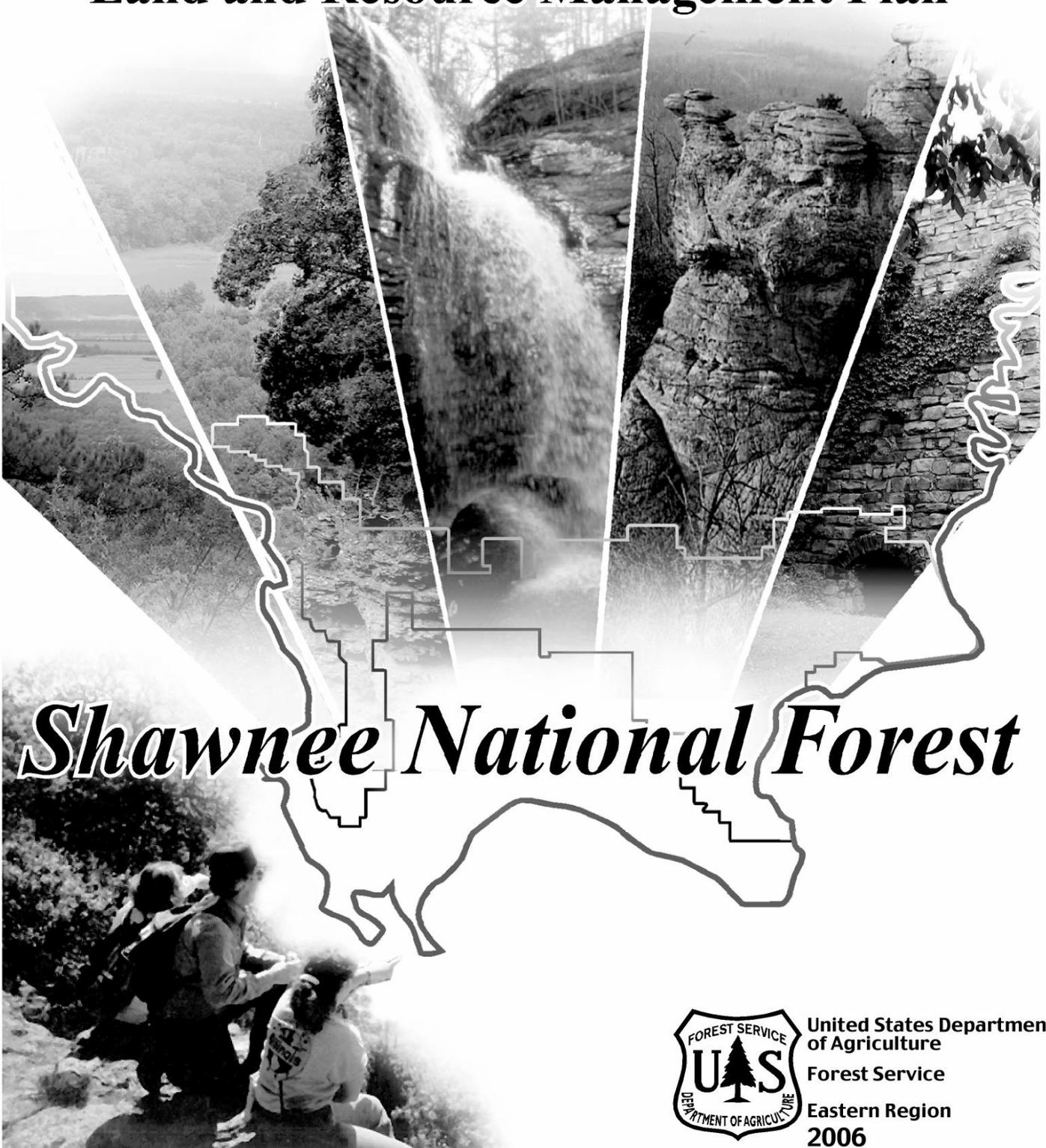


Record of Decision

Final Environmental Impact Statement for the Land and Resource Management Plan



Shawnee National Forest



United States Department
of Agriculture
Forest Service
Eastern Region
2006

This document can be accessed on the Shawnee National Forest website:
www.fs.fed.us/r9/forests/shawnee.

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RECORD OF DECISION

SHAWNEE NATIONAL FOREST FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE REVISED LAND AND RESOURCE MANAGEMENT PLAN (2006 FOREST PLAN)

PREFACE

This Record of Decision (ROD) describes my decision to select Alternative 2 as the Shawnee National Forest (Forest) 2006 Land and Resource Management Plan (Plan). I have reviewed the range of alternatives, considered public input and reviewed the evaluation of the alternatives as documented in the Final Environmental Impact Statement (FEIS).

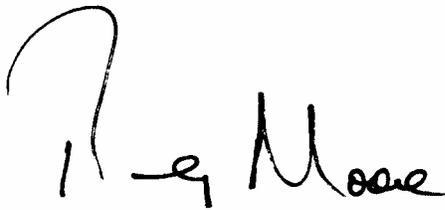
Although I am the final decision-maker, I have not arrived at this decision alone. Developing a forest plan that is supported by the public is not easy. The Forest provides many different uses to many different people, and these people often have divergent views on how to manage public lands. We have reviewed and responded to thousands of comments and suggestions during the development of the 2006 Forest Plan. Hundreds of citizens talked with members of the planning team during meetings held throughout the planning process. Meaningful collaboration with state and federal agencies, local governments and various 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 of all who participated. We have listened to the public and it has shaped the development of this 2006 Forest Plan.

The Forest includes some of Illinois' most beautiful landscapes, important for tourism and a principal reason that people choose to live in southern Illinois. The Forest is ecologically diverse, providing a home for many native plants and animals, including threatened, endangered and sensitive species. Hardwood forests not only provide essential habitat for the diversity of species on the Forest, but also important wood products for society. Potentially useful mineral deposits underlie the Forest. The Forest is uniquely positioned to provide abundant multiple uses, while conserving the ecology of southern Illinois.

The ecological, social and economic conditions on the 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 2006 Forest Plan is dynamic and will be re-evaluated periodically as new information becomes available. The 2006 Plan is the result of a comprehensive evaluation of the 1992 Amended Forest Plan, an examination of the best available scientific information, and an in-depth notice and comment process. The revision process has taken over four years and has been the focus of an interdisciplinary team of over 20 scientists and resource specialists. My role, as well as the role of the Forest Supervisor of the Shawnee 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 Record of Decision.

My decision establishes a plan that, I believe, emphasizes those benefits most important to 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 Forest to the ecological, social and economic sustainability of southern Illinois over the long term. Development of future project decisions consistent with the 2006 Forest Plan will result in a sustainable supply of goods and services from the Forest, while conserving the natural resources of the area. This decision strikes a reasonable balance between resource sustainability and the complex demands expressed by a wide variety of people, groups and organizations.

Our work is not done. Regular monitoring and evaluation of the implementation of the 2006 Forest Plan will ensure it is kept current. Changes in society's needs and values, along with emerging science, may necessitate amendments of the 2006 Plan. I encourage you to continue your partnership with us in keeping the Plan fresh and relevant. In order for the Plan to be fully successful, we will need the help of people working collaboratively to develop projects, monitor resources and adapt the Plan as appropriate over the coming years. Finally, and most importantly, I thank you for your participation, patience, and support throughout this Forest Plan revision process and into the future.

A handwritten signature in black ink that reads "Randy Moore". The signature is written in a cursive style with a large, looping initial "R".

Randy Moore
Regional Forester
Eastern Region, USDA Forest Service

I. INTRODUCTION

The 2006 Forest Plan is a 10- to 15-year programmatic framework for managing and protecting national forest resources. It was developed in accordance with the National Forest Management Act (NFMA) (16 U.S.C.1604, et seq.) and the 1982 planning regulations (36 CFR 219¹). 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 2006 Plan emphasizes different desired conditions and goals for various parts of the Forest. As we develop site-specific projects consistent with the Plan, management practices, such as improving and maintaining roads, restoring streams, harvesting timber and improving campgrounds, will be proposed in some areas, but not in others. We intend to achieve multiple-use goals and objectives in a balanced, cost-efficient and sustainable manner.

