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Forest Service

Mark Twain
National Forest

September 2005



Record of Decision for 2005 Land and Resource Management Plan (2005 Forest Plan)



Mark Twain
National Forest

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Mark Twain
National Forest



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Mark Twain National Forest 2005 Land and Resource Management Plan (2005 Forest Plan)

Record of Decision

Preface

This Record of Decision (ROD) describes my decision to select Alternative 3 as the Mark Twain National Forest 2005 Land and Resource Management Plan (2005 Forest Plan). The ROD also explains my reasons for making changes to the original 1986 Forest Plan.

Although I am the final decision maker, I have not made this decision alone. We received more than 2,000 comments and suggestions during the development of the 2005 Forest Plan. Hundred of citizens talked with members of the planning team during meetings held throughout the planning process. Meaningful collaboration with local governments, state and federal agencies, and various special interest groups resulted in valuable contributions to the revision effort. This decision is the result of the positive and productive relationships that evolved during the planning process and the important contributions from all who participated.

Developing a forest plan that is supported by most members of the public is not an easy task. People often have different views on how public lands should be managed. This is because the Mark Twain National Forest provides many different uses to many different people. The Forest includes some of Missouri's most beautiful landscapes, which are important for the tourism industry and a principal reason that people choose to live in Southern Missouri. The Forest's ecological diversity provides a home for many native plants and animals. Mature oak and pine forests provide important wood products to society. Valuable mineral deposits lie under the Forest. The Mark Twain National Forest is uniquely positioned to provide abundant multiple uses while conserving the ecology and culture of the Missouri Ozarks.

However, the ecological, social, and economic conditions on the National Forest change over time. The public's opinions of what constitutes the best use of public lands also shifts over time. For these reasons, the management direction provided in the 2005 Forest Plan is dynamic and will periodically be re-evaluated as new information comes to light. This 2005 Forest Plan is the result of a comprehensive evaluation of the 1986 plan, an examination of new and current scientific information, and an in-depth notice and comment process. The revision process has taken over 3 years and has been the focus of an interdisciplinary team of over 20 scientists. My role, as well as the role of the Forest Supervisor on the Mark Twain National Forest, has been to guide the process, listen to the public, facilitate the collaboration efforts, ensure the integrity of the analysis, and make important decisions throughout the process, including this final Record of Decision.

My decision strikes a balance among the various interests, opinions, and beliefs expressed by agencies, groups, and individuals involved in the revision process. Together, we have crafted a Forest Plan that provides a scientifically credible foundation for the contribution of the Mark Twain National Forest to the ecological, social, and economic sustainability of southern Missouri over the long term. Implementation of the 2005 Forest Forest Plan will result in a sustainable supply of goods and services from the Mark Twain National Forest while conserving the natural resources of the area.

Our work is not done. Regular monitoring and evaluation of the 2005 Forest Plan implementation will ensure the 2005 Forest Plan is kept current. Changes in society's needs and values, along with emerging science, may necessitate amendments to the 2005 Forest Plan. I encourage you to continue your partnership with us in keeping the 2005 Forest Plan fresh and relevant. Finally, and most importantly, I thank you for your participation, patience, and support throughout this Forest Plan revision process and into the future.

Randy Moore

Regional Forester
Eastern Region, USDA Forest Service

Introduction

The Mark Twain National Forest 2005 Land and Resource Management Plan (2005 Forest Plan) is a 10 – 15 year strategy for managing National Forest resources. It was developed in accordance with the National Forest Management Act (16 U.S.C.1604, et seq.) and the 1982 planning regulations (36 CFR 219). The Forest Plan outlines environmentally sound management to achieve desired conditions on the land and produce goods and services in a way that maximizes long-term net public benefits. The 2005 Forest Plan emphasizes different desired conditions and goals for various parts of the Forest. As the 2005 Forest Plan is implemented, management practices such as improving and maintaining roads, restoring streams, harvesting timber and campground improvements will occur in some areas, but not in others. Multiple use goals and objectives will be achieved in a balanced, cost-efficient, and sustainable manner.

The current Forest Plan for the Mark Twain National Forest was approved in 1986. This 2005 Forest Plan replaces all previous resource management plans for this Forest. It provides an integrated, interdisciplinary, programmatic framework for environmentally sound management based on the best available scientific information.

The 2005 Forest Plan will be amended or revised as necessary to respond to changed conditions, new information, Congressional land designations, and changing needs and opportunities. Any action taken to amend or revise the Plan will include public involvement.

There are six primary decisions made with the 2005 Forest Plan:

- Forest-wide multiple-use goals and objectives.
- Forest-wide management requirements.
- Management area direction.
- Lands suited / not suited for timber management.
- Monitoring and evaluation requirements.
- Recommendations to Congress, such as Wilderness designations.

The goals and desired conditions in the 2005 Forest Plan can be achieved from a physical, ecological, economical, and legal perspective. Management practices will be implemented and outputs produced as the Forest strives to meet the desired conditions called for in the 2005 Forest Plan, although there is no assurance that the outputs will actually occur at the projected level.

The standards and guidelines contained in the Mark Twain National Forest Plan set parameters within which projects must take place. Approval of any project must be consistent with these parameters (16 U.S.C. 1604(i)). If a project cannot be implemented in accordance with the standards included in the 2005 Forest Plan, the project cannot go forward unless the 2005 Forest Plan is amended.

The 2005 Forest Plan is permissive in that it allows, but does not mandate, certain projects and activities. Approval of the 2005 Forest Plan does not mandate any specific project decisions. Projects occur only after they are proposed, their environmental effects considered, and a decision is made authorizing site-specific action. Site-specific environmental analysis that occurs for each project will be tiered to the Final Environmental Impact Statement for the 2005 Forest Plan, pursuant to 40 CFR 1508.28.

This decision was heavily influenced by the public input received during the plan revision process. I made this decision after careful review of public comments, analysis of effects in

the FEIS, and consideration of a broad range of alternatives. I considered the best available scientific assessments and most current scientific knowledge. I considered all new information provided by the public, state, and other federal agencies during the revision process. I believe this 2005 Forest Plan provides the best mix of resource uses and opportunities to provide for public needs and desires within the framework of existing laws, regulations, policies, and capabilities of the land.

The 2005 Forest Plan was developed with many contributions from many partners, but we are especially appreciative of the involvement by State resource experts. In their comments on the draft plan, both the Missouri Department of Conservation and Department of Natural Resources were strongly supportive of the ecological restoration focus of the 2005 Forest Plan. Comments from the Missouri Department of Natural Resources included the following:

The revised plan reflects values that are consistent with the department's efforts in the management of the state's resources. We endorse an ecosystem-based approach to forest management with the focus on conserving biodiversity, addressing species viability, and improving forest health. For these reasons, we support Alternative 3, which provides for the restoration of natural communities in balance with other forest management objectives....The restoration of natural communities is in the mainstream of current conservation principles...[T]he Proposed Forest Plan incorporates restoration objectives and management prescriptions to facilitate these activities. Prescribed burning, as a management tool and primary ecological disturbance process, needs to be expanded to restore natural communities and forest health. The experience of the department is that the restoration and maintenance of natural communities requires the prescription of an ecologically appropriate fire regime over several decades to achieve the desired conditions.

We also support the discontinuation of grazing in units managed for natural community values to allow for recovery and meaningful inventory and monitoring (e.g., woodlands and glades.)

The department supports the preservation and enhancement of water quality as a necessary goal of the Proposed Forest Plan. The plan has incorporated the restoration of ecosystems, proper timber harvesting techniques, restoration and protection of riparian areas, and proper management of public use. These elements should and will contribute to improvements in water quality.

The Proposed Forest Plan demonstrates a commitment to the restoration and maintenance of stream and aquatic habitat through the designation of Riparian Management Zones (RMZ) and Watercourse Protection Zones (WPZ).... As referenced in the DEIS, grazing within these zones is a primary cause of degradation of water quality in streams. We support the phasing out of grazing allotments in these zones.

Likewise, the Missouri Department of Conservation expressed support of the 2005 Forest Plan, as shown by the following statements:

The Missouri Department of Conservation (Department)...considers its relationship with the Mark Twain National Forest (Forest Service) to be an important partnership to protect and manage the forests of the state....The Department supports the Forest Service's selection of Alternative #3... This approach provides a balance between timber production and restoration of natural communities.

The Department appreciates and supports the ecosystem and natural community approach of the Forest Plan. The emphasis on the management and restoration

activities of natural vegetative communities in the management prescriptions 1.1 and 1.2 is a positive aspect of the Forest Plan and is an appropriate step in creating healthy ecosystems. The Department also endorses the approach taken in further protecting streams and riparian corridors.

I want to take this opportunity to personally thank again all of our partners and especially those from the State of Missouri who contributed scientific information and other assistance during the development of this Plan. We appreciate your assistance and support of the 2005 Forest Plan and look forward to working with you to develop projects that will move us towards the desired conditions described in the Plan.

In summary, the 2005 Forest Plan establishes a framework for future multiple-use management. The Environmental Impact Statement discusses broad environmental effects and establishes a useful reference that can be tiered to for compliance with environmental laws at the site-specific project level. Approval of this 2005 Forest Plan does not make any on the ground changes, nor dictate that any particular site-specific action must occur. This 2005 Forest Plan provides the framework for future decision-making.

The Forest

The Mark Twain National Forest encompasses about 1.5 million acres, mostly within the Ozark Highlands ecological section. The Ozark Highlands are an ancient landscape characterized by large springs, over 5,000 caves, nationally recognized streams, rocky barren glades, and old volcanic mountains. Portions of the Ozark Highlands were never under oceans and were never glaciated. These areas have been continuously available to plant and animal life since the late Paleozoic period.

Geologic features, including caves, sinkholes, springs, and rivers, add interest and diversity to the landscape. Underneath the land surface is one of the world's largest lead ore deposits, known as the Viburnum trend. More than 250 million tons of valuable lead, zinc, and copper ore have been removed from the Forest.

Thousands of visitors enjoy the outdoor recreation opportunities on the Forest each year. Developed recreation sites, seven congressionally designated Wilderness Areas, the congressionally designated Eleven Point National Scenic River, and hundreds of miles of floatable streams and rivers are just some of the features drawing outdoor recreation enthusiasts.

