

**Assessment of the Need For Change
for the
Mark Twain National Forest
Land and Resource Management Plan
and
Notice of Intent to Revise the Forest Plan**

April 8, 2002

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND	1
III.	DESCRIPTION OF THE NEED FOR CHANGE PROCESS	2
	1. Identify potential need for change topics.....	2
	2. Evaluate the potential need for change topics using established criteria.....	2
	3. Categorize need for change topics.....	3
	4. Notice of Intent and Public Participation.....	3
IV.	APPLYING THE NEED FOR CHANGE PROCESS.....	3
	Step One - Identification.....	3
	Step Two - Evaluation	4
	Step Three – Categorization.....	5
A.	Major Revision Topics.....	5
	1. Vegetation and Timber Management.....	5
	2. Ecological Sustainability and Ecosystem Health.....	6
	3. Fire Management	8
	4. Management Areas	9
	5. Riparian Areas and Water Quality.....	10
B.	Other Changes and Editorial Corrections or Clarifications	10
	1. Access and Transportation Management.....	11
	2. Scenery Management System.....	12
	3. Monitoring and Evaluation	12
C.	Areas with no proposed changes.....	13
	Step Four – Notice of Intent and Public Participation	15

I. INTRODUCTION

The Mark Twain National Forest Land and Resource Management Plan (Forest Plan) was approved in 1986. Implementation of the Plan over the last 15 years has resulted in thousands of management activities being planned and accomplished. During this time, the conditions of the Forest have changed due to management practices and natural events. A wealth of new information on ecosystem management, social change, and analysis techniques is now available. Considering these facts, the Mark Twain National Forest Plan should be revised to reflect the changed conditions and new information. This document describes the process forest managers used to develop proposed changes to the Forest Plan.

II. BACKGROUND

Several factors indicate a need for revision of the 1986 Forest Plan, including:

- **Land conditions and public demands have changed.**

Long-term drought and insect and disease infestations have changed the condition of the forest in ways not anticipated when the current forest plan was developed. Demand for forest commodities such as timber, game wildlife, and outdoor recreation opportunities have changed. Public recognition of the importance of long-term health of ecosystems has increased. We need to recognize these changes and evaluate their effects on ecological, social and economic sustainability and on healthy forest ecosystems.

- **National guidance for strategic plans and programs has changed since 1986.**

The Government Performance and Results Act Strategic Plan (1998), Forest Service Policy Statements on Ecosystem Management (1992), Forest Service's Natural Resource Agenda (1998), National direction to adopt Scenery Management System (1999), and development of the Strategic Fire Plan (2000) have shifted the course of agency goals and programs since 1986. These policies and programs should be addressed in a revision of the Forest Plan.

- **Results of monitoring and evaluation suggest the need for revision.**

Annual monitoring and evaluation of forest plan implementation shows that implementation of some Forest plan direction is not achieving the desired future conditions. For example, monitoring shows that using uneven-aged management on ecological landtype (ELT) 18, which the plan requires in certain management areas, has not been successful. Monitoring has also revealed inconsistent implementation of riparian management direction due to unclear definitions in the Forest Plan

- **New information is available.**

New scientific information has been published since 1986 including the Ozark-Ouachita Highlands Assessment (1999), The Biodiversity of Missouri report (1998), updates to the Hierarchy of Ecological Units Framework (2000 Statewide Landtype Associations (LTA's) by MORAP), and revision of The Terrestrial Natural Communities of Missouri. In addition, Forest Service research, universities and organizations that study forest ecosystems and forest management have published various technical reports. While some of this information has already been used to amend to the Forest Plan, such as for threatened and endangered species management, additional opportunities remain for changing forest plan direction to respond to the most up-to-date information available. For example, research in the effects of disturbance ecology has revealed that the current forest condition does not resemble the historic condition. The history of land use change has led to unnatural forest succession and disruption of natural processes, resulting in loss of certain ecosystems and biodiversity; changes in hydrological patterns, an increase in forest diseases, sedimentation, exotic species invasions, and loss of productivity.