The original Forest Plan was approved in 1986 and significantly amended in 1992. The 2006 Plan replaces all previous resource management plans for the Forest. It provides an integrated, interdisciplinary, programmatic framework for environmentally sound management based on the best available scientific information and applicable laws and regulations. Monitoring of Plan implementation will provide a basis for periodic evaluation and adaptive management. The 2006 Plan will be amended or revised as needed to adapt to new information and changing conditions. Any action taken to amend or revise the Plan will include public involvement.

There are six primary decisions made with the 2006 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 for adjustments to the Forest's proclamation boundary

The goals and desired conditions in the 2006 Plan can be achieved from a physical, ecological, economical or legal perspective. Management practices will be implemented and outputs produced as the Forest strives to meet the desired conditions identified in the Plan. Project-specific analyses and decision making will determine the actual level of outputs.

The standards contained in the 2006 Forest Plan set parameters within which projects must be implemented, and approval of any project must be consistent with them (16 U.S.C. 1604[i]). If a project cannot be implemented in accordance with applicable standards, it cannot proceed unless the Plan is amended or otherwise changed. We generally will comply

¹ The 2005 Planning Regulations, 36 CFR 219.14(e) (January 5, 2005) allow the use of the 1982 planning regulations for this Plan since it was initiated prior to the transition period defined at 36 CFR 219.12(b).

with Plan guidelines; but, where site-specific conditions require deviation, we will not necessarily amend the Plan, but will discuss the rationale as part of the project analysis.

The nature of this Plan and its legal effect was not well understood during the development and review of the 1992 Plan. The 2006 Plan is permissive in that it allows, but does not mandate or authorize, projects and activities. A project may be implemented only after it is proposed, its environmental effects considered, and a decision made authorizing site-specific action. Site-specific environmental analysis for each project proposed will be tiered to the FEIS for the 2006 Plan, pursuant to 40 CFR 1508.28. (A detailed explanation of the nature of the Plan may be found at www.fs.fed.us/emc/nfma/index1.html.)

This decision is heavily influenced by the public input received during the Plan revision process. I am making this decision after careful consideration in the FEIS of a broad range of alternatives and analysis of their effects, and review of agency and public comment. I have considered the best available scientific assessments and most current scientific knowledge available to us. I have considered all new information provided by the public, state and other federal agencies during the revision process, and was particularly careful about the use of high-quality resource data. I believe the 2006 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 the capabilities of the land.

The 2006 Plan is founded upon the best available science. We analyzed scientific information submitted by the public as well as the findings and recommendations in the *Hoosier-Shawnee Ecological Assessment*. This extraordinary effort to gather and analyze scientific information provided the information necessary to develop, analyze and compare various alternatives. Although we developed the programmatic framework of the 2006 Plan using the most comprehensive scientific information, this information may still not be as comprehensive as some would desire. Although it is always possible to obtain more information prior to making any decision, I am confident that the information we have used is of high quality and sufficient to make a fully informed decision.

In summary, the 2006 Plan establishes a programmatic framework for future multiple-use management. The FEIS discloses the differences in the anticipated environmental consequences of the alternatives and how each alternative responds to issues and concerns. The FEIS discusses broad environmental effects and establishes a useful reference and framework to which we will tier future analyses of site-specific project proposals. The level of effects disclosure in the FEIS is commensurate with the nature of the programmatic decision; detailed analysis of specific environmental effects is not required when the agency has not proposed specific projects that may cause effects. Approval of this Plan, of itself, makes no changes on the ground, nor does it dictate that any particular site-specific action must occur. It simply provides the framework for future decision making.

A. The Forest

The Forest is located in the 11 southernmost counties of Illinois, between the Mississippi and Ohio Rivers. The state's only national forest, it is valued for its natural beauty and unique character. While the vast Illinois landscape to the north is flat to gently rolling cropland, the Forest offers striking contrast in a setting of hills, rock formations and outstanding bluffs and streams, as well as a broad diversity of plants and animals. The

Forest boundary takes in about 284,600 acres of National Forest System lands; it is the largest publicly owned area in Illinois.

The Forest was created about 70 years ago when much of the area was exhausted, abandoned farmland or forestland that had been logged many times with no attempt at reforestation. In August, 1933 the National Forest Reservations Committee approved the establishment of two purchase units in southern Illinois. On September 6, 1939 President Franklin D. Roosevelt proclaimed these purchase units the Shawnee National Forest.

The Forest of today is a tribute to the early and visionary efforts of the citizens of Illinois, who recognized the special values of this forested land, as well as the need to assure protection of the natural resources through wise conservation practices. Additional land was acquired over time, eroded fields and cutover areas reforested, erosion checked, water quality improved, timber managed, and the forest protected from wildfires. The Forest has been managed for over 70 years under the multiple-use concept that ensures the conservation and wise use of its many resources. The Forest is an example of successful natural resource conservation for future generations. This has been, and will continue to be, the focus of management on the Forest

Over 5.6 million people live within 100 miles of the Forest—less than a two-hour drive. Nearly 71 million people—one-quarter of the national population—live within 400 miles—a day's drive. Major cities within a day's drive include Chicago, Indianapolis, Louisville, Nashville, Memphis, St. Louis and Kansas City.

The Forest is located at the southern edge of the glaciated area, at the integration-point of five regional ecotypes, resulting in a broad diversity of plants and animals and unique geological features. The Forest provides diverse habitats for endangered, threatened and sensitive species, as well as for game and non-game species. The Oakwood Bottoms Greentree Reservoir and Mississippi River floodplains provide important wetland habitats for migrating waterfowl in the Mississippi flyway.

Wildlife and plant life abound on the Forest. About 500 vertebrate animal species are represented, with over 237 species of birds, 47 reptiles, 32 amphibians and 112 fish. These include common species, such as whitetail deer, wild turkey, squirrel and northern bobwhite, in addition to rare species found in few other places in Illinois. The variation of plant life on the Forest seems limitless, and botanists have long recognized the Forest for its diversity of plant communities. The Forest protects, and will continue to protect, remnants of 25 rare natural communities in 80 designated natural areas.

The Forest contains some of the largest and most diverse blocks of mature hardwood forest, forest-interior habitat, bottomland forest and openland habitats in Illinois. Most of the Forest is comprised of native oaks and hickories that provide excellent wildlife habitat. These habitats for both animals and plants depend on the protection offered by wise management of the Forest. Non-native pines were planted in the early years of the Forest to control erosion on abandoned farm fields, and pine plantations are now common, especially on the east side of the Forest.

The Forest is characterized by an abundance of natural geologic features. The bluff regions of the Mississippi and Ohio Rivers have a broken topography dominated by high cliffs and

floodplains. Other features include natural bridges and stone sculptures, such as those found at the Garden of the Gods. The geologic features of the area have long been recognized for their scenic beauty and are a prized natural resource. The geologic processes that formed the landscape have also created various mineral resources in the region, including fluorspar, coal, oil, natural gas, tripoli, refractory clay, sand, gravel and barite.

The highest quality, most scenic and most ecologically diverse streams in southern Illinois are in watersheds with a high percentage of national forest ownership. The Forest includes an abundance of wetlands, floodplains and riparian areas that enhance water quality. The Forest also contains many visually attractive hydrologic features like waterfalls, lakes, ponds and rocky streams.

The Forest has a rich cultural history. Native Americans used the area's resources for over 12,000 years. French and English explorers and settlers played an important role in the early European settlement of the area. Over 2,755 heritage resource sites have been identified on the Forest. Inventory and protection of these sites is an important part of Forest management.

The Forest offers open space for public access and many recreational opportunities, providing scenic landscapes, fresh air, natural beauty, quiet and peaceful settings, interesting historic sites, educational and research opportunities and many other attractions. Public recreational uses of the Forest focus on fishing, hunting, camping, horseback riding, hiking and sightseeing. Recreational opportunities are a major attraction for tourism and enhance the local economy. Unique opportunities offered on the Forest include big-game and small-game hunting, fishing, long-distance hiking or horseback riding, bird watching, rock climbing and rappelling, beach recreation and motoring on two national scenic byways, the Ohio River and Great River Roads.