The Forest is rich in plant and animal diversity. The Mark Twain National Forest is where the eastern deciduous forests, the southern pine forests, and the drier western blue stem prairies of the Great Plains converge to create a variety of open grassy woodlands and savannas. This rich mixture of ecologically diverse natural communities provides a home for nearly 3,000 native plant and animal species.

The ecological systems of the Ozarks have been influenced by humans and fire for centuries. As far back as 12,500 years ago, Native Americans were manipulating Missouri's landscape with fire to improve their ability to secure food and shelter. Woodlands and savannas were kept open through the use of frequent, low intensity fire and by free ranging elk and bison. The only forested areas of densely stocked tree cover would have been found along major streams and other areas that were not affected by this historic fire regime.

In the late 1800's and early 1900's, the ecological processes that maintained this rich ecosystem were severely disrupted. The oak and pine woodlands that covered the Ozarks were harvested to support western expansion. Settlers attempted to farm the thin Ozark soils. Livestock were allowed to graze unrestricted on open range. The clearing, intense farming,

and open range grazing eroded soils and degraded watersheds. The diverse woodlands and savannas, where long-lived pine, white oak, and post oak once thrived, evolved to vegetation dominated by short-lived scarlet and black oaks with a dense understory of brush and small trees. The elimination of frequent, low intensity fire was the primary reason for this change in species composition and diversity.

The Mark Twain National Forest is an example of successful resource conservation. For several decades, the Mark Twain National Forest has carefully managed the timber and grasslands, protected and enhanced water quality, and provided a wide variety of recreation opportunities. The focus of our work has been conservation of natural resources for future generations.

New information about the ecosystems of the Missouri Ozarks has helped focus our direction in the 2005 Forest Plan. We know that because the Mark Twain National Forest has a large land base, and many plant and animal communities that are very rare, it is uniquely positioned to play an important part in restoring and conserving the plant and animal diversity of the Missouri Ozarks. The Forest includes several complexes of native natural glade, woodland, savanna, and forest communities that occur entirely on National Forest System lands. One goal of the 2005 Forest Plan is to restore these distinct and important ecological areas.

The goal for most other lands within the Mark Twain National Forest will be to provide goods and services that contribute toward a sustainable local economy, but in a way that conserves the natural communities on these landscapes so that the ecosystems will be healthy and sustainable.

A Vision for the Future

Resources on the Mark Twain National Forest will be managed to conserve, protect, and produce what is desired by the public: wild places, clean water, outstanding fish and wildlife habitat, diverse recreation, wood products, and forage for livestock. The public's desire to keep things natural and wild is balanced with human uses of the Forest for today's needs. Nature continues to change the Forest at its own pace. Management adapts to these changes, protecting resources while providing the goods, services and uses that the public needs.

The Mark Twain National Forest will provide healthy ecosystems by maintaining or restoring natural communities on the landscape. Healthy ecosystems are essential to providing a sustainable flow of goods and services requested by the public. These goods and services will contribute toward maintaining economic stability in the local communities near the National Forest.

A wide variety of recreational opportunities will be available on the Forest. Forest products will continue to be made available as a result of managing for healthy ecosystems. Wood products, forage, minerals, and recreation opportunities will contribute toward the economic sustainability in local communities.

The mosaic of forested ecosystems that will be restored across the landscape will include natural communities in early, mid, and late successional states. This mosaic of healthy ecosystems will contribute to species viability and biological diversity. The management prescribed in the 2005 Forest Plan will continue to preserve and enhance habitat in support of the recovery of threatened and endangered species such as the Indiana bat. Conservation and recovery of federally listed species remains the top priority in decision making.

Achieving this vision for the Mark Twain National Forest will require continued collaboration with the public and with our partners. We will strive to be good neighbors, work cooperatively with others, and share credit for accomplishments.

Decision and Rationale

Need for Change

The current Forest Plan was approved in 1986. It has been kept up-to-date through 31 amendments over the past 19 years.

The need to revise the Plan became apparent through a combination of factors that included new scientific information and recommendations from a variety of sources such as the Ozark - Ouachita Highlands Assessment and the Ozarks Eco-regional Conservation Assessment. Changes in agency policies and priorities have influenced the need for change. Results of Forest monitoring and evaluations have suggested the need to change the Forest Plan. Changing conditions of the land and changing public demands have also led to needed changes in the Forest Plan.

Considering these factors, a comprehensive “need for change” assessment was completed in January of 2002. The findings of this assessment became a focus of the Notice of Intent to prepare an Environmental Impact Statement for revising the 1986 Forest Plan, which was issued in April of 2002.

The need for change assessment and the comments received on the Notice of Intent led to the development of Revision Topics. Chapter 1 of the Final Environmental Impact Statement (FEIS) describes the following revision topics as the areas where changes needed to be considered:

- Vegetation and Timber Management
- Ecological Sustainability and Ecological Health
- Fire Management
- Management Areas
- Riparian Areas and Water Quality
- Threatened, Endangered and Sensitive Species Viability
- Access and Transportation Management
- Monitoring and Evaluation

Although all sections of the 1986 Forest Plan were reviewed, some aspects of the 1986 Forest Plan are working well and did not need to be changed in this revision. Our 2005 Forest Plan analysis did not ignore these areas. The 2005 Forest Plan carries forward the management direction found in the 1986 Forest Plan for these sections. For example, the direction for recreation and Wilderness management are the same as in the previous plan, and we are reaffirming those past decisions.

Decision Overview

I have selected Alternative 3 as the 2005 Forest Plan for the Mark Twain National Forest. I chose Alternative 3 because, in my judgment, it maximizes benefits to the public by:

- Contributing to restoring, enhancing, or maintaining ecological sustainability and biological diversity.

- Contributing to species viability.
- Contributing to the protection of watershed conditions necessary to support ecological functions in riparian and aquatic ecosystems.
- Contributing to the economic and social needs of people, cultures, and local communities.
- Providing sustainable and predictable levels of products and services.
- Providing clear direction to assist managers in making project level decisions in implementing the broader social, economic and ecological goals of this revised plan.

I used four criteria for evaluating the alternatives.

Criterion 1 – The extent to which the alternative contributed to the restoration or maintenance of ecological sustainability, including ecological conditions needed for ecosystem and species diversity.

Criterion 2 – The extent to which the alternative improved and protected watershed conditions to provide the water quality and quantity and the soil productivity necessary to support ecological functions in riparian and aquatic areas.

Criterion 3 – The extent to which the alternative increased the amount of forests restored to, or maintained in, a healthy condition with reduced risk of damage from fires, insects, diseases, and invasive species.

Criterion 4 – The extent to which the alternative contributed to social and economic sustainability by providing desired and sustainable levels of uses, values, products, and services.

Key indicators of these criteria are discussed in Chapter 2 of the FEIS.

My decision also considered how the 2005 Forest Plan responded to the public's comments, internal management concerns, and national direction and policy. My decision to adopt the management direction in the 2005 Forest Plan was made in consideration of the analysis of effects disclosed in the Final Environmental Impact Statement, the Biological Opinion of the U.S. Fish and Wildlife Service, and is supported by the planning record in its entirety.

This decision applies only to National Forest System land within the boundaries of the Mark Twain National Forest. It does not apply to any other Federal, State, county, municipal, or private lands, although in making my decision, I considered how likely future management of other ownerships might contribute to environmental effects resulting from the management of the Mark Twain National Forest.

Decision Summary and Rationale

Vegetation and Timber Management

The 2005 Forest Plan identifies 996,700 acres of land suitable for timber management. This represents about 67% of the Forest's land base. These are lands capable of producing commercial volumes of timber on a sustained basis, where regularly scheduled timber harvest may occur. The Allowable Sale Quantity (ASQ) for the first decade is 1,030 million board feet (which equates to an annual average of 103 million board feet per year). The suitability analysis and ASQ calculations were derived using the best available mapping techniques, updated vegetation data, and knowledge gained from years of implementing and monitoring the 1986 Plan.

The 2005 Forest Plan provides programmatic management direction for selecting the appropriate silvicultural activities at the project level to achieve desired conditions on the landscape. This new direction will provide greater flexibility in selecting the appropriate treatments and allow adaptive management to be practiced. The 2005 Forest Plan also identifies the proportion of probable methods of timber harvest (16 U.S.C. 1604(f)(2)).

In making my decision, I recognize there is a high level of concern from the timber industry about the level of the ASQ. However, the decrease from the 1986 plan ASQ (1,050 million board feet) to the 2005 Forest Plan (1,030 million board feet) is less than one percent.

Some of this concern may be due to a misunderstanding of what ASQ means. ASQ is simply an upper limit on harvest, not a commitment to sell that particular amount over the next decade.

While the Mark Twain National Forest has consistently provided timber to local communities and industry for decades, the full ASQ level has never been reached. Although many factors will continue to influence the actual timber harvest levels from year to year, I am confident that the improved suitability analysis and ASQ calculations gives us the most reliable projection possible of the timber production capability of the Mark Twain. I believe the 2005 Forest Plan will provide the management direction needed to have an effective timber management program that will continue to contribute to the economic stability of local communities and the wood products industry both in Missouri and at the national level.

I also recognize that there are interest groups and individuals who believe that the Mark Twain National Forest should stop all commercial timber sales. Timber sales are often an efficient, effective, and sometimes the only means to move toward the desired conditions for vegetation on the landscape. Timber sales have been a part of resource conservation on the Mark Twain since the mid 1930's. The sale of timber products is an appropriate use of National Forest lands as authorized by various federal laws including Multiple-Use Sustained Yield Act of 1960 and National Forest Management Act of 1976. I made this decision recognizing the preferences of some groups and individuals, but also recognizing that commercial timber harvest on National Forest System lands is both legal and, in the case of the Mark Twain National Forest, desirable.

Ecological Sustainability and Ecological Health

Addressing ecological sustainability and health was one thing that I thought most important in changing the 1986 Forest Plan.

The 2005 Forest Plan provides direction for the long-term sustainability and health of forest ecosystems. The Plan allows us to actively manage vegetation to achieve desired conditions that are consistent with the ecological communities that would naturally occur on the land. Restoration of natural communities is the primary emphasis for 438,000 acres (29%) of the Forest.