- **Suggestions provided by stakeholders.**

Finally, there have been hundreds of suggestions for need for change in the current forest plan collected from forest service employees and non-forest service groups and individuals. While many of these suggestions do not involve new information, they did provide insights into how the plan could be more effectively implemented. The hundreds of suggestions were evaluated and many were refined and incorporated into the revision topics discussed later in this document.

III. DESCRIPTION OF THE NEED FOR CHANGE PROCESS

The forest used a four-step process to determine revision topics.

1. Identify potential need for change topics.

This step was a comprehensive effort to identify all potential revision topics. Some potential topics were identified from the information sources listed above. Stakeholders (those responsible for implementing the plan as well as those interested or affected by plan implementation) were also invited to provide input.

2. Evaluate the potential need for change topics using established criteria.

In this step, criteria were developed and used to evaluate all suggested need for change items. As a result of the evaluation, some of the need for change suggestions were carried forward as revision topics and some were dropped from consideration.

3. Categorize need for change topics.

The objective of this step was to categorize the topics brought forward from Step 2 into two groups: 1) major revision topics, and 2) other topics that are minor in nature or consist primarily of editorial corrections and clarifications. Some suggestions were combined under one topic, resulting in the reduction of many similar or related need for change topics into fewer and broader revision topics.

4. Notice of Intent and Public Participation

The final step in the need for change process will be publication of the Notice of Intent in the Federal Register, followed by a formal and focused period of public involvement. During this important phase, revision topics will be refined to respond to comments and information provided by the public.

IV. APPLYING THE NEED FOR CHANGE PROCESS

Step One - Identification

The identification of potential need for change topics has been ongoing for several years. It has involved listening to comments, discussing the current plan, and evaluating suggestions. The Mark Twain National Forest began evaluating the need for changing the Forest Plan in 1997. A planning team spent approximately eight months collecting and analyzing information. Sources of information for this significant effort included:

- Meetings on every Ranger District with forest employees.
- Discussions with partners and interest groups such as environmental advocacy groups, county government officials, special use advocacy groups, and other state and federal agencies.
- A series of newsletters identifying planning issues and soliciting input.
- Review of the major decisions made in the existing forest plan.
- Review of issues raised in appeals and litigation.
- Results of monitoring and evaluation of plan implementation over the past 15 years.
- Changes in law and policy that are relevant to planning and management.
- New scientific information.
- A five-year review of the Forest Plan conducted in 1991.

As the planning team summarized their findings and began work on a Notice of Intent in early FY 1998, Congressional appropriations bill language halted all funding for new forest plan revision efforts, including those on the Mark Twain National Forest.

After funding again became available, additional information was collected and analyzed in support of Forest Plan revision, including:

- Results from the Ozark-Ouachita Highlands Assessment.
- Roads Analysis completed on the Salem and Potosi districts in FY 1999.
- Watershed Analysis for the Mark Twain National Forest completed in FY 2000.

The planning team evaluated this new information and reexamined the findings of the 1997 effort. The result of this step in the process was a list of potential revision topics and proposed changes to the Forest Plan.

Step Two - Evaluation

The objective of this step was to take a hard look at the potential need for change topics to determine if they should move forward as revision topics. Criteria were developed and used to provide an unbiased and objective method for identifying revision topics. Suggestions that did not meet the criteria will not be addressed during Forest Plan revision. The criteria used to evaluate the potential topics and proposed changes identified in step 1 were:

- a) Must be linked to one of the six following decisions made in the Forest Plan:
 1. Forest-wide goals or objectives.
 2. A specific standard or guideline.
 3. Activities allowed in Management Areas.
 4. Lands suitable for timber harvesting.
 5. Monitoring and evaluation requirements.
 6. Wilderness recommendations or non-wilderness allocations for roadless areas.
- b) Must be consistent with federal laws and policies and relate to the mission of the Agency.
- c) Must be within the Responsible Official's decision-making authority.
- d) Is not adequately addressed in the current plan.
- e) Sufficient information is available to address suggested need for change topic at this time. No additional research is needed to evaluate the proposed change.
- f) There is new information that warrants a reevaluation of one of the six decisions made in the plan cited above in first criteria.
- g) Addresses critical, high-priority needs.