The Forest contains six candidate wild and scenic rivers and seven Congressionally designated wildernesses for backcountry recreation, the largest acreages of wilderness in Illinois. Recreational uses have become increasingly important as the nearby urban population seeks renewal, relaxation and physical challenge in the outdoor environment. The diverse setting of forests, hills and streams attracts thousands of recreational visitors each year. The Forest provides and manages campgrounds, picnic areas, boat-launching sites and trails for the use and enjoyment of visitors.

Timber harvesting is available to thin dense stands of trees, to create the environmental conditions necessary for the continued regeneration of oak and hickory forests, and to provide essential habitat for wildlife. This involves the protection and utilization of the renewable timber resource to provide a sustained yield of wood to meet the present and future needs of society. Reforestation is a continuing element of the management of the timber resource. The combination of all forest vegetation management practices ensures a forest with a diversity of tree species, from seedlings to large, old-growth trees, while maintaining recreational opportunities and the scenic qualities of the landscape.

B. A Vision for the Future

The mission of the Forest Service is to sustain the health, diversity and productivity of the nation's forests and grasslands in order to meet the needs of present and future generations. This mission requires a balanced consideration of the use of all Forest resources. It requires the application of scientific knowledge, conservation leadership and prudent management in partnership with other government agencies and private organizations and individuals.

Through implementation of the 2006 Plan, the Forest will be able to provide the public a variety of resource uses and recreational experiences and services, while protecting physical and biological resources. The Forest will remain biologically diverse, serving as a model for the large-scale ecosystem conservation needed to establish an interconnected network of wildlands throughout the Midwest. It will offer a diversity of forest, openland, wetland and aquatic habitats that support sustainable populations of native plants and animals, including endangered, threatened and sensitive species. The Forest will continue to acquire lands to enhance ecosystem health and sustainability, maintain biodiversity, restore wetlands and floodplains and improve recreational opportunities.

The Forest will be a consolidation of large, unfragmented blocks of healthy, native, hardwood-forest ecosystems presenting the visitor with a mosaic of hills and streams dominated by stands of hardwoods. Interspersed openlands will add to the diversity of wildlife habitat and provide recreational opportunities and broad viewsheds. The amount of hardwood forest will increase as many of the existing pine plantations are harvested and reforested to native hardwoods. However, even with the best of efforts to maintain as much of the oak-hickory forest-type as possible, it is likely that natural succession to maple-beech will continue on many areas of the Forest due to the lack of disturbance where vegetation is not actively managed. Oak-hickory forest will be replaced by the more shade-tolerant maple-beech forest, especially on deeper soils and more productive sites.

The oak-hickory forest will be maintained where there is active vegetation management for oaks and hickories, and persist on the shallow soils and poorer sites. Vegetation management activities, including landscape-scale prescribed burning, timber harvesting, timber-stand improvement and openlands management will be closely coordinated with wildlife habitat needs and recreation and scenery-management objectives. Management of much of the Forest will result in larger and older trees for wildlife habitat and visual quality.

Habitat conditions for game and non-game wildlife species will be enhanced, and wildlife populations will increase on the Forest. Special emphasis will continue in the management and protection of the many at-risk plants and animals on the Forest. Cooperative efforts with other government agencies and private organizations in fisheries and wildlife management will continue.

A wide variety of recreational opportunities will be provided, ranging from highly developed recreational sites to semi-primitive motorized and non-motorized areas that provide a feeling of isolation from most of the sights and sounds of human activity. A roaded-natural recreational setting will be featured on most of the Forest to provide a mix of non-motorized and motorized recreational opportunities.

Opportunities for dispersed recreational uses will be emphasized. These include hunting, fishing, hiking, horseback riding, remote camping and the observation of natural features. A well designed, maintained, marked and mapped trail system will be developed to enhance the recreational visitors' experience and to provide outstanding hiking and horseback-riding opportunities. Recreational operations and maintenance will provide for the protection of public health and safety and the maintenance of investments, especially developed recreational sites.

Wilderness areas will be managed to provide backcountry recreational opportunities in a semi-primitive, non-motorized setting. These are places where ecological succession is allowed to proceed freely, and that serve as ecological reference points for the rest of the Forest. Mature forests with shade-tolerant vegetation, and wildlife associated with forest-interior conditions, will likely dominate. Past human disturbances are becoming less evident. Trails and primitive recreational facilities will be provided when required to enhance the wilderness recreational experience or to protect the wilderness character.

Segments of six streams are eligible for inclusion in the national wild and scenic rivers system. A variety of land conditions may be observed along these streams. The free-flowing condition, water quality and outstandingly remarkable values that qualified these stream segments for further study will be protected. Recreational settings and opportunities vary by stream, but are primarily roaded-natural, with a mix of non-motorized and motorized uses.

Ninety areas on the Forest are managed to preserve and enhance their special features for future generations. These include 4 heritage-resource sites listed on the national register of historic places, 4 research areas, 14 botanical areas, 58 ecological areas, 2 geological areas, 8 zoological areas and 10 research natural areas.

Achieving this vision for the 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.

II. DECISION AND RATIONALE

A. NEED FOR CHANGE

The original Plan for the Forest was approved in 1986 and, following a 1988 administrative appeal settlement, was replaced by a significant amendment approved on May 14, 1992. This 1992 Plan was challenged in federal district court. The court rejected some of the plaintiffs' claims, but upheld others. In 1996, the district court issued injunctive relief that precluded commercial hardwood timber harvest, ATV/OHM trail designation, and oil and gas development pending further environmental analysis. The district court's decision was affirmed by the Seventh Circuit Court. Our analysis was informed by the court orders, which also formed an important part of our need-for-change analysis.

In addition to the court ruling on the 1992 Plan, the need to revise the Plan became apparent through a combination of factors, including monitoring, new scientific information, changes in agency policies and priorities, changing conditions of the land and changing public demands. In consideration of these factors, a comprehensive assessment of

the need for change was completed in 2002, and the findings became a focus of the Notice of Intent to revise the 1992 Forest Plan, published on March 20, 2002.

The need-for-change assessment and the comments received on the Notice of Intent led to the development of issues and revision topics (see FEIS Chapter 1). Based on public input, seven revision topics address more than 30 specific items identified as needs for change:

- Watershed Resources
- Biological Diversity, and Wildlife and Aquatic Habitat
- Recreation Management
- Forest Ecosystem Health and Sustainability
- Mineral Resources
- Wilderness, Roadless Areas, Wild and Scenic Rivers
- Land-Ownership Adjustment

We reviewed all of the 1992 Forest Plan, many aspects of which were working well and required no change. Our 2006 Plan analysis did not ignore this, and we considered public and internal comments regarding these aspects of the Plan. Those elements of the 1992 Plan not requiring change are incorporated into the 2006 Plan.

B. DECISION SUMMARY AND RATIONALE

I am selecting Alternative 2, as documented in the FEIS, to be the 2006 Forest Plan. I choose Alternative 2 because, in my judgment, it maximizes benefits to the public by:

- Contributing to the protection of watershed conditions necessary to support ecological functions in riparian and aquatic ecosystems,
- Restoring, enhancing, or maintaining ecological sustainability and biological diversity, and contributing to species viability on the Forest,
- Increasing the Forest's capability to provide diverse, high-quality outdoor recreational opportunities,
- Contributing to the economic and social needs of people, cultures, and local communities,
- Offering sustainable and predictable levels of products and services, and
- Providing clear direction to assist managers in making project-level decisions implementing the broader social, economic and ecological goals of this Plan.

I used five criteria in evaluating the alternatives:

Criterion 1 – The extent to which the alternative improves and protects watershed conditions to provide water quality and quantity, and the soil productivity necessary to support ecological functions in riparian and aquatic areas.