About 45% of the Forest will be managed with a primary emphasis on multiple-use resource objectives, but using practices that will enhance the diversity of natural communities and improve forest health conditions. Approximately 18% of the land base will have limited management with an emphasis on providing semi-primitive recreation opportunities, and the other 8% has an emphasis of Wilderness or other special area designation.

The 2005 Forest Plan provides direction that will prohibit future livestock grazing on natural communities of glades and woodlands in Management prescriptions 1.1 and 1.2 and in riparian management zones.

The elements of my decision related to ecological sustainability and forest health are based on a wealth of scientific information on ecological processes and functions, as well as new information about the natural communities of Missouri. My decision responds to the Healthy Forests Restoration Act of 2003 by managing for desired conditions of the fire-adapted ecosystems in Missouri. The programmatic direction in the 2005 Forest Plan will allow for adjustment of the vegetation patterns and species composition on the Forest over time, resulting in vegetative communities that are healthy, sustainable, diverse, and designed to maintain or improve the viability of plant and animal species most at risk.

Non-native invasive species are spreading rapidly in natural ecosystems. The selected alternative recognizes the serious threat to forest health from non-native invasive species and provides a programmatic framework for addressing this emerging challenge. Healthy ecosystems are resilient and better able to withstand the threat posed by invasive species.

I recognize that there is strong public support for the restoration of natural communities. I also recognize there are some concerns about this new focus on restoration. In recognition of these different viewpoints and concerns, my decision balances the allocation of land so that about 29% will be managed with an emphasis on restoration on natural communities and about 45% of the Forest will be managed with multiple use resource objectives as an emphasis. The remaining 36% will be managed with an emphasis on recreation, Wilderness, or other special area designation. The 29% selected for a restoration emphasis are those lands that are the best examples of some of the rarest natural communities in Missouri.

Concerns have been raised about the effect of prohibiting grazing on glades, woodlands, and in riparian areas. Existing grazing in these areas will continue until the expiration of each individual range allotment permit. There will be no immediate effect on grazing permits because of my decision on this 2005 Forest Plan. While my decision will have future effects on some specific grazing permits located in these areas, I have committed to the individuals affected, and to the industry as a whole, to make every effort to fully offset the estimated loss of grazing outputs. I will undertake site-specific analysis of grazing in some currently inactive allotments. The Forest will also analyze development of new allotments in ecologically appropriate areas. I am fully committed to working with our partners to address the future loss of grazing allotments in ecologically sensitive areas.

My decision responds effectively to the need for change items described in Chapter 1 of the FEIS. Implementing the 2005 Forest Plan will improve sustainability and ecosystem health on the Forest. I believe the ecological, social, and economic components of sustainability will all benefit from this decision.

Fire Management

The 2005 Forest Plan provides a programmatic framework that allows for an increase in the use of prescribed burning as a management tool to accomplish ecological objectives. The use of prescribed fire will alter understory and ground vegetation species composition and density. This will result in healthier ecosystems and help restore native plant communities on the land.

My decision also provides programmatic direction allowing future use of prescribed burning on site-specific projects to reduce hazardous fuel conditions and improve public safety.

Finally, the 2005 Forest Plan direction allows for managing wildfires to effectively protect life, property, and communities.

In my decision, I recognize that many of the natural communities on the Mark Twain National Forest have evolved under a fire regime of frequent, low-intensity fire. The careful

use of prescribed fire will help restore and maintain these natural communities to a healthy and sustainable condition. The framework set forth in the 2005 Forest Plan is based upon a wealth of current scientific research about fire-adapted ecosystems and fire regimes on the ecosystems of the Mark Twain National Forest. My decision also responds to the Healthy Forests Restoration Act of 2003 by managing for the restoration of these fire-adapted ecosystems.

I recognize that there are concerns over air quality with an increased burning program. Based on my review of the analysis, I am confident that careful site-specific burn planning and execution will mitigate smoke impacts. The Forest Supervisor will continue to work closely with the State and other Federal agencies to ensure that projects meet applicable air quality standards.

I also recognize that as a result of wildfire suppression and natural succession, hazardous fuels have accumulated in some areas that threaten property and public safety. My decision allows for prioritizing sites and accomplishing future hazardous fuel reductions with a variety of methods as determined by site-specific analysis.

Wildland fire suppression is extremely important for the protection of life and property. The 1986 Forest Plan had very little direction for wildland fire suppression. My decision provides needed direction for a comprehensive approach to managing wildland fires.

Overall, my decision addresses an important goal of the USDA Forest Service Strategic Plan for Fiscal Years 2004 – 2008 by helping reduce the risk from catastrophic wildland fire on the Mark Twain National Forest

Management Areas (Including Wilderness and National Recreation Rivers Recommendations)

The 2005 Forest Plan allocates National Forest lands in the following manner.

Table 1 - Management Prescription Allocations for the Forest Under the 2005 Forest Plan

Management Prescription	Emphasis	Total Acres (in 1000s)	Percent of NFS Lands
1.1	Restoration of Natural Communities (NC)	376.2	25.1
1.2	Restoration of NC / Semi-primitive motorized	62.2	4.2
2.1	Multiple use objectives, Enhancement of NC	669.9	44.8
5.1	Designated Wilderness	64.1	4.3
6.1	Limited Management, Semi-primitive Motorized	73.6	4.9
6.2	Limited Management, Semi-primitive Non motorized	196.4	13.1
6.3	Rivers Eligible for National status	17.2	1.2
7.1	Developed Recreation	5.9	0.4
8.1	Non-Wilderness Special Areas	30.6	2.0
Total		1,496.1	100.0

My decision to allocate lands to 1.1 and 1.2 Management Prescriptions, with an emphasis of restoration of the natural communities on these lands, is based upon the ecological significance of these lands and the need to act now to maintain and restore these unique resources.

Management Prescription 2.1 is a consolidation of many of the 1986 Forest Plan management prescriptions that had very little difference in on-the-ground implementation among them. Combining these into Management Prescription 2.1 will simplify, clarify, and improve implementation.

The 2005 Forest Plan identifies a 16-mile segment of the Black River as a candidate for National Recreation River Status. Its eligibility for this national status will be protected through management direction under Management Prescription 6.3. My decision to identify the 16-mile segment of the Black River as a Candidate National Recreation River takes into account the important recreational opportunity of this river. Direction in the 2005 Forest Plan will protect the river’s outstandingly remarkable values so that it may be eligible for Wild and Scenic River designation in the future.

I carefully examined lands throughout the Forest for their potential as Wilderness. Over 60 parcels of land were evaluated to see if they meet national criteria to be included in the Roadless Area Inventory. Thirteen of these parcels qualified as inventoried roadless areas. These thirteen parcels were further evaluated for their Wilderness potential. All thirteen were found to be excellent candidates for additions to existing designated Wilderness. The following table describes the 13 parcels and their locations. My decision includes a recommendation to Congress for Wilderness designation for 1,770 acres of land on 13 separate parcels. All parcels are adjacent to and would be additions to existing Wilderness.

Table 2 - Proposed Wilderness Study Areas on the Mark Twain NF

Wilderness Study Area Name	Number of Parcels	Size (acres)
Hercules Glades Wilderness Additions	3	40; 20; 20
Piney Creek Wilderness Additions	1	20
Irish Wilderness Excluded Lands	2	900; 320
Rock Pile Wilderness Additions	2	80; 40
Paddy Creek Wilderness Additions	2	40; 60
Bell Mountain Wilderness Additions	3	200; 10; 20
Total	13	1,770

I recognize that some local governments, timber industry groups, and elected officials did not express support for additional Wilderness. The alternatives analyzed in the FEIS reflect the full range of opinions expressed. I decided to recommend these areas because they are all additions to existing Wilderness, and may improve the solitude and remoteness qualities of the existing areas and our ability to manage more effectively for the various Wilderness values.

This Wilderness recommendation is a preliminary administrative recommendation that will receive further review and possible modification by the Chief of the Forest Service, Secretary of Agriculture, and President of the United States. The Congress has reserved the authority to make final decisions on Wilderness designations. Therefore, this 2005 Forest Plan Wilderness recommendation is not appealable under 36 CFR 217.

Riparian Areas and Water Quality

The 2005 Forest Plan improves the definition of riparian areas and creates a Riparian Management Zone and a Watercourse Protection Zone. The 2005 Forest Plan standards and guidelines will facilitate consistent application and accurate identification of these important zones during site specific planning and project implementation. I have decided to add standards and guidelines that provide increased protection for riparian areas and for karst features such as caves, springs, seeps, fens, and sinks. The increased protection for these areas will help protect water quality because the karst terrain connects many surface features to the ground water.

My decision is based upon the most current available knowledge of the important functions of riparian areas. It responds to the goal of Improving Watershed Conditions listed in the

USDA Forest Service Strategic Plan for Fiscal Years 2004 – 2008. The decision will improve management and insure water quality and riparian ecosystems are maintained or improved during plan implementation.

Threatened, Endangered, and Sensitive Species

The direction in the 2005 Forest Plan improves the standards and guidelines for threatened, endangered, and sensitive species conservation and recovery. The 2005 Forest Plan includes management direction aimed at improving habitat for all species of concern including federal, regional, and state listed species.

The 2005 Forest Plan will no longer include specific management areas for Indiana bat hibernacula and maternity colonies (as the 1986 plan did in Management Prescription 3.5). The U. S. Fish and Wildlife Service (USFWS) agrees that the 2005 Forest Plan's standards and guidelines contain conservation measures that will adequately protect habitat near hibernacula and around maternity colonies, and that implementation of the 2005 Forest Plan will minimize incidental take and is not likely to jeopardize the continued existence of the Indiana bat.

The management direction in the 2005 Forest Plan will lead to healthy ecological conditions of the natural communities on the Forest. This ecological approach to management will contribute to species viability as well as increase ecosystem integrity and biological diversity on the Forest.

Access and Transportation Management

My decision eliminates the road density standards that were in the 1986 Forest Plan. I have also decided to eliminate the term "woods road," and assign these roads a standard maintenance level. The Forest Plan transportation map has also been eliminated. Finally, the 2005 Forest Plan clarifies, but does not change, the off-road vehicle (ORV) policy of the 1986 Forest Plan.