Some of the more common reasons for not including a suggested topics or change to the Forest Plan include:

- Suggestion is already addressed in the current Forest Plan or recent plan amendment;
- Insufficient data, information or rationale exists to evaluate the need for a change or to support a change to the Forest Plan;
- Suggested change is outside the mission or authority of the Forest Service;
- Suggestion relates to a site-specific project, not overall Forest Plan direction.

Step Three – Categorization

The objective of this step is to categorize the need for change suggestions remaining after Step Two into appropriate revision topics. Some similar or related topics and suggested changes were refined and combined under one topic, resulting in fewer and broader revision topics. The topics were also divided into two groups: 1) major revision topics, and 2) other changes that are minor or consist primarily of editorial corrections and clarifications.

To ensure the revision is completed within the scheduled four-year timeframe, the Forest Plan revision will focus on high priority topics and changes. Some changes that meet the criteria outlined in Step Two would not affect many resources or result in a significant change in the plan. Although these might include changes that are important as direction for the forest, they are narrow in scope. It is within the discretion of the Responsible Official to select the topics to be addressed in the Forest Plan revision. Some of these minor changes will be included in the revision. However, other narrowly focused topics and changes that are not critical for revision may be deferred until Plan revision is complete. They could then be implemented through the course of on-going Plan maintenance and amendments.

A. Major Revision Topics

This category of proposed changes relates directly to one of the six plan decisions listed above. These topics are interrelated, meaning that changes in one topic area would have impacts on other topic areas. Changes in Forest Plan direction in these topics could also cause significant changes in the goods and services provided by the Forest. Each of the revision topics is listed below along with the factors indicating a need for a change, and the proposed change. In some cases, a specific change to the Forest Plan is identified. In other cases, further discussion and analysis following issuance of the NOI will be needed to determine what specific action best resolves or narrows the associated issues.

1. Vegetation and Timber Management

Concerns about vegetation management, especially timber management, have evolved over the last 15 years around harvest levels, cutting methods, timber sale cost efficiency and maintaining or restoring healthy ecological processes through the application of vegetation manipulation.

Key aspects of this revision topic include:

1a. Lands suited to timber production and Allowable Sale Quantity (ASQ)

Factors leading to a need for change: The current plan identifies 88% of Mark Twain National Forest lands as suitable for timber production. Among these acres are some that are actually unsuitable for timber production because they are inoperable, or because timber production is incompatible with the management emphasis, such as in recreation areas. Changes in national policy, specifically the Roadless Area Conservation Policy, have identified additional acres that may be inappropriate for intensive timber production. Through implementation of the Forest Plan, we have also learned that the areas available for timber harvest and treatment is less than assumed due to the combined effect of mitigation factors such as filter strips for riparian areas, visual quality measures, and limits on the combined size of adjacent openings.

When developing the ASQ for the current Forest Plan, assumptions were made about the market for some forest products, specifically roundwood, that have not been met by actual demand.

The over estimation of suitable lands along with the differences between the assumptions made and the actual market demands for some wood products led to an inflated ASQ that has never been met by the Forest, and is no longer considered feasible.

Proposed Changes: Revisit suitable lands determination, revise demand estimations, and rebuild ASQ determination based on those changes.

1b. Even-aged and uneven-aged management

Factors leading to a need for change: The current plan was developed with the assumption that even-aged management, including clear-cutting, would be used as the primary means of perpetuating the oak-hickory, shortleaf pine, and oak-pine communities that constitute the desired future condition on the majority of the Forest. Uneven-aged management was to be used “on selected areas to determine the long term feasibility of using this system...” (Forest Plan, page IV-3.) The use of clearcutting has decreased from 65% of acres sold for timber harvest in 1988, to an average of 10% of acres sold for the past 10 years. In contrast, the use of uneven-aged techniques has increased from less than 1% of acres sold in 1988 to over 26% of acres sold in 2001, with an average of 31% in the last ten years. While some people see this shift as a positive move by the Forest, others believe that the decrease in clearcutting has contributed to the current problems of oak decline.

