altered fuel accumulations (fuel loads) in these areas. The tornado up-rooted whole trees, tops were broken off, and stems splintered in this part of the project area. Alterations to the fuels conditions include an estimated increase of five to twenty-five times the overall fuel load from pre-tornado conditions. This fuel loading caused by the tornado on National Forest land threatens over 400 valuable structures within $\frac{3}{4}$ mile of the tornado's paths. Prescribed burning of the tornado-damaged area would be included within other landscape scale prescribed burns to reduce the amount of newly constructed fireline needed. Prescribed burning treatments are proposed to address fuel-loading conditions in a total of 182 stands in 6 compartments in the tornado-damaged area. One hundred-forty of these stands were treated by salvage harvesting to reduce hazardous fuel loading conditions. Only the damaged part of the stands was treated (salvaged). Actual salvage treatment acres were approximately 1,751 acres. These tornado-damaged areas would be treated by prescribed burning generally as part of larger, landscape scale burns conducted for wildlife and other purposes. These stands alone comprise approximately 4,000 acres, or 23% of the total prescribed burning proposal. Specific compartments and stands proposed for treatment are identified in the attached spreadsheet.

Maintenance of open-road density in the 3.4-2 MA near or below the Forest Plan standard of 2.0 miles of open road per square mile of National Forest System land.

- **De-commissioning of an estimated 47 miles of unclassified, non-system roads.** System open road density is 1.46 miles per square mile of National Forest System land in this part of the 3.4-2 area. The Forest Plan standard is 2.0 miles of System open road density per square mile of National Forest System land. The current MA road density is within Forest Plan standards and guidelines for System roads. However, there are over 100 unclassified non-System roads not needed for land management purposes not counted in this road density figure. These non-system roads are of varying lengths, and total an estimated 47 miles. Some are identified on topographic maps as unimproved or 4-wheel drive roads or trails. Others are user-developed roads not identified on topographic maps. They would be blocked using earthen berms or rocks. Closure would be preceded by the removal of illegal trash dumps alongside many of them.

Many of these de-commissioned roads would be obliterated, and some would be planted with native and/or non-native, noninvasive wildlife benefiting ground cover. Some may be periodically utilized as fireline. An estimated seven roads may need special use authorizations to access private lands. These roads would have special considerations. These roads are identified in the attached spreadsheet and on the attached Transportation Map.

- **An estimated 32 miles of road maintenance to 22 System road segments is needed.** Maintenance is needed to improve the condition of several National Forest System roads in the project area by providing improved drainage, brushing, grading, and spot graveling as needed. Maintenance involves repairing a road on the Forest Transportation System to meet minimum System road standards as described in the LRMP to improve safety, afford adequate access and egress, and/or correct erosion problems. These roads are identified on the attached System Road Inventory and on the Transportation Map.
- **Re-construction of seventeen (17) road segments totaling an estimated 13 miles** (see attached Transportation Map). Re-construction involves improving a road to meet minimum road standards. This would improve safety, afford adequate access and egress, and/or correct erosion problems. The latter may include ditching alongside the road, culvert replacement, and/or re-alignment of the road to address resource issues/concerns.

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Maintain Forest Plan standard of 1-2 water sources per square mile, including other specialized habitat.

- **Maintenance of 82 existing ponds less than 1-acre in size.** These upland ponds, each one acre or less in size, would be maintained by handcutting undesirable vegetation from the banks, and/or minor rebuilding dams, seeding banks, or cleaning out siltation from the ponds on an as needed basis. If any ponds would need to be rebuilt, it could involve using a small dozer or trackhoe to reconstruct the pond. It could require dozing out or pulling material from the bottom of the pond to rebuild the dam. Prescribed burning would generally be used instead of handcutting to maintain these areas as conditions warrant as part of larger landscape scale prescribed burns. The ponds are identified by compartment and stand in the attached spreadsheet. Proposed treatment stands are identified in the attached spreadsheet and Resource Management Activities Map.
- **Vernal pool development.** Vernal pools would be developed as circumstances allow; at least one per ½ mile of closed roads. Vernal pools are small, ephemeral wetlands that fill with water in the spring and dry out in the fall, and are often isolated from other bodies of water. They are generally 1/25 acre or less in size. They are void of fish, thereby providing safe havens for many amphibians, insects, and crustacean species. These pools would be developed in conjunction with fireline construction, Non-system roads closures, and erosion control efforts.