There are two reasons for my decision to eliminate road density standards. First, there should be very little change in road density during the next 10 to 15 years because the Forest is now focusing on maintaining the current transportation system rather than building new roads. Secondly, there is no scientifically supported rationale to support any particular road density limit, as there is a lack of scientific data and research showing a correlation between road density and adverse effects on biological resources in Missouri. There is a correlation between the amount and type of roads, and the recreational opportunities provided in an area. In light of this, I decided to eliminate the density standards. Instead, the transportation system will be managed to meet the recreation opportunity spectrum (ROS) objectives for each Management Prescription. Under the programmatic direction in the 2005 Forest Plan, I will be taking steps to improve the road system by improving some roads and decommissioning other roads. These will be addressed in site-specific analysis and decision-making.

In the 1986 plan, the term "woods road" is applied to unimproved system roads with a low level of maintenance. This low level of maintenance has not been appropriate in some cases, and resource damage has occurred in some situations. My decision will allow these roads to be assigned maintenance levels needed to prevent erosion or damage.

I decided to eliminate the Forest Plan Transportation Map because specific road-by-road direction on location, use, and maintenance is too detailed to be a part of a strategic land management plan. Our experience with implementing the 1986 Plan has shown that these types of road management decisions require individual on-the-ground analysis that can only be conducted on a project-by-project basis. This is in line with agency direction that requires

a roads analysis process any time the road system is adjusted. A Forest Plan map showing all roads is also unnecessary, because national direction requires a Forest Transportation Atlas on each Forest.

I recognize that there is a high level of interest in the off-road vehicle policy for the Forest. Many people want ORV's to be allowed in more areas. Others want ORV's prohibited everywhere. Based upon monitoring and experience gained in implementing the 1986 Plan, the 1986 Forest Plan direction remains well suited to protect resources and guide managers to administer ORV use on the Forest. My decision does not change direction, but the 2005 Forest Plan clarifies the direction in the 1986 Forest Plan so that there will be more consistent implementation and fewer questions about ORV use. The 2005 Forest Plan's direction advances the agency's strategic goals for providing managed, sustainable recreational use. The direction in the 2005 Forest Plan will protect resources, public safety, and minimize conflicts with other multiple uses. We will continue to work diligently with our partners in State and local government to prevent illegal ORV riding that may occur on the Forest.

Monitoring and Evaluation

The 2005 Forest Plan strengthens the monitoring and evaluation direction. The revised direction will better inform managers how resource management activities are affecting ecological health and whether activities are moving the land toward the desired conditions set forth in the 2005 Forest Plan.

My decision to revamp the monitoring strategy (Chapter 4) of the 2005 Forest Plan places the focus on monitoring the extent to which we are making progress toward the desired conditions and objectives described in the 2005 Forest Plan. In strengthening the monitoring section of the 2005 Forest Plan, the Forest incorporated concepts developed at the Forest Service Inventory and Monitoring Institute. The Monitoring Framework in Chapter 4 embodies the strategic nature of forest plans by focusing on what is needed to monitor implementation of the Forest Plan, posing specific questions that need to be answered, what will be monitored, and timetables for reporting. Technical information, including specific monitoring methods, protocols, and analytical procedures, will be included in a monitoring and evaluation implementation guide, as needed.

The 2005 Forest Plan identifies new management indicator species (MIS) which I believe will be excellent indicators of the health of selected natural communities. These MIS serve as only one part of the overall monitoring program and adaptive management approach for the 2005 Forest Plan.

Changes to the Forest Plan between the Draft and Final Environmental Impact Statements

We received a great deal of public and internal comments on our Draft Environmental Impact Statement (DEIS) and the Draft Revised Plan. Based on the many comments received, I have made several changes to the Draft Revised Forest Plan.

The changes range from minor edits and clarifications to changes in the standards and guidelines and monitoring requirements. The following summary describes the changes to standards, guidelines, and other areas of the Draft Revised Forest Plan.

Management Prescription 1.1 and 1.2

- Changed standards to allow for the construction of wildlife ponds if a long-term species viability concern is demonstrated and that concern cannot be addressed in another location.

This change is a result of a concern about amphibians in these areas. The change resolves this concern.

- Added direction to clarify that the full range of variable conditions, from regeneration openings to areas exhibiting old growth characteristics, should be provided.

Questions were raised about the absence of a specific percentage of old growth in management prescriptions 1.1 and 1.2. This change helps explain that restoration of natural communities includes the full range of age classes as well as a range of natural community types and vegetative species across the landscape in patterns and distributions they would have naturally occurred.

Management Prescription 2.1

- Removed a standard regarding distribution of activities in MP 2.1.

Questions were raised about the standard in MP 2.1 requiring that activities be distributed to emulate historical vegetation patterns and quantities of natural communities. The goal for MP 2.1 is to provide a variety of uses, products, and values, while enhancing the condition of natural communities. Part of the desired condition for MP 2.1 is that “natural communities are distributed similar to historical vegetation patterns.” The interdisciplinary team agreed that a standard requiring that activities be distributed to emulate historical conditions was redundant with the desired condition, and therefore unnecessary. The proposed standard does not add any clarity to permitted or restricted activities, and therefore does not meet the basic purpose of a standard. The desired condition will be used at the project level to plan and guide proposed activities. We are making this change to streamline and better align the standards and guidelines with the theme, goals, and desired condition for MP 2.1, and with the analysis that was conducted in the EIS.

Threatened and Endangered Species

- Added requirements to survey for the presence of mussels prior to in-stream work, and to modify projects if presence confirmed.
- Added standard to prohibit vehicle or equipment use in fens, unless needed to improve Hine’s emerald dragonfly habitat.
- Modified direction for Indiana bat maternity colonies. One change provides additional foraging habitat by strengthening designation criteria of maternity colony area and by specifying activities that are restricted within maternity colonies. A second change increases protection of roost trees by timing and activity restrictions around occupied roost trees.
- Added monitoring requirements for existing bat gates on caves.
- Added restrictions on prescribed burn timing near Indiana bat maternity colonies and near caves during swarming / dispersal periods.
- Prohibited core drilling in the 150-acre area designated as old growth around gray or Indiana bat caves.

These changes are in response to comments made by the U. S. Fish and Wildlife Service. These modifications represent a strengthening and clarification of direction proposed in the Draft Revised Forest Plan, not a major shift in the management direction. Protection of threatened and endangered species was a priority in development of the draft plan; these modifications are a logical outgrowth of the consultation dialogue with the Fish & Wildlife Service on the draft plan.

Wildlife Habitat

- Revised Table 2-2 regarding stocking of trout.

The Draft Revised Plan introduced Table 2-2, which listed cold-water streams where trout management existed as of August 2002. The revision to the table is in response to comments from the Missouri Department of Conservation and will better align the 2005 Forest Plan with current trout stocking by Missouri Department of Conservation.

- Moved direction regarding the provision for old growth and regeneration openings in MP 2.1, 6.1 and 6.2 from standards and guidelines to goals and objectives.

Standards and guidelines are permissions or limitations pertaining to management practices that modify the way they are implemented on the ground. They are applicable to all foreseeable management situations. Goals are statements that describe a desired condition to be achieved sometime in the future, and objectives describe time-specific and measurable courses of action that move the resource toward the goals.

Management prescriptions 2.1, 6.1, and 6.2 each included a standard requiring the designation of a percentage of each management area as permanent old growth, and a guideline describing the desired amount of regeneration openings. While reviewing comments related to the designation of old growth, it became obvious to the interdisciplinary team that these were actually goals and objectives, not standards and guidelines because they described a desired future condition, and were not permissions or limitations on activities.

The standard regarding old growth designation has been changed to an objective. Compliance with objectives is not optional, given necessary funding. This change will still require the designation of 8% - 12% of management prescription 2.1 and 6.2, and 15% - 20% of management prescription 6.1 as permanent old growth. This change also provides more flexibility in designating permanent old growth throughout a management area to meet the needs of a variety of species. The guideline regarding regeneration openings is part of the desired condition described for each of these management prescriptions, and as such will help form the purpose and need for site-specific projects.

- Lowered the percentage of the areas that are desired as regeneration openings in management prescription 2.1 (from 11-20% to 8-15%) and 6.2 (from 3-5% to 1-5%).

This change is made in response to public comment noting that the proposed percentages were higher than those desired in comparable Management Prescriptions in the 1986 Forest Plan. In addition, the higher percentages did not take into account the contribution of early successional habitat from natural community restoration activities.

Lower Rock Creek Area

- Added a standard prohibiting motorized use in most of Lower Rock Creek.

The Draft Revised Plan proposed to change the Lower Rock Creek area from a semi-primitive non-motorized area (6.1 Management Prescription) to a restoration emphasis (1.2) with a semi-primitive motorized designation. The change between draft and final 2005

Forest Plan is that for a portion of the Lower Rock Creek 1.2 area, a standard that restricts motorized use has been added.

The Lower Rock Creek Area is of great interest to groups and local residents. There is disagreement over the appropriate management prescription for this area. This change is designed to address the concerns through compromise and still meet important restoration of natural community objectives. The 2005 Forest Plan direction emphasizes natural community restoration in this area, which is appropriate due to the ecological conditions. Based upon comments received and monitoring information, I have decided to change the management prescription for the Lower Rock Creek Area from 6.1 to 1.2 as proposed in the draft plan, but add a standard that prohibits motorized use in all parts of the Lower Rock Creek Area except Wolf Hollow. Although the management prescription for the Area changes from the 1986 Plan, my decision continues the existing restriction on motorized access for most of the Lower Rock Creek Area. My decision also recognizes the occasional, seasonally-restricted use of an existing road for traditional hunting purposes in Wolf Hollow, a relatively small portion of the Lower Rock Creek Area. The Forest is committed to closely monitoring the recreational use and resource conditions of Lower Rock Creek Area. By making this change (i.e. adding a standard to prohibit motorized use in a portion of the Area) from the draft 2005 Plan, I hope to demonstrate to all interested parties my intent to do what is right for the land, and do what is right for the public who use the land. I have listened to public comments from all viewpoints, considered local conditions, and crafted a balanced and equitable solution.

Temporary Openings

- Changed the definition of a temporary opening created by even-age timber management to specify that the stand remains an opening until the vegetation is 15 feet high (was 10 feet.)