Criterion 2 – The extent to which the alternative contributes to restoring or maintaining ecological sustainability, including the ecological conditions required for ecosystem and species diversity, to sustain viable populations of native and desired non-native species, and for the recovery of threatened and endangered species.

Criterion 3 – The extent to which, and the timeframe within which, the alternative increases the amount of forest restored to or maintained in a healthy condition, with reduced risk of damage from fires, insects, pathogens and non-native invasive species.

Criterion 4 – The extent to which the alternative provides opportunities for diverse, high-quality recreation.

Criterion 5 – The extent to which the alternative improves the capability of the Forest to provide desired sustainable levels of uses, values, products and services.

Key indicators of these criteria are displayed and discussed in Chapter 2 of the FEIS. Further information about how I applied these criteria is in the section, “Alternatives Considered in Detail,” beginning on page 30 of this ROD.

My decision also considered how the 2006 Plan responds to federal and state agency and public comments, internal management concerns and national direction and policy. My decision to adopt the management direction in the 2006 Plan was made in consideration of the analysis of effects in the FEIS and the Biological Opinion of the US 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 Forest. It does not apply to any other federal, state, county, municipal or private lands, although, in making my decision, I considered how likely past, current and future management of other ownerships might contribute to the overall environmental effects resulting from the management of the Forest.

1. Watershed Resources

The Forest Service is committed to protecting and improving water quality. Indeed, watershed protection was one of the primary reasons for establishment of the National Forest System. Lands adjacent to streams and rivers are rich in biological diversity and especially important for recreation and wildlife. Opportunities for improving watershed conditions over what was prescribed in the 1992 Plan (FEIS Alternative 1) include new management area prescriptions, revision of Forest-wide riparian filter-strip standards and guidelines, and incorporation of the state’s best management practices to guide Forest management. These are important to watershed resource protection and, therefore, were applied to Alternatives 2, 3 and 4. The 2006 Forest Plan establishes a new management prescription for water-supply watersheds with additional emphasis on protecting soils and water quality in these areas. It also establishes a new management prescription for the Mississippi and Ohio Rivers floodplains. It emphasizes wetland and floodplain management and the establishment of native bottomland forests. These changes improve and enhance watershed protection.

Forest-wide standards and guidelines for the management of riparian ecosystems and streamside filter strips have been revised to incorporate the state’s best management practices and new scientific information. This direction is based on the best available science and information that indicates these measures will effectively protect water quality.

Within these areas, activities with the potential to degrade water quality, such as timber harvest and road or trail construction, will be required to meet restrictions on bare-soil exposure. Bare-soil exposure limits apply to ground-disturbing activities within 100 to 300 feet of perennial streams (depending on slope), 50 to 150 feet of intermittent streams (depending on slope) and 25 feet of ephemeral streams. Although designed to protect water quality, these restrictions will not interfere unduly with managed recreational use. Forest visitors will experience a natural setting in wetlands and floodplains and near perennial and intermittent streams.

I am basing my decision upon the most currently available knowledge of the important functions of watersheds and riparian areas. It responds to the Forest Service's national goal of improving watershed conditions, as stated in the Forest Service Strategic Plan for Fiscal Years 2004–2008. The 2006 Plan's direction will help ensure that water quality and riparian ecosystems are maintained or improved.

2. Biological Diversity and Wildlife and Aquatic Habitat

Almost every aspect of Forest management, including no management at all, has some effect on plant and animal community diversity. The plant and animal communities on the Forest are always changing, even if we take no action to care for or manage the Forest. Diversity and wildlife habitat would continue to change through natural processes, resulting in future conditions that may not be as ecologically desirable as what could be achieved through future project decision-making consistent with this Plan's direction. Through prudent management of the Forest's resources, we will influence the natural processes to ensure that a vigorous forest ecosystem with robust diversity will be here for future generations. Prudent management may include the use of fire, active manipulation of forest vegetation, maintenance of openlands and the protection of wilderness and 80 ecologically significant areas. Lack of active management (e.g., prescribed fire) can affect diversity and wildlife habitat by enabling natural processes to convert much of the oak-hickory forest to the more shade-tolerant maple and beech.

I realize that there is disagreement regarding the level of management appropriate for the Forest. Some think there should be minimal or no active vegetation management, that management activities themselves will decrease plant and animal community diversity. Many are concerned about the steady conversion of the oak-hickory forest to the maple-beech-type because of the predictable, scientifically demonstrated adverse effects on diversity, while some are not convinced that conversion to maple-beech will have any effects on diversity. Others believe that the Forest will provide diversity of plant and animal communities based on the suitability and capability of the land to meet overall multiple-use objectives, if it is managed prudently, with the active vegetation-manipulation required for maintenance of the oak-hickory forest-type, wildlife habitat, openlands and the unique biological features of natural areas.

While the benefits of management versus no management can be debated, the Forest Service in Alternative 2 has set a science-based, balanced course guided by stewardship of the integrity of the forest ecosystem. The Forest will continue to be a composite of plant and wildlife communities, its diversity supported by the oak-hickory forest and large, unfragmented blocks of hardwood forest. The oaks and hickories will continue to provide the hard mast—acorns and nuts—that are critical food for many wildlife species, and the large,

unfragmented blocks of hardwood will continue to provide essential habitat for many Neotropical migrant birds and other forest-interior species. In order to maintain a portion of what remains of the oak-hickory forest-type that dominated the regional landscape under the Native Americans and presently covers over two-thirds of the Forest, vegetation management and disturbance is required. Disturbance creates the ecological conditions necessary to regenerate oaks and hickories, maintain certain species within natural communities, and slow succession to the shade-tolerant maple-beech forest-type. Large, unfragmented blocks of oak-hickory will be maintained throughout the Forest to provide for diversity in a multiple-use context.

Remnants of once-extensive hill prairies, glades and savannas will be restored. Natural areas will continue to preserve the unique biological features for which they were established and enhance the overall diversity of the Forest. Populations of species federally-listed as endangered or threatened, listed as sensitive by the Regional Forester, and whose viability is at risk will be maintained or improved through protection and management of their special habitat requirements. The best scientific information indicates that, in some instances, disturbance-causing activities are required to maintain or improve habitats of at-risk species.

In some parts of the Forest, large openlands, wildlife openings and oldfields will be maintained, although the 2006 Plan proposes no new wildlife openings. These openlands will assist in providing for wildlife populations and the diversity of plants and animals on the Forest, including game species such as deer and turkey, as well as non-game species such as yellow-breasted chat. The Forest maintains some existing large openland habitat, as it is important to the viability of several at-risk wildlife populations, such as Henslow's sparrow, northern bobwhite and American woodcock. Wildlife openings have been maintained on the Forest for decades in partnership with the Illinois Department of Natural Resources, Quail Unlimited and the National Wild Turkey Federation, and benefit dispersed recreation through improved hunting and wildlife-viewing opportunities.

This decision includes the selection of five management indicator species (MIS) as a focal point for wildlife population monitoring: worm-eating warbler, scarlet tanager, wood thrush, yellow-breasted chat and northern bobwhite. These species are already associated with credible monitoring protocol and, by tracking changes in either the habitats created for these species or estimating specific population changes, we will be able to better understand the effects of implementing projects under this Plan and make appropriate changes where needed.

The analysis and rationale for the selection of these MIS is described in Appendix F to the FEIS. We listened to the public, analyzed the best available science and, based on our experience under the 1992 Plan, selected MIS in accordance with the discretion afforded by 36 CFR 219.19(a)(1). The monitoring program in the 2006 Plan includes more than MIS species only. Other focal points for monitoring biological diversity include threatened, endangered and at-risk species, rare ecosystems or communities, terrestrial and aquatic habitat conditions, invasive species and species of recreational interest. MIS selection and monitoring is only one part of a comprehensive strategy for adaptive management. Monitoring of other plant and wildlife species (e.g., Mead's milkweed and Indiana bat) is ongoing and will continue.