They provide foraging habitat for many bat species, including the federally endangered Indiana bat, as well as feeding and nesting areas for wood ducks. Generally, vernal pool development would involve creating or expanding a shallow depression in the soil with a dozer. These would either be on the existing road tread or in drainage dips to either side of a roadway that channel water off the road surface. Other acceptable methods are to use synthetic fish-grade pond liners or Bentonite (clay) in shallow depressions. Bat, wood, and/or songbird boxes would be erected at existing ponds, as well as vernal pools, on a case-by-case basis to provide additional habitat for these species.

Soil erosion conditions would be corrected in Compartment 74.

- **A small area (less than one acre) of an old tram road once used for historical logging and other access is severely rutted.** This problem would be corrected. The location would be disked, reseeded with native and/or nonnative, noninvasive grasses, and fertilized, then closed to public access.

A gas pipeline on the western boundary of the Cane Ridge Project area is experiencing unauthorized Off—Highway Vehicle (OHV) use.

- **Unauthorized OHV use is a problem on a gas pipeline.** The section of gas pipeline right-of-way (approximately 3.4 miles) that is the western boundary of the project area would be blocked off with rocks, gates, or trees based on the site-specific location. These locations would be selected after consultation with the pipeline company. Short, intermittent areas of the pipeline would be disked, and reseeded with either native wildflowers and grasses or approved non-native, non-invasive wildlife benefiting ground cover.

Dispersed recreation opportunities would be provided.

- **Approximately 14 miles of additional horseback riding trail opportunities would be designated.** These trail loops would use existing System and Non-system and woods roads as new loops that either tie into the existing Victory Trail, or stand alone. Approximately 3 miles of new trail connectors would new to be constructed, as well as one new trailhead located at Upalika Pond. There is currently no trail link to Upalika Pond.
- **Maintenance on existing trails and trailheads.** Trail maintenance activities, including, clearing, grubbing, limbing, and trail tread repairs would be conducted as needed. Approximately 18 miles of the

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Ozark Trail and connecting segments would be treated on an as needed basis. Two trailheads may need re-alignment.

- **A 4-site horseback camp would be developed at Upalika Pond.** This area is currently used for camping by horseback riders, but needs further development to meet public needs and address resource concerns, such as soil erosion and compaction. A toilet would be installed at the site. Trailer parking would be provided, as well as fencing and other improvements to protect water quality in the pond itself. The access spur road would be re-aligned to better accommodate horse trailers. Also, interpretive displays would be developed on the Upalika Pond site area that interpret the area's history.
- **Additional dispersed camping opportunities would be provided.** Log landings, where appropriate, would be re-seeded and reclaimed following use as primitive campsites. When some roads and trails would be blocked (based on site-specific conditions), sufficient area would be left at the junction of the road or trail with a System road for a primitive campsite. Opportunities for two to three larger, communal type campsites (capable of holding 3-4 camper units) may be developed, based on specific site conditions.
- **Driving for pleasure opportunities would be enhanced.** Native wildflower development in six wildlife openings along Cane Ridge Road. Forestland would be opened up in some harvest treatment areas, and undisturbed in others. In areas opened up, recreationists would be able to see into the woods, and be able to better observe wildlife, both game and non-game. They would also be able to view the diversity of midstory trees and ground cover vegetation.

Making firewood available for local residents.

- **Firewood would be made available for those who use wood to heat their homes.** Tops and cull material felled during timber harvesting operations or as part of other resource management activities, such as site prep, would be available to woodcutters after harvesting activities are complete. Access to and from these areas would be on existing System, as well as temporarily constructed roads and skid trails used for timber harvest, burning, and/or other resource management activities. No cross-country travel would be authorized.