This change is in response to concerns that stands 10 feet high would still be visually perceived as openings and could lead to too many adjacent regeneration cuts. Changing this to 15 feet insures that the area will look like a young forest and not an opening.

Monitoring and Evaluation

- Changed monitoring requirements for Management Indicator Species (MIS) to focus on the effects of management activities on habitat, rather than on species population.

Population trends can be estimated through a variety of methods: population sampling, indices, occurrence data, and species habitat relationships. Based upon comments received and experience gained in monitoring for the 1986 Forest Plan, we believe that monitoring changes in habitat rather than species populations will be a more reliable indicator of the effects of management actions. This change is consistent with the transition language in the 2005 Planning Rule (36 CFR 219.14(f)).

Editorial Corrections

Editorial changes were made to correct misspellings, formatting, or to clarify management direction. These corrections did not change the basic intent of that direction.

Public Involvement

The Forest Service implemented a thorough and active public involvement campaign throughout the planning process. A variety of public involvement tools and methods were used including public meetings, open houses, newsletters, news releases, and meetings with specific special interest groups when they requested them. Our efforts, and the efforts of those people who participated, provided valuable contributions to the development of the 2005 Forest Plan.

Meetings and Open Houses

Early in 2002, we held three public meetings before we published our Notice of Intent. Forest Service resource specialists made presentations and were available for a question and answer period. The meetings were held in the evenings on the following dates and locations:

- Thursday January 17, 2002 at the Settle Inn in Branson, Missouri;
- Tuesday January 22, 2002 at the Senior Center in Houston, Missouri; and
- Tuesday February 5, 2002 at the Powder Valley Conservation Nature Center in Kirkwood, Missouri (suburb of St. Louis)

Public input from these meetings was used to determine necessary changes, actions that should be taken, and issues to be reviewed in the Forest Plan revision process. From public input and internal evaluations, we developed the proposed action and began the NEPA process by publishing a Notice of Intent (NOI) in the Federal Register.

After the NOI was published, four additional public meetings were held in June 2002 to allow the public a chance to meet the Forest planning staff and other resource specialists, become more familiar with the planning process, and provide input on plan revision. These meetings were in the evenings on the following dates and locations:

- June 13, 2002 at the Black River Coliseum in Poplar Bluff, Missouri;
- June 20, 2002 at the Civic Center in Farmington, Missouri;
- June 24, 2002 at the Civic Center in West Plains, Missouri;
- June 27, 2002 at the Lenoir Community Center in Columbia, Missouri

In April of 2003, a series of open houses were held to provide information on the Forests' approach to ecosystem management, discuss Off-Highway Vehicle use on the Forest, answer questions, and hear what the public had to say. The meetings were at in the evenings on the followings dates and locations:

- Tuesday April 8, 2003 at the Senior Center in Alton, Missouri;
- Thursday April 10, 2003 at the Community Building in Ozark, Missouri;
- Tuesday April 22, 2003 at the City Hall in Salem, Missouri; and
- Tuesday April 29, 2003 at the Madison County Senior Center in Fredericktown, Missouri

These meetings were useful in informing the public about the direction we were taking in revising the Forest Plan. It helped keep the public informed of where we were in the process and gave us an opportunity to learn from their questions and concerns.

In February 2004, we held another series of open houses to discuss the alternatives we had developed, clarify our approach to addressing issues, and answer any questions. These meetings were in the evening on the following dates and locations:

- February 10, 2004 at the University of Missouri in Rolla, Missouri; and
- February 17, 2004 at the Powder Valley Conservation Nature Center in Kirkwood, Missouri (suburb of St. Louis)

In February of 2005, after the release of the Draft Revised Forest Plan and DEIS, we held another series of open houses to present the Draft Environmental Impact Statement, and answer questions about the analysis and the preferred alternative. These meetings were held in the evenings from on the following dates and locations:

- February 8, 2005 at the Powder Valley Conservation Nature Center in Kirkwood, Missouri (suburb of St. Louis);
- February 15, 2005 at the Old City Hall Building in Salem, Missouri;
- February 22, 2005 at the Civic Center in West Plains, Missouri;
- March 15, 2005 at the Black River Coliseum in Poplar Bluff, Missouri;
- March 22, 2005 at the Library Center in Springfield, Missouri

These meetings were important for providing the public a forum to ask questions about the Draft Revised Plan so that they could provide more informed comments.

Special Meetings Requested by Groups

Throughout this process, several meetings were held with other state and federal government agencies and special interest groups to talk about specific issues. Meetings were arranged and held at the request of the group or agency.

- On July 23, 2002, the Forest planning team made a presentation and answered questions at a meeting for the Missouri Equine Association held at the Greene County Library in Springfield, Missouri.
- On April 12, 2003, a meeting was held with the Missouri Coalition for the Environment to discuss revision topics and concerns in Rolla, Missouri.
- On April 29, 2004, the Forest planning team met with the Society of American Foresters Policy Committee to discuss the Forest Plan Revision and National Forest management.
- On June 19, 2004, another meeting was held with the Missouri Coalition for the Environment to discuss revision topics and concerns in Rolla, Missouri.
- On January 12, 2005, the Forest Supervisor and Deputy Forest Supervisor met with Brent Bryant, Missouri Cattlemen's Association, in Jefferson City, MO, to discuss the proposed reduction in grazing allotments and various ways to maintain a stable range program.
- On January 22, 2005, the Forest Supervisor met with the Cedar Creek Grazing Association to discuss the proposed reduction in grazing allotments and various ways to maintain a stable range program.
- On February 12, 2005 the Forest Supervisor met with the Conservation Federation to discuss the Forest Plan Revision
- On March 10, 2005 the Forest Supervisor for the Mark Twain National Forest met with the Missouri Department of Natural Resources to discuss the Forest Plan Revision
- On March 22, 2005 the Forest Supervisor met with an affected Range permittee

- On March 24, 2005 members of the Forest planning team met with the representatives of the Environmental Protection Agency to discuss the Forest Plan Revision
- On April 5, 2005 the members of the Forest planning team met with the Missouri Department of Conservation to discuss the Forest Plan Revision
- On May 3, 2005 the Forest Supervisor and some members of the planning team met with the Coalition for the Environment to discuss the Forest Plan Revision
- On May 5, 2005, the Poplar Bluff District Ranger met with the Ripley County Commissioners.
- On May 5, 2005, the Forest Supervisor met with Kelly Smith of the Missouri Farm Bureau Federation.
- On June 20, 2005, the Poplar Bluff District Ranger met with the Butler County Commissioners.
- The Forest Supervisor participated in several meetings with the Missouri Forest Products Association to discuss the Forest Plan Revision

Newsletters

Nine issues of the Mark Twain National Forest Planning Journal were sent to a mailing list of more than 600 addresses. Each issue contained information about our Forest Plan and provided several ways for the public to get involved in the process. Each Planning Journal coincided with significant milestones in the process, such as announcing the publication of the Notice of Intent, or accompanying distribution of the Annual Monitoring and Evaluation Report.

News Releases

At every significant milestone, news releases were prepared and distributed to area newspapers, including the Associated Press, as well as to National Public Radio. Each news release informed the public of the status of our revision and gave them information on how to provide comments or obtain additional information.

Website

The Forest posted information and pertinent documents about Forest Plan Revision on its web site at <http://www.fs.fed.us/r9/forests/marktwain/>. All correspondence referenced the website.

Schedule of Proposed Actions (SOPA)

Forest Plan Revision has been listed on the Forest's SOPA since 2001. The SOPA is distributed quarterly to over 150 addresses and posted on the Forest's web site.

Alternatives

Alternative Development

The Plan Revision process was initiated by the April 2002 Notice of Intent. Public comments received during this initial comment period, along with management concerns identified during the need for change assessment, helped the interdisciplinary team develop a range of

alternatives that would address the issues. The process used to formulate the alternatives is described in Chapter 2 of the FEIS.

Perhaps no task was more important to the interdisciplinary team working on the 2005 Forest Plan than development of a reasonable range of alternatives. Based upon resource information, public comment, and experience gained under the 1986 Plan, the team crafted what I believe to be an excellent representation of alternative means to meet the purpose and need for this programmatic document. To the extent practicable, we have solicited and reviewed alternatives submitted by the public and documented that analysis in the record. At root, the range of alternatives is driven by what is best for the land and the people that use it. Existing resource conditions and the role of the Forest (as embodied in the purpose and need statement) are the heart of the development of the alternatives. Development of a programmatic multiple use resource plan involves compromise and balancing of a myriad of biological, physical, and social factors. The range of alternatives reflects the trade-offs associated with this task.

Alternative 5 is the no-action alternative, which reflects the 1986 Forest wide direction and subsequent amendments. Alternatives 1, 2, 3, and 4 were developed to provide a range of choices for addressing the revision topics and issues.

Alternatives Not Considered in Detail

Although they contributed to the range of alternatives, five alternative themes were eliminated from detailed study because they were impractical, infeasible, or did not meet the purpose and need for revision. A detailed description of these and the reasons for not considering them can be found in Chapter 2 of the FEIS. The five alternatives considered but eliminated from detailed study are:

- An alternative considering recommendation of all Inventoried Roadless Areas mapped in the Roadless Area Conservation Rule Final Environmental Statement as Wilderness Study Areas. This was eliminated from detailed study because these areas were evaluated in our 2004 Roadless Area Inventory and Wilderness Evaluation and only one of the areas met the criteria.
- An alternative(s) providing off-road, off-trail cross-country use of motorized vehicles by changing the Forest policy of “closed unless posted open.” This alternative was eliminated from detailed study due to potential impacts being better addressed at the site-specific level.
- An alternative(s) to restrict or prohibit mineral exploration and development within the Forest or within a specific area, such as the Eleven Point River. This alternative was eliminated from detailed study because current available information does not support a change in management direction at this time.
- Alternatives where standards and guidelines for resource management are different by alternative, either more or less restrictive. Standards and Guidelines provide the baseline direction for protecting forest resources. This alternative was eliminated from detailed study because of the importance of the standards and guidelines for protecting forest resources. Less restrictive standards and guidelines would not adequately protect forest resources. More restrictive standards and guidelines would unnecessarily restrict management activities and increase costs without providing additional protection for forest resources.
- An alternative that includes each of the principles and criteria from the “Citizens’ Call for Ecological Forest Restoration: Forest Restoration Principles and Criteria” (Citizens Call) as standards in the 2005 Forest Plan. This was eliminated from

detailed study because the principles espoused by the Citizens' Call are embodied within the range of alternatives considered in detail.