Through implementation of the Forest Plan over the last 15 years, we have discovered that using uneven-aged management on some sites where it is required by the plan is ineffective and has undesirable results. New information about oak regeneration and how to successfully implement uneven-aged management is now available.

Proposed Changes: Maintain oak-hickory, shortleaf pine and oak-pine communities by providing for adaptive management and greater flexibility in types of silvicultural techniques that may be used.

2. Ecological Sustainability and Ecosystem Health

Sustainability consists of ecological, social, and economic components. By managing for ecological sustainability, forest ecosystems will be healthy, resilient, and sustainable in the long term and will provide a sustainable flow of goods and services that help sustain the economy and local communities. Managing for ecological sustainability requires an integrated management approach that considers natural processes such as fire, insect and disease outbreaks, and catastrophic wind events, along with forest management activities that mimic those natural events. The USDA Forest Service Strategic Plan (2000 Revision) includes several objectives to achieve the goal of ecosystem health.

Key aspects of this topic include:

2a. Oak decline and forest health

Factors leading to a need for change: In the early 1900's the Missouri Ozarks were subjected to extensive logging, open-range overgrazing, over-burning, and subsequent soil erosion and loss of the grass/herbaceous ground cover component. Changes in forest vegetation brought about by these activities, along with changes in hydrological processes have led to less productive, droughtier soils, timber overstocking, and loss of healthy ecosystems. Oak decline, which occurs cyclically on the forest and appears to coincide with extended periods of drought, has been worsened by these historic changes. Long-term implications to forest health exist. The 1986 Forest Plan did not anticipate the current extended drought cycle and subsequent oak decline.

Proposed Changes: Restore and maintain healthy forest ecosystems in response to oak decline. Provide a healthier balance of shortleaf pine and white oak in what is now a predominantly black and red oak forest. Restore some of the more open woodland habitats encountered by early settlers. Strategies could include thinning and prescribed fires.

2b. Reforestation and Timber Stand Improvement Management direction

Factors leading to a need for change: The current plan contains restrictions intended to insure that hardwood forests were not converted to softwood plantations. For example, the current Plan does not allow pine planting in management areas that emphasize or wildlife habitat diversity, even within the natural pine range. Management techniques to improve areas of pine are prohibited in management areas that emphasize hardwood management, even within the natural pine range. Practices to improve areas of oak forests are not permitted in management areas that emphasize motorized semi-primitive recreation. However, these restrictions are preventing the Forest Service from implementing practices to encourage healthier, more resilient and sustainable oak and oak-pine forests when confronted with large-scale natural events such as fire, tornados, red oak borers and oak decline.

Proposed Changes: Encourage natural vegetation most suited to Missouri's landscape associations and natural communities by allowing pine and oak reforestation and stand improvement in a wider variety of situations.

2c. Wildlife habitat management direction.

Factors leading to a need for change: The current Forest Plan was developed during a time of emerging ecological knowledge. Management direction and objectives for various wildlife habitat conditions were identified based on needs of Management Indicator Species (see item 2d). These standards and objectives varied based on landtype association (LTA) and management prescription in order to provide a diversity of habitats well distributed across the Forest. Through implementation of the plan, we have found that the resulting habitat conditions have been very similar across all management prescriptions, and in all but two landtypes, resulting in a more homogenous landscape than desired. Additional information gained over the last 16 years suggests that the

diversity of natural communities possible in the Ozarks is not provided for by current management direction. In addition, it has been difficult to accurately measure some of the specified habitat conditions given the data we currently collect.

Proposed Changes: Provide a wide diversity of natural communities and wildlife habitat conditions based on differing landscape capabilities and advanced ecological knowledge of fire-adapted Ozark woodlands. Provide a closer link between habitat conditions and wildlife populations.

2d. Management Indicator Species

Factors leading to a need for change: The management indicator species (MIS) for the 1986 Forest Plan were selected by a committee of State and Federal biologists to represent the range of species present on the Mark Twain National Forest. MIS were selected to emphasize species of interest to the public (including both species that are hunted and those that are not) and indicators of ecological change. Information gained in the past 17 years through monitoring population trends suggests there may be other species that would better reflect changes in habitat composition and quality.