The 2006 Plan includes objectives related to active vegetation management (including timber harvest, prescribed fire and timber-stand improvement) in order to move toward our goal of maintaining and restoring oak-hickory forests and other natural communities. I base my decision on a wealth of scientific information about ecological processes and functions, as well as the most current information about the natural communities of Illinois. The trade-offs between management and no management are set forth in the FEIS analysis of alternatives. Alternative 2 provides for diversity of plant and animal communities in a multiple-use context. There has been minimal active vegetation management over the past decade. Another decade of no management (as some desire) will have unacceptable effects on NFMA diversity. My decision responds to the Healthy Forests Restoration Act of 2003 by managing for desired conditions typical of the fire-adapted ecosystems in southern Illinois.

Based on the best science available, including the *Hoosier-Shawnee Ecological Assessment*, the direction in the 2006 Plan is expected to result in ecologically favorable changes in the vegetation patterns and species composition on the Forest over time. The result will be vegetative communities that are healthy, sustainable, diverse, and capable of maintaining or improving the viability of plant and animal populations most at risk, including Mead's milkweed, Henslow's sparrow, loggerhead shrike, redheaded woodpecker, American woodcock, Swainson's warbler and eastern woodrat. The Plan addresses the desire for large, old-growth forests, and long-term (150-year) projections indicate that over two-thirds of the Forest will be large trees (70 or more years old), with over half of these old growth (120 or more years). The rest of the Forest will be comprised of trees less than 70 years old or openland habitats.

The FEIS analysis confirms that the maintenance of viable populations of at-risk species requires a variety of habitats: mature hardwood forest, mid-successional hardwood forest, early-successional habitat, openlands, and healthy aquatic and riparian habitats. Recognizing the fact that large blocks of unfragmented forest and openlands are limited within this ecoregion, the Central Hardwoods Bird Conservation Joint Venture, a coalition of various state and federal agencies and environmental and conservation groups, has identified several areas on the Forest with the potential to provide this important habitat. The direction of the 2006 Plan ensures the maintenance of these various, essential habitats.

Oak-hickory forests have dominated the region for thousands of years, largely because of the frequent use of fire by Native Americans. Recent forest inventory and analysis reveal that the overall proportion of oak and hickory species is declining on the Forest and throughout Illinois, as compared to more fire-intolerant and/or shade-tolerant species. These species, particularly sugar maple and American beech, are replacing the oaks. The virtual elimination of fire from eastern forests since the 1920's is a key factor in the decline of oaks. Because the oak-hickory forest-type provides key habitat and ecological functions for a broad array of wildlife, including many non-game species, the 2006 Plan provides a programmatic framework that allows an increase in the use of prescribed fire for restoration of the oak-hickory ecosystem.

Conservation and recovery of the endangered Indiana bat was a major component of Forest Plan revision. Some are concerned that any vegetation management, prescribed fire and other management activities could somehow harm the Indiana bat. Based on the analysis of the environmental effects of the selected alternative, I am confident that implementation of

the 2006 Forest Plan will have a generally beneficial effect on Indiana bat habitat. The Forest considered plan direction on other national forests and the range-wide status of the Indiana bat populations. The US Fish and Wildlife Service biological opinion of the 2006 Plan indicates that the Plan would not jeopardize the continued existence of the species, largely because the ecological conditions envisioned in the Plan and supported by its standards and guidelines will protect the bats and their habitat.

3. Recreation Management

The Forest is defined not only by its physical components—water, soil, rocks, plants and animals—but also by its non-physical aspects—recreational opportunities and the experiences of wilderness, heritage sites, remnant landscapes, geological formations, vistas, trails and roads. The landscape of the Forest attracts thousands of people each year seeking many types of recreation. Some spend their entire visit at a campground; some seek the solitude and challenge of wilderness; others hike, hunt, fish, ride horses, or drive the Forest's roads to view the scenery.

Many want the Forest to continue to be an attractive place to visit and to be available for as many types of recreation as possible. Most want well-maintained trails, roads, campgrounds and picnic areas, as these facilities make a visit to the Forest more enjoyable. There are others, however, who want only undeveloped environments for recreation. They are concerned that management might destroy the beauty of the Forest. The people of Illinois and the region have used the Forest for generations and will continue to do so. Our management of the Forest will continue to be sensitive to the environment while responding to the needs of our visitors.

We listened carefully to all expressions of interest in the development of the 2006 Forest Plan. Under the 2006 Plan, the Forest will be a place everyone can enjoy. There will be campgrounds and picnic areas offering camping, swimming and socializing. Others will visit to escape the commotion of towns and cities, to enjoy nature and the quietness of a natural environment. During the life of the Plan, one of the main emphases for recreation management will be the establishment of an adequate, well-marked, mapped and maintained trail system through site-specific decision-making. A system of roads and trails will allow visitors to hike, ride horses and bicycles, and drive through many parts of the Forest with licensed vehicles.

Two popular forms of recreational use are desired on the Forest: horseback riding and ATV/OHM use. Horseback riding on the Forest has increased notably during the last ten years, stimulating passionate discussion over the extent of resource damage attributable to equestrian use, and where, when and how equestrian use should be allowed. While all generally agree on the need for an adequate, well-marked, mapped and maintained trail system on the Forest, there is disagreement over what constitutes an adequate trail system and where appropriate locations are. There is also disagreement as to whether equestrian use should be restricted to designated system trails or continue to be allowed on user-developed trails and cross-country. Following programmatic analysis fully informed by the lessons learned from seven years of litigation in the case of *Glisson vs. Forest Service*, monitoring data and the recently completed Trails Designation Project FEIS, the 2006 Plan will restrict equestrian use to designated system trails as trails are designated on a site-specific basis. The

recently completed FEIS for the Trails Designation Project for the Lusk Creek, Big Creek, Big Grand Pierre and Hayes Creek watersheds exemplifies this site-specific analysis.

Implementation of the 2006 Forest Plan's direction regarding the restriction of equestrian use to designated system trails after further site-specific analysis is anticipated to require much of the Forest's recreation budget during the life of the Plan. Site-specific analysis will consider trail designation, construction, improvement and maintenance, with special emphasis on trails within wilderness and the River-to-River Trail. The 2006 Plan envisions a modest increase in the programmatic objectives for the construction and maintenance of hiking, equestrian and biking trails, with a potential of up to 700 miles of multiple-use trails. This would involve about a 12-percent increase in the amount of equestrian system trails over what was proposed in the 1992 Plan, and more than a 100-percent increase over what is presently designated as part of the Forest trail system. The locations of new system trails and non-system trails to be closed will be determined through site-specific environmental analyses and decision-making. Likewise, new recreational sites, such as campgrounds, picnic grounds and boat launches, will be considered, while others may be closed.

There is disagreement as to whether the use of ATV/OHMs should be allowed. Some believe that ATV/OHM use has no more effects than equestrian use and should be allowed anywhere horses are allowed. Others believe that ATV/OHM use has caused resource damage and user conflicts in the past, but could be an important recreational use if carefully managed. Still others see ATV/OHM use as totally incompatible with environmental protection and other recreational uses. After programmatic analysis of current unauthorized use, use on other national forests, the prohibition of use on state lands, use on private ATV riding areas and the costs and benefits of potential ATV/OHM use, it is clear that comprehensively addressing the anticipated adverse effects on safety, the environment and Forest resources from the use of these vehicles, and prevention of unauthorized use, would require an investment of funds and staffing for program analysis and development that would preclude virtually any other recreation-program activity. Such a resource investment in the foreseeable future to establish an essentially new recreational use of the Forest far outweighs any benefits of establishing this recreational activity. Because of this, the 2006 Forest Plan adopts the prohibition of ATV/OHM use from the 1995 district court injunction and continues the 1997 Forest Supervisor decision and closure order prohibiting ATV/OHM use on the Forest, except as allowed for administrative use, by emergency vehicles and under permit.