Alternatives Considered in Detail

Alternative 1

Background

This alternative was designed to respond to those who want to see passive restoration principles implemented, semi-primitive recreation emphasized over timber production, less active management of forest resources, and commercial activities reduced or eliminated.

Theme

Emphasis is on minimizing direct human influence. Characteristics of the forest environment, such as vegetation structure and species, would be affected primarily by natural disturbance factors such as insects, disease, fire, and weather events. As a result, wildlife habitat would focus on mature forest, with fewer and smaller areas of early successional habitat. No commercial timber harvest would be allowed. Existing developed recreation areas would remain, but other recreation opportunities would emphasize dispersed recreation like backpacking, hunting, and floating in a semi-primitive, motorized environment. Management is focused on visitor safety, law enforcement, and other custodial elements.

Decision Rationale

I did not select Alternative 1 because the estimated effects on forest resources indicate that many of the desired conditions on the landscape would not be achievable under the management direction in Alternative 1. The adverse effects of Alternative 1 include: a decrease in species diversity; a high chance that Bachman's sparrow would be extirpated from Missouri; a decrease in dispersed recreation activities; an increase in the risk of catastrophic insect and disease outbreaks and wildfires due to overstocked forest conditions; and a decrease in the quantity and quality of fire adapted natural communities due to the ineffectiveness of procuring non-commercial treatments. In addition, Alternative 1 did not address social and economic conditions as well as Alternative 3. Alternative 1 would not provide wood products that help sustain local economies. There would be a reduction in services, negatively affecting some smaller communities' economy. When I evaluated how well the anticipated effects of Alternative 1 addressed the decision criteria, I determined that Alternative 3 met all decision criteria more effectively than Alternative 1.

Alternative 2

Background

This alternative was designed in response to those who want Forest management to emphasize maintaining composition, structure, and dynamics of native forest ecosystems; aggressively restoring native terrestrial communities, such as glades, savannas, and shortleaf pine forests; and focus on restoration of ecosystems on large regional scales.

Theme

This alternative provides emphasis and direction to encourage biodiversity and restore sustainable native ecosystems, and gives less emphasis on timber production. The emphasis is on restoration of underrepresented terrestrial natural communities, while providing forest products and other multiple use benefits. Management activities, such as timber harvest and prescribed fire, would be used to influence ecological processes to attain and sustain a high diversity of habitats and species. A wide range of wildlife habitat is provided by restoring and

enhancing terrestrial natural communities, and emulating their historical distribution patterns. A broad range of settings for a variety of recreational opportunities are provided, including both developed recreation sites and areas for dispersed recreation like backpacking, hunting, floating, and off-road vehicle use.

Decision Rationale

I did not select this alternative because it did not provide as good of a balance of uses and products as Alternative 3. The increased acreage with a restoration emphasis would have similar environmental effects on forest resources as Alternative 3. However, the restoration emphasis on approximately 44% of the Forests' land base (compared to approximately 29% in Alternative 3) would lower the allowable sale quantity (ASQ) and the estimated portion of sawtimber volume included in the ASQ, which is important to sustaining some local economies. In addition, Alternative 2 would have the least amount of uneven age management and pre-commercial thinning, which are important tools for providing sustainable level of uses and products (Decision Criterion 4). These activities help to create and maintain healthy forest conditions.

Alternative 3 – The Selected Alternative.

Background

This alternative was designed in response to those who want to see a balance between restoration of natural communities and production of traditional forest commodities.

Theme

Emphasis is on improvement of forest health conditions, production of forest products and other multiple use benefits, and enhancement of terrestrial natural communities. Restoration of terrestrial natural communities is focused in areas that are identified as biologically rich. Management activities, such as timber harvest and prescribed fire, are used to mimic ecological processes to attain and sustain a high diversity of habitats and species. A wide range of wildlife habitat is provided by restoring and enhancing terrestrial natural communities, and emulating their historical distribution patterns. A broad range of settings for a variety of recreational opportunities are provided, including both developed recreation sites and areas for dispersed recreation like backpacking, hunting, floating, and off-road vehicle use.

Decision Rationale

My rationale for selecting Alternative 3 as the 2005 Forest Forest Plan has been detailed on pages 7 through 13 of this Record of Decision.

Alternative 4

Background

This alternative was designed in response to those who want to see the use of traditional forest management and production of forest commodities emphasized over restoration of natural communities.

Theme

Emphasis is on providing utilization of forest resources in a way that also enhances ecosystem functions. Multiple-use management is emphasized for a majority of the Forest. Timber management, mineral extraction, and other activities such as recreation, are likely to influence ecological processes. A wide range of wildlife habitat is provided by emphasizing achievement of early successional and old growth habitat objectives, as well as protection of

special habitats. A broad range of settings for a variety of recreational opportunities are provided including both developed recreation sites and areas for dispersed recreation like backpacking, hunting, floating, and off-road vehicle use.

Decision Rationale

I did not select Alternative 4 because it does not move the Forest toward the desired conditions as effectively as Alternative 3. When I evaluated how well the estimated effects from Alternative 4 addressed the decision criteria, I determined that Alternative 4 did not address Decision Criterion 1 as effectively as Alternative 3. All of the key indicators for ecosystem sustainability are better under Alternative 3 when compared to Alternative 4. Also, some of the positive effects to Regional Forester Sensitive Species under Alternative 3 are not realized under Alternative 4. The positive effects to Threatened and Endangered Species and Management Indicator Species are not as great under Alternative 4 when compared to Alternative 3.

Alternative 5

Background

Alternative 5, the no-action alternative, reflects 1986 Forest-wide direction. It meets the 1982 Planning regulations (36 CFR 219.12(f) (7)) and NEPA requirement that a no-action alternative be considered. ‘No action’ means that current management allocations, activities, and management direction found in the existing Forest Plan, as amended would continue. Output levels have been recalculated for this alternative to comply with new information, in particular, new scientific and inventory data.

Theme

The 1986 Forest Plan gives strong emphasis to wildlife habitat development; particularly unique or specialized habitats such as caves, springs, seeps, fens, riparian areas, glades and fishless ponds. Timber management is the primary tool for reaching desired vegetative conditions, wildlife habitat objectives, and providing timber products for local industrial and individual needs. The 1986 Plan provides a range of settings for a variety of recreational opportunities including both developed recreation sites and areas for dispersed recreation like backpacking, hunting, floating, and off-road vehicle use.

Decision Rationale

I did not select Alternative 5 because it will not improve the condition of the ecosystems present on the Forest as well as Alternative 3 (Decision Criterion 1 and 3). Positive effects to viability for Regional Forest Sensitive Species are less under Alternative 5 when compared to Alternative 3. Positive effects to habitat quality and availability for Threatened and Endangered Species are less under Alternative 5 when compared to Alternative 3. Land determined to be eligible for Eastern Wilderness would not be recommended for designation under Alternative 5, and because of this, would not produce the same kind and level of dispersed recreational benefits as Alternative 3.

The Environmentally Preferred Alternative

Alternative 3 is the environmentally preferable alternative because it has the fewest adverse effects on the environment overall. This alternative will allow for the most appropriate mix of management direction to protect, preserve, and enhance the historic, cultural, and natural resources on the Mark Twain National Forest. Alternative 3 will provide for the best mix of management emphasis to areas to provide the highest degree of ecological sustainability

within the social, economic, and ecological environments. This alternative places top priority on conservation and recovery of threatened and endangered species.

Present Net Value

A part of determining the net public benefits is determining Present Net Value (PNV), which is used in the determination of the economic efficiency of each alternative. A comparison of the PNV by alternative is shown in Table 3.

Table 3 - Comparison of PNV by Alternative

Alternative	Overall PNV
5	\$2,463,190
4	\$2,451,339
3	\$2,467,518
2	\$2,437,469
1	\$2,444,174

The overall PNV includes values for market price in addition to non-market values.

A variety of quantitative and non-quantitative considerations were made in making my decision. The selected alternative (Alternative 3) has the highest PNV based upon market values and non-market amenities. Appendix B of the FEIS includes a detailed description of the economic analysis.

Findings Related to Other National Policies, Law and Authorities

The Forest Service manages the Mark Twain National Forest in compliance with many laws, regulations, executive orders, and policies. The list provided here is not a complete list of all governing statutes that apply to the Forest Plan Revision, but it highlights the primary statutes guiding the preparation of this plan revision. In all cases, the 2005 Forest Plan is consistent with national law, policy, and direction.

National Environmental Policy Act (NEPA)

The Forest has compiled and generated an enormous amount of information relevant to the effects of each of the alternatives considered in the Final Environmental Impact Statement. I find that the environmental analysis and public involvement process complies with each of the major elements of the requirements set forth by the Council on Environmental Quality for implementing NEPA (40 CFR 1500-1508). These include:

- Considering a broad range of reasonable alternatives;
- Disclosing cumulative effects;
- Using the best scientific information available;
- Consideration of long-term and short-term effects; and
- Disclosure of unavoidable adverse effects.

The decision here does not directly authorize any new ground-disturbing activities or projects. Ground-disturbing activities and projects will be subject to additional site-specific environmental analysis that will tier to the Final Environmental Impact Statement and follow applicable environmental analysis, public involvement, and administrative appeal procedures.

The 2005 Forest Plan has adopted practicable means to avoid or minimize environmental harm. These means include provisions for providing those ecological conditions needed to support biological diversity and standards and guidelines to mitigate adverse environmental

effects that may result from implementing various management practices. The 2005 Forest Plan includes monitoring requirements and an adaptive management approach to assure needed adjustments are made over time.

National Forest Management Act (NFMA)

The NFMA and its implementing regulations specify a number of requirements for forest plan development. Congress has mandated that forest plan revision assure that the plans provide for multiple-use and sustained yield of products and services. Not every use can or should occur on every acre. Our goal is to blend multiple-use of the Forest in such a way that is sustainable and best meets the needs of the American people.