Proposed Changes: Revise list of management indicator species.

3. Fire Management

The topic of fire management focuses on the concept of using fire as a management tool. Fire management includes two aspects: 1) all activities required for protecting natural resources and property from fire; and 2) the use of fire to meet resource and land management goals.

Key aspects of this topic include:

3a. Prescribed fire

Factors leading to a need for change: Natural disturbance factors that shape the vegetation in Missouri include insects, disease, flooding, wind, and fire regimes. Fire has historically been a major disturbance element influencing development of Missouri's diverse ecosystems, including savannas, woodlands, prairies, forests, fens, wetlands, and glades. Plant species presence, forest structure and composition across the landscape are influenced by fire. Natural area inventories conducted by state officials throughout the Midwest have demonstrated great loss of Missouri's historic fire-adapted ecosystems due to landscape alteration, conversion to croplands and pasture, urban/housing development, and fire suppression.

The Forest Plan has very little guidance for using prescribed fire, and it is silent regarding when, where, why, and how prescribed fire can be utilized as a tool.

Proposed Changes: Use prescribed fire to restore ecosystems, maintain healthy forests, provide wildlife habitat, and reduce hazardous fuels.

3b. Wildland fire suppression

Factors leading to a need for change: Wildland fire suppression is necessary to protect life and property, especially considering the intermingled ownership patterns and the

proximity of private homes and communities to the Forest. The Forest Plan has very little guidance relating to wildland fire suppression. There are several national reports that have been developed in response to wildland fire threats to communities in recent years. These reports include: “A Collaborative Approach for Reducing Wildland Fire Risk to Communities and the Environment-10 year Comprehensive Strategy, August 2001;” “Managing Impacts of Wildfires on Communities and the Environment, September 2000;” and the National Fire Plan, September 2000. These reports outline a comprehensive approach for wildland fire management, and make recommendations for protecting communities.

Proposed Changes: Manage wildland fires to protect life, property, and communities.

3c. Fuels management

Factors leading to a need for change: While wildland fire suppression is essential and necessary to protect life and property, it can result in unnatural fuel buildup that leads to more intense and damaging fires than in the past. The extensive logging in the early 1900’s, combined with decades of fire suppression, have resulted in forests with a high density of trees and an increase in woody debris. Oak decline is adding to the problem by increasing and changing fuel types. In addition to increasing fire intensity, these accumulated fuels damage otherwise diverse, healthy ground vegetation. The Forest Plan does not address hazardous fuels that might result from natural events or management activities, or the effects on rural interface communities.

Proposed Changes: Improve and maintain forest health and reduce the intensity of wildland fires through a proactive approach to fire and fuels management.

4. Management Areas

Management area boundaries are determined by ecological characteristics, social considerations, and on-the-ground practicality of differentiating one management area from another. New ecological principles and changes in social expectations may necessitate revision of some of the current management area boundaries.

Key aspects of this topic include:

4a. Management area boundaries and new land-type associations (LTA)

Factors leading to a need for change: A land-type association is a subdivision of a landscape characterized by similar geological features, patterns, ecological processes and natural plant communities. In recent years, new LTA boundaries for Missouri have been delineated through a multi-agency partnership.

Proposed Changes: Adjust management area boundaries where needed to incorporate ecological landtypes, current social demands, and management practicalities.

4b. Special Area allocations.

Factors leading to a need for change: Wilderness, Natural Areas, Wild, Scenic and Recreational Rivers, and Special Management Areas are land allocations for specific purposes. A roadless area inventory to identify potential wilderness areas is required

during plan revision. There will also be an inventory to identify any rivers with potential for inclusion in the Nation's wild and scenic river system.

Proposed Changes: Strive to protect roadless, wilderness, wild, and scenic river values. Evaluate inventoried roadless areas for their potential for Wilderness designation. Determine the most appropriate use and management for inventoried roadless areas not recommended to Congress for Wilderness designation.

Determine eligibility and highest potential classification for any rivers identified with potential for inclusion in the Nation's wild and scenic river system.