The Forest's ability to provide semi-primitive, non-motorized recreational experiences is limited by its scattered ownership pattern and the dense network of roads under various jurisdictions within the Forest's proclamation boundary. Much of the road development necessary for management of the Forest has already occurred. The 2006 Plan focuses on the maintenance of established roads and the decommissioning of unused roads, rather than on the development of new roads, although new roads may be built if required to facilitate management. Nevertheless, I find that it is appropriate to allocate parts of the Forest to a management regimen under which natural processes predominate, management is minimal and opportunities for semi-primitive, non-motorized recreational experiences are provided. In addition to over 28,000 acres of Congressionally designated wilderness, a new management prescription for non-motorized recreational areas was developed to provide additional non-motorized recreational opportunities in the Ripple Hollow and Camp

Hutchins areas. The 2006 Plan allocates over 12 percent of the Forest to non-motorized recreation.

After considering a broad range of alternatives and the advice and comment of federal and state agencies, as well as the public, I have concluded that the selected alternative provides the best balance of opportunities to meet widely divergent public expectations regarding recreation on the Forest, and responds to one of the major threats to national forests, unmanaged recreation. Given the highly mixed ownership pattern in and around the Forest, the 2006 Forest Plan will be in a position to make excellent progress in the provision of backcountry and semi-primitive recreational opportunities, while allowing an increase of designated trail miles for bicyclist and equestrian use.

4. Forest Ecosystem Health and Sustainability

The 2006 Plan provides direction for the long-term sustainability and health of forest ecosystems. It provides a programmatic framework for the management of vegetation to move toward ecological conditions more similar to those that historically occurred and those that provide the habitat needed by wildlife residing on the forest. The 2006 Plan does not contain any site-specific timber-harvest proposals, or authorize any on-the-ground action. Development of future projects consistent with the 2006 Plan will move the Forest towards these desired conditions.

The Forest is one of the few public areas in Illinois with large, contiguous blocks of diverse forest, grasslands and shrublands that can be managed on a sustainable basis, protecting native plant communities and providing habitat for native or desirable non-native species. The Forest contains the largest blocks of oak-hickory forest in the state, although much of this forest-type is converting to maple-beech, mainly due to aggressive fire suppression for the past 50 years and reduced disturbance from timber harvesting for the last 15 years.

Pine trees are not native to southern Illinois, except in a small area of the LaRue Pine Hills Ecological Area. Most of the non-native pines on the Forest were planted in the 1930's and 1940's to control erosion on depleted farm fields and about 45,000 acres, 16 percent of the Forest, are now in non-native pine plantations that are not a component of the native hardwood forest ecosystem. Reforestation of these plantations to native hardwoods will enhance the diversity of the forest ecosystem. Many people advocate the harvest of pines to accelerate conversion to native hardwoods. Others believe that the pines should be left alone.

I realize there is disagreement about whether any trees should be harvested from the Forest. Some believe that timber harvesting, in conjunction with prescribed burning and other vegetation management, is essential to maintain and regenerate the oak-hickory forest. Some promote establishing a balanced age-class distribution through timber harvesting, while others believe forest composition and age classes should be based on pre-settlement conditions and the natural range of variability.

Others want the Forest to cease timber harvesting and associated road building, believing that harvest always harms the forest and that natural processes, unaltered by humans, are the best way to provide old-growth hardwood forests. They expressed concern about below-cost timber sales and the effects of timber harvest on wildlife, water quality, visual quality and recreation. Many called for an end to all commercial timber harvest on the Forest and

said that they would prefer to see natural succession proceed unhindered to determine future forest composition.

Based upon the experience of other forests and the best available science concerning southern Illinois forests, a combination of vegetation management tools and harvest methods will be available under the 2006 Plan to maintain oak-hickory forest and other natural communities. Prescribed burns, tree planting, timber harvest and timber-stand improvement will be proposed as future site-specific actions to maintain oak-hickory forest where oaks and hickories have grown historically. The availability of these practices will allow the Forest to retain a significant portion of the oak-hickory forest on the landscape and continue to provide the wildlife and plant diversity now characteristic of the Forest.

I understand that some prefer there be no active management of the Forest; but rather, that natural succession alone be allowed to determine the Forest's future composition. However, active management allows us to determine the appearance of our environment and to provide desirable benefits, such as early-successional and oak-hickory forests for wildlife habitat, increasingly rare natural ecosystems such as remnant glades and barrens, and forest settings desired for recreation. The relatively small volume of timber production anticipated under the 2006 Plan, primarily pulpwood and small-diameter sawtimber, is not going to greatly influence the timber industry in this area, an industry that has survived the past 20 years without national forest timber.

Although timber production for the sole purpose of manufacturing timber products is not a goal of the 2006 Plan, silvicultural treatments, like timber harvesting, prescribed burning and timber-stand improvement, can play a key role in managing vegetation to maintain or improve wildlife habitat, a diverse forest ecosystem and retaining forest health over time. The economic benefits that result from these treatments are not solely in the monetary value of the timber sold, processed and used by the public, but also in the intangible values related to the maintenance and enhancement of the Forest's overall setting and character that attracts visitors from all parts of the world. I am selecting an alternative that calls for active management of the Forest's ecosystems because this approach will benefit the social and economic fabric of the area, as well as the Forest's variety of ecosystems.

The overarching principle guiding our proposal of future timber harvest is the necessity to make vegetative changes, that is, to remove trees from timber stands in order to admit more light and enable the regeneration and growth of new, young trees. This will increase diversity while, at the same time, harvest a byproduct, marketable trees with value to society. Commercial timber harvest is an efficient way to improve ecological conditions while at the same time providing the renewable forest-resource products needed and utilized by the public. I believe that our approach reflects a good stewardship ethic for our natural resources.

The shelterwood timber-harvest method analyzed in the 2006 Plan, when conducted in compliance with Forest-wide and management area standards and guidelines, can provide timber products while improving the health of the forest and maintaining ecological integrity, vegetative diversity, visual quality and recreational opportunities. With the careful design of openings created by timber harvesting and the use of prescribed fire, the Forest will contain more oak and hickory in the future than if no management was undertaken. Other harvest methods may be used as needed, depending upon local conditions. Determination of harvest method is a site-specific decision; the 2006 Plan does not identify or choose any particular

harvest method. Based on analysis of scientific information, prescribed burning may be used on about 8,400 acres annually, similar to historical fire-frequencies, to create conditions in the forest understory favorable to oak-hickory regeneration and to aid in controlling competing vegetation such as beech and maple.

The 2006 Plan classifies about 40 percent of the Forest as suitable for timber production. The remaining 60 percent will be managed for objectives other than scheduled timber harvest. On average, less than one-half of one percent of the Forest, about 1,100 acres, is administratively available for scheduled timber harvest annually during the next ten years.

In the first decade of Plan implementation, the potential estimated hardwood timber harvest is about 1.1 million board feet (MMBF) per year, and the conversion of pine plantations to hardwoods could result in the offering of about 3.6 MMBF per year. Therefore, the 2006 Forest Plan sets an average annual allowable sale quantity (ASQ) of 4.7 MMBF per year during the next ten years. The ASQ is the upper limit of volume that may be harvested from the suitable timber base within the decade. Actual harvest may be more or less than the average annual 4.7 MMBF, depending on annual budgets and site-specific issues encountered during project development. Some additional timber could be harvested from lands that are considered unsuitable for timber resource management when needed to achieve other management objectives. This could amount to an estimated 0.8 MMBF per year for the next ten years.

The 2006 Plan recognizes the serious threat to forest health from non-native invasive species and provides a programmatic framework for addressing this challenge. Relying principally on the maintenance of healthy ecosystems and their resilience to resist the threat posed by non-native invasive species, the Plan nonetheless allows the aggressive suppression of species such as kudzu and garlic mustard, which are not native to southern Illinois, extremely aggressive in their spread, and pose immediate threats to at-risk native plants and ecosystems. The 2006 Plan does not contain any site-specific proposals regarding non-native species.

I have noted concerns over air quality related to our proposal to increase prescribed burning. My review of the analysis assures me that careful, site-specific planning and execution will minimize the effects of smoke and other emissions. The 2006 Plan contemplates an increase in the use of prescribed fire, but does not authorize or make site-specific decisions regarding burning. The Forest Supervisor will continue to work closely with state and other federal agencies to ensure that future project proposals meet applicable air-quality standards.