The Mark Twain National Forest developed an integrated land and resource management plan using a systematic interdisciplinary approach to integrate consideration of physical, biological, economic, and other sciences. The 2005 Forest Plan maximizes net public benefit and contains strong conservation measures to protect, maintain, and improve soil and water resources, wildlife habitat, and other forest resources within a multiple-use context. The 2005 Forest Plan complies with each of the NFMA and regulatory requirements, as explained elsewhere in this Record of Decision, accompanying FEIS, and Appendices. Certain requirements are discussed in further detail below.

The 1982 NFMA regulations require fish and wildlife habitat to be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area (36 CFR 219.19). A key part of forest plan revision was the evaluation of 242 species for viability concerns.

Using an ecological or “coarse filter” approach, broad land categories containing wildlife habitat were identified. The magnitude of change in the abundance and quality of wildlife habitats likely to occur under the 2005 Forest Plan in the next decade is relatively small. Some changes in the quality and quantity of wildlife habitat will occur through natural succession and disturbances. These changes are not anticipated to create any viability concerns. The Forest also used a species, or “fine filter”, analysis to assure that standards and guidelines were in place to provide for the needs of species identified as threatened, endangered, or sensitive. Programmatic forest plan direction was developed for use in future project decision-making to conserve habitat and avoid adverse effects of the future management actions. The analysis presented in the FEIS indicates that there is a high likelihood of continued representation of all species and important wildlife habitats on the Forest under all alternatives.

Management Indicator Species (MIS) were chosen that, we believe, will respond to forest management activities and assist in predicting the effects of implementing the forest plan over time. The choice of MIS was based upon experience as we implemented the 1986 Forest Plan and the best available scientific information. Monitoring and management experience has shown that some species that were selected as MIS in the previous plan were not good indicators. This was because their populations were substantially affected by “off-forest” activities and conditions rather than primarily by activities that occurred on the Mark Twain National Forest; they were habitat generalists so were not very responsive to changes in management; they occurred on only a small portion of the Mark Twain National Forest so were of limited use in indicating overall effects; or they were difficult to find so that regular monitoring was either impossible or unreliable.

MIS are just one part of the overall monitoring effort. Species that are not designated as MIS may still be monitored. Recognizing the discretion provided by the 1982 NFMA regulations (36 CFR 219.19(a)(1)), the Forest carefully selected MIS that will meet the intent of the

NFMA regulations, but not impose an unattainable or unnecessarily burdensome monitoring requirement on the Forest.

NFMA requires that forest plans identify the proportion of harvest methods that are proposed or probable for implementation. The Forest analyzed possible harvest methods and the 2005 Forest Plan includes a forecast of the methods that are likely to be chosen as the plan is implemented. The 2005 Forest Plan does not mandate any particular harvest method to be applied for any specific project. The choice of when, where and how to harvest timber is appropriately reserved as a future site-specific decision.

NFMA regulations also require that we identify the alternative that maximizes present net value (PNV). According to the economic analysis in the FEIS, the PNV varies considerably among alternatives, with Alternative 1 being the lowest and Alternative 5 being the highest. The selected alternative (Alternative 3) has a PNV of \$2,467,518.

Endangered Species Act

The Endangered Species Act creates an affirmative obligation "...that all Federal departments and agencies shall seek to conserve endangered and threatened (and proposed) species" of fish, wildlife, and plants. This obligation is further clarified in the national Interagency Memorandum of Agreement (dated August 30, 2000) which states our shared mission to "...enhance conservation of imperiled species while delivering appropriate goods and services provided by the lands and resources."

The selected alternative does the best job of protecting threatened, endangered, and sensitive species. The 2005 Forest Plan was developed with our responsibilities concerning conservation of listed species (Section 7(a)(1)) foremost in mind. Based upon consultation with the U.S. Fish and Wildlife Service, their concurrence with our Biological Assessment, and the non-jeopardy finding in their Biological Opinion, I have determined that the 2005 Forest Plan is in compliance with the Endangered Species Act.

Forest and Rangeland Renewable Resources Planning Act (RPA) and Forest Service Strategic Plan 2004 – 2008

The 1982 Planning regulations (36 CFR 219.12 (f) (6)) require that at least one alternative be developed that responds to and incorporates the Resources Planning Act Program's tentative resource objectives for each National Forest as displayed in Regional Guides. The Forest Service Strategic Plan 2004 – 2008, in lieu of a Resource Planning Act Program, was completed in accordance with the Government Performance Results Act (GPRA) and the Interior and Related Agencies Appropriations Act. While forest plans should be consistent with the broad guidance provided in the Strategic Plan, and should consider the information provided by the Resource Planning Act Assessment along with other available and relevant science, neither the Strategic Plan nor the Assessment contain recommended outputs to incorporate in specific forest plans. I find the 2005 Forest Plan to be in compliance with the Forest Service Strategic Plan, and to contribute towards its goals, which are:

Reduce the risk from catastrophic wildland fire

The 2005 Forest Plan contains management direction in the form of desired conditions and objectives to increase the amount of forest restored to or maintained in healthy condition to reduce risk and damage from fire. The 2005 Forest Plan also focuses on treating vegetation in high hazard areas within the wildland / urban interface areas to reduce risk from wildland fire.

Reduce the impacts from invasive species

The 2005 Forest Plan addresses the spread of terrestrial or aquatic non-native invasive species that pose a threat to native ecosystems through the establishment of forest wide direction as well as desired conditions on the ground that foster native species.

Provide outdoor recreation opportunities

As outlined elsewhere in this Record of Decision, the 2005 Forest Plan places emphasis on recreational use of the Mark Twain National Forest. Specifically, it clarifies direction needed to better manage uses of recreation motor vehicles.

Help meet energy resource needs

There are no large biomass energy projects currently in operation in the area surrounding the Mark Twain National Forest. However, if a nearby biomass or energy project were developed, it could create a market for smaller diameter trees and lower quality wood products that would contribute to our ability to meet vegetative objectives identified in the 2005 Forest Plan. Stands not economic to treat under current utilization standards for pulpwood or saw timber may become operable.

Improve watershed conditions

The 2005 Forest Plan employs a proactive approach to the management of watersheds and riparian areas.

Mission-related work in addition to that which supports agency goals

This goal deals mostly with processes. While the 2005 Forest Plan specifically focuses on desired conditions and objectives, and not the process to achieve them, we will improve our productivity and efficiency as we implement the 2005 Forest Plan.

Healthy Forest Restoration Act

I find the 2005 Forest Plan is consistent with the Healthy Forest Restoration Act in that it provides for the protection of old growth when conducting covered projects, provides for public involvement in assessing and conducting hazardous fuels reduction projects, and prioritizes areas for hazardous fuels reduction based on condition class and fire regime. The 2005 Forest Plan also emphasizes protection and enhancement of riparian areas and watershed health as directed under the Healthy Forest Restoration Act.

Environmental Justice (Executive Order 12898)

Executive Order 12898 (59 Federal Register 7629, 1994) directs federal agencies to identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. I have determined, from the analysis disclosed in the Final Environmental Impact Statement, that the 2005 Forest Plan is in compliance with Executive Order 12898.

My conclusion, based upon the analysis in the FEIS, is that the risk of disproportionate effects on minority or low-income populations resulting from the programmatic 2005 Forest Plan is very low. The selected alternative was developed as a programmatic framework to avoid adverse environmental effects in future decisions. The risk of environmental justice issues may be greater under Alternative 1, due to a decrease in labor and income during the next decade (FEIS, page 3-333).

National Historic Preservation Act (NHPA)

The 2005 Forest Plan is a programmatic action and does not authorize any site-specific activity. Projects undertaken in response to direction of the 2005 Forest Plan will fully comply with the laws and regulations that ensure protection of cultural resources. The 2005 Forest Plan contains direction for cultural resource management, including direction to integrate cultural resource management with other resource management activities.

Several other laws apply to the preservation of cultural resources on federal land. Since the 2005 Forest Plan does not authorize ground-disturbing activities, consultation with the Missouri State Historic Preservation Offices (SHPO) under the NHPA is not required.

It is my determination that the 2005 Forest Plan complies with the National Historic Preservation Act and other statutes that pertain to the protection of cultural resources.

Migratory Bird Treaty Act and Executive Order 13186

The 2005 Forest Plan is a programmatic framework guiding future decision-making and is permissive in nature. As such, it does not authorize, fund, or implement any site-specific activity. The 2005 Forest Plan focuses on enhancing ecological health and plant and animal community diversity to the benefit of wildlife species, including migratory birds. The management direction in the 2005 Forest Plan is in compliance with the Migratory Bird Treaty Act and was developed with full consideration of the broad objectives and intent of Executive Order 13186.

Data Quality Act

The Data Quality Act and its federal guidelines concern the quality of information used in the work of federal agencies. The 2005 Forest Plan and its accompanying EIS were developed by an interdisciplinary team of agency scientists and resource specialists using the best available scientific information. Data quality was a paramount concern, as the objectivity and quality of scientific data is key to development of a realistic resource plan. The interdisciplinary team was aware of the USDA information guidelines and devoted considerable effort towards ensuring that the information used in plan development was credible and appropriate for the context. Scientific information was solicited from other federal agencies, State resource agencies, and other recognized experts and scientists. Although the USDA Data Quality Act guidelines are not intended to be legally binding regulations, they were carefully considered during development of the 2005 Revised Plan and EIS.

Other Laws, Policy, and Regulations

I also find that the Final Environmental Impact Statement and the 2005 Forest Plan are consistent with the following body of policy and regulation: the National Energy Policy (Executive Order 13212); the Transportation Rule and Policy; the Clean Air Act; the Clean Water Act; the Energy Requirement and Conservation Potential; Executive Order 13112 on Invasive Species; Secretary of Agriculture's Memorandum #1827 on Prime Farmland, Rangeland and Forestland; Executive Order 1099 on the Protection of Wetlands and Floodplains; and the existing body of national direction for managing National Forests.

Implementation, Monitoring, and Evaluation

Implementation Begins in 30 Days

The 2005 Forest Plan becomes effective 30 calendar days after the Notice of Availability of the Record of Decision and Final Environmental Impact Statement is published in the Federal Register (36 CFR 219.10 (c)(1), 1982 planning rule.)