5. Riparian Areas and Water Quality

Factors leading to a need for change: Knowledge of the important functions of riparian areas and their effects on the biological and hydrological integrity of streams has increased since the current plan was approved. A Forest Plan amendment for management of riparian areas was approved in 1991. However, the criteria used for riparian area definition and delineation was not clear or quantifiable. Inconsistent identification of riparian areas in project planning and implementation has led to inconsistent application of management direction, resulting in lack of protection for riparian areas and associated surface waters in some projects.

Knowledge of the interconnection of surface and subsurface waters due to the karst terrain in the area has also increased. Management direction for protection of groundwater and ecological processes associated with karst hydrologic systems are generally lacking in the current Forest Plan.

Proposed Changes: Restore and maintain the ecological function of riparian areas, emphasizing the ecological processes that riparian areas play in supporting aquatic systems and water quality. Define riparian areas and aquatic ecosystems based on plant community, soil and hydrologic criteria. Protect water quality and ecological processes associated with karst terrain and karst features.

B. Other Changes and Editorial Corrections or Clarifications

In addition to the major revision topics listed above, we anticipate making other changes that are important as direction for the forest but which tend to be narrow in scope. These changes, which are described below, would not affect multiple resources or result in significant changes in the plan.

We also propose making changes of an editorial nature. These could include changes needed to explain or clarify direction in the existing plan, removing items that do not pertain to the six Forest Plan decisions, or removing direction that can be found elsewhere, such as in the Forest Service Directives System. These changes would not represent a change in the direction, goals or objectives in the Plan.

1. Access and Transportation Management

Roads are needed in the Forest for recreational access, for forest management, and for access to private property. However, roads and the access they provide have become increasingly controversial. Concerns exist about the effect of roads on natural resources such as water quality and wildlife habitat. Traffic volumes have increased, and the recreational uses of roads have changed. Forest managers are concerned about the costs of road construction and maintenance.

The Mark Twain is currently conducting a Forest scale roads analysis to determine and provide for the minimum forest transportation system that best serves current and anticipated management objectives and public uses, while maintaining land health and water quality. Any proposed changes to direction for road and transportation management identified by the Forest-wide roads analysis will be considered in the Forest Plan revision.

Key aspects of this topic include:

1a. Road density standards in management area prescriptions.

Factors leading to a need for change: Current road density management direction do not include non-forest service roads or private lands in their calculation. A roads analysis of the Salem and Potosi Ranger Districts questioned the meaning and usefulness of these density standards in light of the extensive non-Forest Service road network on both NFS lands and private lands. There is a lack of scientific data and research showing a correlation between these limits and their effect on any specific wildlife species or other natural resources at the Forest Plan level. It might be more appropriate to evaluate road density at the project level.

Proposed Changes: Clarify or modify or eliminate road density standards

1b. "Woods Roads"

Factors leading to a need for change: The Mark Twain National Forest is the only forest with a subset of classified roads called "woods roads." These roads are generally unimproved, and are to be maintained somewhere between maintenance levels 1 and 2. This low level of maintenance, however, has not been appropriate for the level and type of use these roads have received, and in some cases has resulted in resource damage. The term "woods road" has led to confusion because the public commonly uses it to mean any road in the Forest, including old roads that are not part of the Forest's road system and are to be closed.

Proposed Changes: Eliminate the term "woods road" and assign them standard maintenance levels.

1c. Forest Plan Transportation Map

Factors leading to a need for change: The existence of the Forest Plan Transportation Map as part of the Forest Plan proved to be useful during the implementation of the plan. However, the transportation system is now largely in place and there is very little new road construction occurring on the Forest, reducing the need for a Forest Plan

Transportation Map. Land acquisitions and changing demographics and development in an area can affect the need for individual roads. The Forest Plan Transportation Map essentially makes site-specific decisions, which should be made at the project level, not at the Forest Plan level. In addition, changes in National direction regarding roads management, especially the requirement to compile and maintain a Forest Transportation Atlas, make the Forest Plan Transportation Map unnecessary and redundant.