In support of our adaptive-management approach, the 2006 Plan provides flexible, programmatic direction for selecting appropriate on-the-ground vegetation-management actions that can achieve desired conditions on the landscape. The Plan also identifies the proportion of probable methods of timber harvest (16 U.S.C. 1604[f][2]), but does not decide when, where, or how timber harvest will be done in any particular location. The final determination of the appropriateness of even-aged management is a site-specific finding that is better made at the project level using site-specific resource information.

5. Minerals Resources

Federal law allows for and encourages minerals development on National Forest System lands. Recently, the Energy Policy Act of 2005 stated again that domestic energy production from both renewable and non-renewable sources is of national importance. Beneath the Forest are minerals owned by the federal government, private citizens and corporations. These minerals could provide important resources for industry and the national economy, as well as income for local governments, citizens and the federal treasury. The FEIS includes a broad and programmatic analysis of the potential environmental effects of minerals development. It is our intent that the FEIS analysis provide a starting point for the subsequent, detailed, project-level analysis and disclosure that will occur if any specific minerals-development activity is proposed.

With this ROD, I am making two determinations regarding the exploration and development of federally owned oil and gas resources:

- The identification of those federally owned oil and gas rights within the Forest that are administratively available for future leasing (36 CFR 228.102[d]).
- The identification of *minimum* lease terms and stipulations that will be applicable to tracts of federally owned minerals if the Forest Service should consent to lease at some future date.

Subsequent to the decision for the revised plan, and only if there is an expression of interest forwarded by the Bureau of Land management (BLM), the Forest Service will determine whether or not to consent to lease specific lands (36 CFR 228.102[e]) and authorize the BLM to proceed with an offer for lease on specific tracts.

With the 2006 Plan, no final agency decision is made to consent to lease federal oil and gas resources. My decision to make some lands within the Forest administratively available for oil and gas leasing does not authorize any surface-disturbing activities. If lands are leased for oil and gas production, well in advance of the execution of surface-disturbing activities associated with the exercise of rights under such a lease, the lessee/operator must receive approval of an Application for Permit to Drill (APD) from the BLM. Prior to BLM approval of the APD, the Forest Service must approve a very detailed Surface Use Plan of Operations. The approval process for surface activities related to a lease includes appropriate site-specific environmental analysis in compliance with NEPA (36 CFR 228.107).

With the 2006 Plan, no final agency decision is made to consent to lease federal oil and gas resources. Rather, the Plan identifies those areas that are “administratively available” for oil/gas exploration and development, approximately 256,500 acres of the federal mineral estate. Any leasing of these areas is subject to varying levels of restriction, referred to as stipulations and notifications. About 61 percent of the federal mineral estate is available for oil and gas exploration and development generally under standard lease terms; about 21 percent is available subject to no surface-occupancy. The no surface-occupancy (NSO) requirement is the most restrictive stipulation specified in the Plan for available lands. NSO prohibits the use or occupancy of the land surface for oil/gas exploration and development. Areas subject to NSO requirements include: Cave Valley, developed recreational areas, natural areas, significant heritage resource sites, candidate wild and scenic river corridors and stream-side filter strips and riparian areas.

The selected alternative includes other stipulations, including time-limitations that would prohibit activities during some part of the year to avoid disruptions of wildlife or recreational use. Special stipulations (such as timing of operations or control of surface use) would apply to 45,600 acres of the 256,500 acres identified as administratively available, or 18 percent.

Congress has withdrawn the federal mineral estate in wilderness areas; the Plan identifies no other minerals as unavailable. With this decision I have determined that the remaining part of the federal mineral estate is available for exploration, but with specific conditions, including restrictions on the season of operation, well spacing and vegetation disturbance. The seasonal restrictions will apply in the Oakwood Bottoms Greentree Reservoir, water-supply watersheds, the Mississippi and Ohio Rivers floodplains, mature hardwood forests and non-motorized recreational areas.

Direction in the 2006 Plan clarifies standards and guidelines for the management of federally owned minerals. The plan no longer repeats higher-level direction found in the Forest Service handbook and manual, the Code of Federal Regulations, or in Executive Orders, etc. The Plan includes management direction aimed at improving cooperation with owners of the privately held mineral rights that lie beneath National Forest System surface ownership. The Plan standards and guidelines and special notifications and stipulations provide mitigation of potential impacts to National Forest System lands that could result from future projects that may be developed to access the privately owned minerals.

Project-related impacts and associated mitigation measures will be addressed in site-specific NEPA analyses. Considering the mitigation measures outlined in the Plan, and the future site-specific analyses that would be required to approve or disapprove any project, I do not find it necessary to choose between oil and gas activities and the protection of Forest resources. As a reflection of the federal laws that govern the Forest, the direction in the 2006 Forest Plan allows for both goals, and these goals are not mutually exclusive. My decision to identify areas administratively available for possible development is based on the analysis documented in the FEIS and its use of the best available scientific information and disclosure of programmatic effects.

6. Wilderness, Roadless Areas, Candidate Wild and Scenic Rivers

The Illinois Wilderness Act of 1990 designated seven areas on the Forest as wilderness: Bald Knob, Clear Springs, Panther Den, Burden Falls, Bay Creek, Lusk Creek and Garden of the Gods. These areas encompass about 28,100 acres, ten percent of the Forest. The law prohibits motorized use, timber harvest and development of the federal mineral estate in these areas. These areas provide excellent opportunities for hiking, hunting, trapping, fishing and horseback riding.

It has been proposed by some individuals and organizations that the Ripple Hollow, Burke Branch and Camp Hutchins areas be recommended for wilderness study, although there remains disagreement among the public over the benefits of wilderness and the need for additional wilderness on the Forest. The Ripple Hollow and Burke Branch areas were included in the Roadless Area Review and Evaluation II (RARE II) and were not recommended for wilderness evaluation. They were also analyzed in the roadless area

analysis for the 1986 Plan and were not recommended for wilderness evaluation. The roadless area analysis for the 1992 Plan also did not recommend Burke Branch for wilderness evaluation; however, Ripple Hollow was conditionally recommended pending procurement of the private mineral rights in the area. The 2000 Roadless Area Conservation Rule (RACR) included all areas from RARE II that did not become wilderness in the 1990 Illinois Wilderness Act. The Camp Hutchins area was not included in the RARE II or the RACR studies. However, due to its proximity to the Bald Knob and Clear Springs Wildernesses, it could someday become suitable for wilderness evaluation if the private land is acquired and the county road closed that separate Camp Hutchins from the existing wilderness areas.

As part of the Plan revision, Ripple Hollow, Burke Branch, Camp Hutchins and other areas of the Forest were reviewed to determine if they meet roadless inventory criteria and, so, should be considered for detailed evaluation as potential wilderness. This review utilized geographic information system technology that was not available with earlier planning efforts and found that no areas outside of existing wildernesses meet the roadless inventory criteria and, so, none were further evaluated for wilderness capability or suitability. It is also unlikely that the private mineral rights in the Ripple Hollow area will be acquired in the foreseeable future. Although neither the Ripple Hollow nor Camp Hutchins areas will be recommended for wilderness study, we recognize the strong public desire and demand for more opportunities for non-motorized recreation on the forest, so these areas will be managed under a new, non-motorized recreational area, management prescription. Non-motorized recreational opportunities will be emphasized in these areas and they will be classified as unsuitable for timber production.

With a very dense system of improved and unimproved roads, and more than 15 percent of its area in non-native pine plantations, the Burke Branch area is not consistent with the natural settings required either for wilderness or for management to provide semi-primitive non-motorized recreation. However, the Burke Branch area contains sensitive plant, water and geological resources that the Forest wishes to protect. Accordingly, Burke Branch will be managed primarily under the mature hardwood forest management prescription. This will emphasize wildlife habitat and recreation in a mature, hardwood-forest setting. Timber harvest will not be scheduled within the area, but could be utilized as a tool to meet other management objectives. Motorized use is allowed only on some roads in this area.