Decision Framework

As the Responsible Official, the Poplar Bluff District Ranger will decide in late summer or early fall 2004 whether to implement the Proposed Action, a No Action alternative, or an alternative action developed through consideration of substantive comments received regarding this proposal.

The decision to be made is not one of land allocation (for example, suitability for timber harvest, appropriate Management Area designation, etc.) The scope of the decision to be made is confined to a range of reasonable alternatives implementing the Mark Twain National Forest Plan on the area of National Forest System land described as the area (Compartments 73-75, 107-116, 137-139, and 176) within MA 3.4-2 of the Poplar Bluff Ranger District, Mark Twain National Forest, Butler and Wayne Counties, Missouri. The scope is further constrained by Forest Plan Standards and Guides for Management Prescription 3.4. Generally, alternatives conflicting with the Forest Plan will not be considered in detail unless they move the area toward the Forest Plan desired condition. In such a case, a project-specific amendment to the Forest Plan is required.

An environmental assessment (EA) will be prepared that analyzes, compares, and documents the environmental impacts of at least two alternatives: the Proposed Action and No Action. One or more action alternatives may be developed, based on substantive comments received as a result of public involvement. Based on the analysis presented in the final EA, the District Ranger will determine whether there are significant environmental effects requiring the preparation of an Environmental Impact Statement (EIS). If

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an EIS is not required, the District Ranger will decide whether or not to implement the Proposed Action or an alternative course of action. The District Ranger's decision will be based on the ability of the chosen alternative to meet Forest Plan objectives while resolving environmental effects issues identified by the Interdisciplinary Team and public.

Public Involvement

The Poplar Bluff Ranger District Interdisciplinary Team (IDT) developed the project in December 2003. This document is intended to provide information to the public on the proposal beyond that contained in the notice of opportunity to comment required under the revised 36 CFR 215.5. This a relatively large, complex landscape scale project, we wanted to send it out for public scoping period before initiating the 30-day legal comment period required by CFR 215. We will use your scoping comments to further fine-tune the project proposal (a revised Proposed Action) prior to the required 30-day comment period. Following the 30-day comment period, we will develop an environmental assessment, and a decision will be made as to how or whether or not to proceed.

I ask that any comments you would want to provide be substantive. To be substantive, they must be within the scope of the Proposed Action, specific to the Proposed Action, have a direct relationship to the Proposed Action, and include supporting reasons for me to consider before I finalize the Proposed Action. Substantive comments will be used to further identify the environmental effects of the Proposed Action (or revised Proposed Action), to define issues (points of debate, disagreement or uncertainty concerning the effects of the Proposed Action), and to develop reasonable alternatives that respond to the issues.

Comments on this proposal must be postmarked or received by July 21, 2004. Any comments, substantive or otherwise, provided during this initial comment period will not provide standing for an appeal of the subsequent decision made after the 30-day legal comment period. The 30-day legal comment period is the exclusive means for calculating the time to submit comments on the Proposed Action or a revision.

To obtain more information about this project, please contact Bill Paxton, Integrated Resource Analyst, or Megan York-Harris, Wildlife Biologist, at (573) 785-1475. Please send mail comments to: District Ranger, Poplar Bluff Ranger District, P.O. Box 988, Poplar Bluff, MO 63902. **ATTN: Initial Project Proposal for the Cane Ridge Project Area.** The District Ranger telephone number is (573) 785-1475. Send any fax comments to the District Ranger at (573) 785-0267. Submit any e-mail comments to: comments-eastern-mark-twain-poplar-bluff@fs.fed.us. Please include the name of the proposed action (**Initial Project Proposal for the Cane Ridge Project Area**) in the subject line of the e-mail. Acceptable formats for electronic comments are: text or HTML e-mail, Adobe Portable Document Format (PDF), or formats viewable in Microsoft Office applications. Office hours (for those hand delivering comments by hand) are 8:00 a.m. to 4:30 p.m. Monday – Friday at 1420 Maud Street, Poplar Bluff, Missouri. Oral comments must be provided at my office during normal office hours prior to the close of business July 21, 2004.

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