Proposed Changes: Eliminate the Forest Plan Transportation map. Clarify that changes to the road system are project level decisions.

1d. OHV and ATV use on the forest.

Factors leading to a need for change: The current plan restricts off-road vehicle use to designated trails or use areas. The only designated trails on the Forest are the Sutton Bluff trail system, and the only designated use area is the Chadwick Motorcycle Special Use. The Forest Plan allows for the development and designation of additional trails and use areas.

Off-road vehicles may also use Forest Service classified roads (system roads), if the vehicle complies with State law. The Forest Plan considers all unclassified roads to be closed (whether or not there is a physical closure) and therefore off-limits to all motorized vehicle use. The Forest Supervisor's closure order for roads, however, seems to restrict use only on those roads that are gated, bermed, or signed closed. OHV users have expressed confusion regarding which roads they are allowed to use, as have forest managers.

Proposed Changes: Clearly state the existing Forest direction for OHV and ATV use of "closed unless posted open." Clarify the relationship among the Forest Plan direction, State law, and the Forest Supervisor's closure order.

2. Scenery Management System

Factors leading to a need for change: A new method for the management of scenic values has been developed known as the Scenery Management System. Forests have been directed to incorporate the new system into their revised Forest Plans.

Proposed Changes: Incorporate the Scenery Management System into the Forest Plan and adjust management direction as needed in response to this new system.

3. Monitoring and Evaluation

Factors leading to a need for change: Through implementation of the monitoring and evaluation direction, we have found that some of the requirements can not be fully implemented, do not yield meaningful results, are not measurable or scientifically supported, or are not reasonably affordable. In addition, new information about ecosystem management and ecological sustainability concepts are not reflected in the current monitoring and evaluation requirements.

Proposed Changes: Revise and improve the strategy for monitoring and evaluation to reflect ecosystem management and ecological sustainability concepts and approaches. The monitoring strategy will focus on information that will (1) enhance understanding of

resource management issues; (2) is measurable and scientifically supported; and (3) is feasible given probably budgets.

C. Areas with no proposed changes

Many of the decisions and management direction provided in the 1986 Forest Plan appear to be adequately addressed and do not need to be changed. While some decisions or resource areas may have a high level of interest, this alone does not mean that they need to be addressed in the Forest Plan Revision. Others areas are not considered to be among the highest priority topics to be included in this revision. Parts of the Forest Plan that are most frequently mentioned as needing revision are described below, along with the rationale for not changing them at this time.

1. Threatened, endangered and sensitive species viability and management

We do not expect that the Forest Plan will need any changes for species at risk. The Forest Plan was amended in 2000 and 2002 to incorporate changes in management for threatened and endangered species. In 2001, an analysis found that the current plan provided objectives contributing to the viability of species on the R9 Regional Forester's Sensitive Species list.

2. Rivers eligible for Wild and Scenic River designation.

The 1986 Forest Plan identified parts of seven rivers flowing through the Mark Twain National Forest as eligible for inclusion in the National Wild and Scenic Rivers system. Formal suitability studies are required to determine whether a recommendation should be made to Congress regarding designation of these rivers under the Wild and Scenic Rivers Act. These suitability studies have not been undertaken.

Under current Forest Plan direction, these rivers and the NFS lands around them are managed to perpetuate their current condition and protect their unique qualities. There has been no wide spread public support, or any indication from the State, other Federal agencies, or Congressional delegations that there is a need to change the current management of these rivers or to conduct a suitability determination at this time.

We do not propose any changes to the management direction for the rivers currently identified in the Forest Plan as eligible for wild and scenic river designation.

3. Off-road vehicle use on the forest.

Under the current plan, the Forest is "closed unless posted open" to motorized use. This means that off-road vehicle use is restricted to designated trails or use areas. Off-road vehicles may also use Forest Service classified roads (system roads), if the vehicle complies with State law. The Forest Plan allows for the development and designation of additional trails and use areas. Currently, the only designated trails on the Forest are the Sutton Bluff trail system, and the only designated use area is the Chadwick Motorcycle Special Use.