Transition from the 1986 Plan to the 2005 Forest Plan

The 2005 Forest Plan direction will apply to all projects that have decisions made on or after the effective date of this Record of Decision. Because this was a revision of the 1986 Mark Twain National Forest Plan, many aspects and much of the management direction from the 1986 Plan is carried forward relatively unchanged into the 2005 Forest Plan. Therefore, many existing projects and ongoing actions that were consistent with the 1986 Plan will continue to be so with the 2005 Forest Plan.

Many management actions decided prior to the issuance of the Record of Decision are routine and ongoing. Those decisions will generally be allowed to continue unchanged because the projected effects of these actions are part of the baseline analysis considered in the Final Environmental Impact Statement and Biological Assessments for the revision.

The National Forest Management Act requires that “permits, contracts and other instruments for use and occupancy” of National Forest System lands be “consistent” with the Forest Plan (16 U.S.C. 1640(i)). In the context of a 2005 Forest Plan, the National Forest Management Act specifically conditions this requirement in three ways:

1. These documents must be revised only “when necessary;”
2. These documents must be revised as “soon as practicable;”
3. Any revisions are “subject to valid existing rights.”

As the decision maker, I have the discretion, on a case-by-case basis, to modify pre-existing authorizations to bring them into compliance with the 2005 Forest Plan standards and guidelines. I find that the statutory criteria of “as soon as practicable” and excepting “valid existing rights” useful in exercising that discretion.

I have decided not to modify any existing timber sale contracts solely due to the 2005 Forest Plan. These contracts will be executed according to their terms, and these effects and conditions were considered in the Final Environmental Impact Statement. Existing timber contracts, in most cases, will be completed within three years. The decision is left to the Forest Supervisor to determine whether to modify decisions authorizing timber sales not currently under contract.

Other uses and occupancy agreements are substantially longer than timber contracts. These uses and occupancy agreements will be reviewed to determine whether or when the Forest Supervisor should exercise discretion to bring them into compliance with the 2005 Forest Plan. Recent project decisions that have not yet been implemented will be reviewed and adjusted by the decision maker, if necessary, to meet the direction found in the 2005 Forest Plan.

Two grazing permittees use allotments that consist solely of glades or natural woodlands. Balancing equitable treatment of these permittees with resource protection, the 2005 Forest Plan standards specifically state that grazing can continue on these allotments until the current permits expire in 2007 and 2008.

The Forest has taken a hard look at grazing effects, resource condition, and monitoring information. The FEIS for the 2005 Forest Plan assumed that grazing currently under permit would continue without change until the term for these permits ends. We are working with permittees and industry representatives to secure other allotments to replace those with glades, natural woodlands, and riparian areas. NFMA requires that permits “in existence shall be revised as soon as practicable to be made consistent with such plans.” 16 U.S.C. § 1604(i). The Forest will work cooperatively with permittees to modify or issue new permits as soon as practicable and after site-specific analysis, consistent with the 2005 Forest Plan.

Key Considerations in Plan Implementation

The 2005 Forest Plan provides broad, strategic, landscape-level direction for managing the Mark Twain National Forest. Working toward the desired conditions and achieving the objectives in the 2005 Forest Plan will be accomplished through site-specific project decisions, using the appropriate analyses and processes to meet the requirements of the National Environmental Policy Act and other laws and regulations. The 2005 Forest Plan itself makes no project-level decisions.

The Final Environmental Impact Statement for the 2005 Forest Plan did consider and evaluate the total management program that likely would be necessary to implement the objectives of the 2005 Forest Plan. It also dealt with those issues and concerns relevant at a larger landscape or forest-wide level. Therefore, in essence, the Final Environmental Impact Statement is itself a cumulative effects document, because it analyzed the total of activities that may be expected in the first decade (and longer term) and disclosed the forest-wide effects of those activities considered in total.

By tiering to the Final Environmental Impact Statement, we will make use of this forest-wide analysis to streamline our environmental analysis for project-level decisions. We will not revisit landscape or forest-wide scale issues and effects because those effects have already been considered and disclosed in the Final Environmental Impact Statement. This has applicability to a wide range of findings that are appropriately done at the Forest-wide level. Analysis and findings related to species viability and effects on threatened or endangered species should be greatly simplified when projects are within the parameters of the 2005 Forest Plan and the Final EIS. Project-level analysis will not revisit Plan decisions, but rather, will determine which management techniques (if any) and mitigations (beyond those in the 2005 Forest Plan) are best suited to each individual project.

Implementation of the 2005 Forest Plan is dynamic and depends upon many factors. Plan Appendices D and E contain information concerning proposed management techniques and projected outputs. This information is a forecast of what may occur over the lifetime of this Plan. However, final implementation will depend on demand for products and uses, available funding, natural events such as fire or windstorm, and other factors. There is no certainty that the projected outputs will actually occur at the estimated levels.

Future Changes to the Plan

Monitoring and Evaluation

Monitoring is designed to answer questions regarding implementation of the 2005 Forest Plan. Monitoring and evaluation will tightly focus on decisions made in the Record of Decision.

Evaluation reports will display how Forest Plan decisions have been implemented, how effective the implementation has proved to be in accomplishing desired outcomes, and what

we have learned along the way. This will allow a check and review of the validity of the assumptions upon which this decision is based.

The Monitoring Framework in Chapter 4 ties well with the strategic nature of Forest Plans, with increasing specificity as the Plan is stepped down to specific projects. This monitoring framework has four key monitoring components. The first component is the direction provided in Chapter 4 of the 2005 Forest Plan. The remaining three are implementation tools to ensure a common approach in monitoring Plan direction.

1. The Forest Plan (Chapter 4) direction that provides broad, strategic guidance.
2. A Procedural Guide that provides specific, technical guidance.
3. An Annual Monitoring Schedule that outlines annual, specific tasks for the current year.
4. An Annual Monitoring Evaluation Review that provides a forum to review current year findings and identify specific modification if necessary.

Amending the Forest Plan

This revision of the Forest Plan is shaped by a central idea: how we manage the Forest should adapt to changes in how we understand the ecological, social, and economic environments. In the Forest Service, we call this adaptive management. The 2005 Forest Plan is well structured for adaptive management to occur because it does a good job of describing the desired conditions toward which we will strive as we implement the Plan. In fact, those desired conditions are the very basis for the projects we will accomplish during the life of the Plan.

In making the decision on the 2005 Forest Plan, I am also deciding that this plan will be adaptive and subject to change as we monitor, learn, and gain new information. The revision of the Mark Twain National Forest Plan has taken many years and has incorporated much that has been learned since the 1986 Plan and even as the 2005 Forest Plan was developed. However, as I have said before, this Plan can still be improved as we learn more about complex ecosystem functions and processes. This Plan is not cast in stone to be unquestioningly adhered to for the next 15 years. We will track progress toward reaching the desired conditions identified in the Plan, and modify or reformulate management actions in response to that progress. If a particular management strategy, technique, or practice is applied, its results will be monitored to see if the desired effect is occurring, and if not, a modified or new strategy will be developed and implemented. That new strategy will also be subject to monitoring, evaluation, and, if needed, change.

Changes to the Plan will generally take the form of plan amendments and will follow the appropriate procedures specified in the National Forest Management Act and its regulations. The need to amend the plan may result from:

- Recommendations of an interdisciplinary team based on monitoring and evaluation results;
- Review of relevant new information;
- Determinations by the Forest Supervisor that existing or proposed projects, permits, contracts, cooperating agreements or other instruments authorizing occupancy and use are appropriate, but are not consistent with elements of the Plan's management direction;
- Planning errors found during forest plan implementation;

- Administrative appeal decisions;
- Changes in physical, biological, social, or economic conditions.

The Forest Supervisor will determine whether the proposed changes to the Forest Plan are significant or non-significant. Significance here is defined by the NFMA regulations and is different from significance as used under NEPA. The correction of simple errors may take the form of an errata statement.

Administrative Appeal of My Decision

This decision is subject to appeal pursuant to the provisions of 36 CFR 217.3. A written notice of appeal must be filed with the Chief of the Forest Service within 90 days of the date that legal notice of this decision appears in the Milwaukee Journal.

Regular Mail:

USDA Forest Service
Ecosystem Management Coordination
1400 Independence Avenue, SW
Mailstop Code 1104
Washington, DC 20250-1104

Express Mail:

USDA Forest Service
Ecosystem Management Coordination
201 14th Street, SW
3rd Floor, Central Wing
Washington, DC 20024
Phone: (202) 205-0895

A copy of the appeal must simultaneously be sent to the deciding officer:

Regional Forester of the Eastern Region
USDA Forest Service
Eastern Region
626 East Wisconsin Avenue
Milwaukee, WI 53202

Any notice of appeal must be fully consistent with 36 CFR 217.9 and include at a minimum:

- A statement that the document is a Notice of Appeal filed pursuant to 36 CFR Part 217.
- The name, address, and telephone number of the appellant.
- Identification of the decision to which the objection is being made.
- Identification of the document in which the decision is contained, by title and subject.
- Date of the decision and name of and title of the Deciding Officer.
- Identification of the specific portion of the decision to which the objection is made.
- The reason for the appeal including issues of fact, law, regulation, or policy.
- Identification of the specific change(s) in the decision that the appellant seeks.

Contacts

More information on this decision, the 2005 Mark Twain National Forest Land and Resource Plan, and / or the Final Environmental Impact Statement can be obtained by contacting:

Ronnie Raum
Forest Supervisor
(573) 364-4621

or

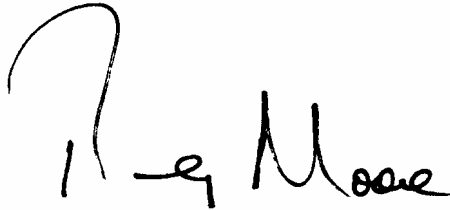
Rich Hall
Planning Staff Officer
(573) 364-4621

or

Laura Watts
Forest Planner
(573)364-4621

Mark Twain National Forest
401 Fairgrounds Road
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Electronic copies of the Final Environmental Impact Statement, the Executive Summary, the 2005 Forest Plan, or the Record of Decision can be obtained at www.fs.fed.us/r9/forests/marktwain.



Randy Moore, Regional Forester

September 21, 2005

Date

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<http://www.fs.fed.us/r9/forests/marktwain/>

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