OHV and ATV users have expressed a strong interest in using existing unclassified roads. The Forest Plan considers all unclassified roads to be closed (whether or not there is a physical closure) and therefore off-limits to all motorized vehicle use. Over the last

several years, use of the Forest by off-road vehicles, especially all-terrain vehicles (ATV) and off-highway vehicles (OHV) such as Jeeps, has increased exponentially. Much of this use occurs off-road as well as on unclassified roads, and has become increasingly difficult to manage.

Some nearby Forests originally allowed off-road and off-trail OHV and ATV use, but found the use to be very heavy and difficult to manage. Those Forests initiated planning processes resulting in significant plan amendments that changed the management from “open unless posted closed” to “closed unless posted open.”

Allowing motorized use of unclassified roads (essentially allowing off-road and off-trail use) would radically change the existing Forest Plan direction for Mark Twain National Forest lands. Based on monitoring results, interpretation of national policy trends, other Forests’ experiences, and our own experiences trying to manage ATV and OHV use, we do not believe that a major change in plan direction for off-road motorized use is warranted.

4. Recreation Management

The Forest Plan was recently amended to update the goals and management direction for recreation. The amendment expanded the emphasis of the recreation program from providing dispersed recreation to include providing quality developed sites. The amendment added direction that allows investments in recreation facilities needed to meet the needs and desires of the public being served by the facility and to provide recreation visitor information. The amendment also added Management Prescription 7.1 to the Forest Plan, emphasizing intensive recreation opportunities occurring in the more highly developed recreation areas. Management Prescription 7.1 better defines the desired future condition for developed recreation areas, as well as the expectations and objectives by which recreation areas will be managed. It also provides increased flexibility as trends in recreation activities change, allowing for greater diversity in recreational opportunities. We do not propose any additional changes in direction for recreation management at this time.

5. Heritage Resources Management

The Forest Plan was recently amended to address current federal mandates and compliance requirements for heritage resources. Processes were included for preservation efforts to restore and interpret selected heritage sites, increase public outreach, and develop public education and volunteer programs. We do not propose any additional changes in direction for heritage resources management at this time.

6. Fish and Aquatic Management

The Forest Plan was recently amended to incorporate goals and management direction for fish and aquatic species into the Forest Plan. The amendment provides for protection of aquatic ecosystems, restoration of degraded aquatic ecosystems and recovery of threatened and endangered aquatic species, and enhancement of aquatic resource user opportunities by increasing system productivity, improving user access and/or associated

amenities, and providing environmental education and interpretation. We do not propose any additional changes in direction for fish and aquatic management at this time.

7. Minerals Exploration

Under the Mineral Resources on Weeks Law Land Act of March 4, 1917, mineral prospecting is permitted on lands acquired by Weeks Law Act authority, which includes most lands of the Mark Twain National Forest. While the Bureau of Land Management has responsibility and authority over federally owned minerals (including those lying under National Forest System lands), the Forest Service is responsible for the administration of surface resources on the Mark Twain National Forest.

The Forest Plan states that all lands are available for exploration when methods and technologies are used that do not disturb the land surface. Surface-disturbing exploration (including core drilling) is permitted where it is compatible with the management area objectives. It is prohibited on administrative sites, developed recreation sites, endangered and threatened species habitat, National Trails System, over known caves, and in Wilderness. The goals established in the Forest Plan for minerals management are to provide for mineral prospecting and mineral development while complementing other resource management objectives. Management direction is provided to protect soil, water, wildlife, scenery and other resources.

There is a high level of interest and widely differing opinions about the mining and processing of lead in Missouri. The responsibility of the Forest Service in regards to mining is limited to the surface activities, primarily those associated with exploration for minerals. We believe that the Forest Plan contains appropriate and adequate direction in regards to the surface activities associated with mining that occur on the Mark Twain National Forest, and we do not propose any changes to the management direction in the Forest Plan.

Step Four – Notice of Intent and Public Participation

The final step in the need for change process is publication of the Notice of Intent in the Federal Register. The Notice of Intent describes the major revision topics, other changes, and areas of the Forest Plan with no proposed changes. A formal and focused period of public involvement will follow publication of the Notice of Intent.