Six streams on the Forest are eligible for inclusion in the national wild and scenic rivers system: Hutchins Creek, Big Creek, Big Grand Pierre Creek, Lusk Creek, Bay Creek and the Big Muddy River. A quarter-mile corridor on each side of these streams will be managed to retain the characteristics that make them eligible for inclusion in the system. Some would prefer that these corridors be abandoned and others would like to see the streams included in the national system. Analysis during Plan revision included a review of the eligibility of these streams for the national system, as well as a comprehensive review of other streams on the Forest to determine if any were eligible. We found that only the six streams listed above are eligible and that the highest classification of all is Recreational, except for the upper ten miles of Lusk Creek, which is Scenic. The 2006 Plan standards and guidelines are written to ensure maintenance of the eligibility of these streams for inclusion in the national system within the highest classification that they were determined to be eligible.

7. Land-Ownership Adjustment

National forest land is fragmented in places within the Forest proclamation boundary. A consolidated landbase would provide for greater ease of public use and more efficient management of the Forest. I recognize that land acquisition on the Forest has been the subject of considerable public and political interest. Some have expressed concern about further increases in public lands due to the reduction of the tax base, while others support additional acquisitions for public use. We have taken both points of view into consideration during Plan revision.

We have improved Plan direction for land adjustment by changing priorities for surface-ownership acquisition, setting a goal of acquiring all available property rights (both surface and subsurface) when possible, making a recommendation for Congress to adjust the statutory boundary of the Forest to facilitate future land acquisition along the Mississippi River floodplain. We have eliminated the Forest Consolidation Map from the Plan, in order to provide greater ability to respond to specific opportunities that may arise. With the changes, the Forest can better advance resource protection, economic development and quality of life for the residents of southern Illinois. Nothing in this aspirational Plan requires or even suggests that any particular parcel be acquired for the National Forest System. As always, land acquisitions will proceed on a “willing buyer-willing seller” basis.

H. CONCLUSIONS

My decision responds effectively to the need-for-change issues described in FEIS Chapter 1 and Appendix A. Implementing the 2006 Forest Plan will improve biological diversity and forest ecosystem health and sustainability. I believe that the ecological, social and economic components of sustainability will all benefit from this decision.

III. CHANGES TO THE FOREST PLAN BETWEEN THE DRAFT AND FINAL ENVIRONMENTAL IMPACT STATEMENTS

We received and responded to over 2,300 comments from state and federal agencies and the public on the DEIS and proposed Forest Plan. Based on our review of these comments, we have made some changes to the proposed Plan and incorporated them into the 2006 Plan (FEIS Alternative 2). These range from minor edits and clarifications to changes in some standards and guidelines and monitoring requirements. The following summarizes the major changes made between the proposed and final revised Plans.

A. THREATENED AND ENDANGERED SPECIES

- Updated the Plan Forest-wide standards and guidelines and strategies for the conservation of biological diversity to include requirements pertaining to federally listed threatened and endangered species from the US Fish and Wildlife Service biological opinion of the 2006 Plan.

As a result of formal consultation with the US Fish and Wildlife Service on the effects of the 2006 Forest Plan on federally listed species, we have added additional direction to the Plan to

ensure protection of the Indiana bat and Meads milkweed and compliance with the biological opinion. This primarily involves guidelines on amounts and timing of prescribed burning.

B. NO SCHEDULED TIMBER HARVEST IN OAKWOOD BOTTOMS GREENTREE RESERVOIR

- No commercial timber harvesting will be scheduled in the Oakwood Bottoms Greentree Reservoir management area.
- Added objectives for prescribed burning, timber-stand improvement and tree planting in most of Oakwood Bottoms.

We made these changes as a result of further environmental analysis and recent field observations that revealed, in most locations, there is not sufficient merchantable timber to successfully undertake commercial timber harvesting in the Oakwood Bottoms Greentree Reservoir. Floods in the 1990's and infestations of forest tent caterpillar have created considerable mortality in the pin oak forest overstory. Mortality continues to occur in the mature overstory pin oak due to the natural decline and death of older trees or other causes. Even though vegetation management cannot be achieved through commercial timber harvesting, there remains a need for prescribed burning, timber-stand improvement and planting to help maintain the pin oak forest-type within the greentree reservoir. Retaining a pin oak dominated forest is essential, as this area provides critical habitat for wood ducks and other waterfowl migrating annually along the Mississippi River flyway.

C. ADDITIONAL PLANTING, PRESCRIBED BURNING, TIMBER-STAND IMPROVEMENT AND WETLAND STRUCTURES

- Increased objectives for tree planting, prescribed burning and timber-stand improvement, and providing wetland structures in the Mississippi and Ohio Rivers floodplains in anticipation of land acquisition during the life of the Plan.
- Increased objectives for timber-stand improvement in the even-aged hardwood and mature hardwood forest management areas to meet anticipated timber-stand improvement needs during in the first decade of Plan implementation.

These changes to the amounts of anticipated management levels were made in response to review of the proposed and probable management practices that are allowable during the life of the Plan. The amounts of these activities generated through Spectrum were not considered to be sufficient to meet the anticipated needs.

D. NORMAL OPERATING SEASON AND TIMBER-STAND IMPROVEMENT GUIDELINES

- Moved guidelines regarding the normal operating season for timber-sale contracts and timber-stand improvement methods to a Forest Supplement of the Silvicultural Practices Handbook.

This change was made because this type of technical guidance is appropriate for the Forest Service directives system rather than the Plan.

E. SUBSURFACE OWNERSHIP AND LAND-OWNERSHIP GUIDELINES

- Removed Plan guidelines related to subsurface ownership and land exchange.

Further review of the proposed Plan guideline regarding subsurface ownership revealed that this direction was not appropriate because subsurface rights cannot be subordinated, and because it would be very difficult, if not impossible, to compare public benefits from surface values with the costs of acquiring subsurface rights. The guideline regarding land exchange was removed because there are situations in which National Forest System lands should be available for exchange in order to enhance management efficiency and to acquire desirable land parcels for the National Forest System.

F. EDITORIAL CORRECTIONS

Editorial changes were made to correct misspellings, formatting, or to clarify management direction in both the 2006 Forest Plan and FEIS. These corrections did not change the basic intent of the direction or the analysis.

IV. PUBLIC INVOLVEMENT

The Forest Service implemented an active public-involvement effort throughout the planning process. A variety of public-involvement tools and methods were used, including public meetings, open houses, news releases and meetings with government agencies and interested groups. Our efforts, and the efforts of those who participated, provided valuable contributions to the development of the 2006 Forest Plan.

A. NEED FOR CHANGE

Early in the planning process, it was necessary to determine which items in the 1992 Forest Plan were in need of change. We sought the advice of our employees, who implement the Plan, federal and state agencies, scientists, resource management specialists, and the public. To facilitate our public involvement efforts, we enlisted the assistance of Senator Paul Simon and the Public Policy Institute at Southern Illinois University. We held several public meetings regarding the need for change and to help develop the vision, niche and role for the Forest. We also held three public meetings before publishing the Notice of Intent to revise the Forest Plan.

Date	Need for Change Public Participation Activity
10/15/99	Initial "Need for Change" scoping letter mailed to over 1,400 people in October 1999, inviting comments regarding possible needs for change of the 1992 Forest Plan.
10/19/99	Public hearing conducted by the Public Policy Institute at Southern Illinois University regarding possible needs for change of the 1992 Forest Plan.
11/10/99	Open-house public meeting held to discuss the forest plan revision process, proposed timelines, answer questions and to accept potential need-for-change topics.
7/27/00	Initial public meeting/workshop held to aid development of the desired vision, niche and role for the Forest.
1/22/01	Public meeting held to review vision, niche and role papers regarding future management for the Forest.

B. PROPOSED ACTION AND NOTICE OF INTENT

Date	Notice of Intent Public Participation Activity
3/15/02	Notice of Intent sent to over 3,100 individuals who expressed interest in management of the National Forest.
3/20/02	Notice of Intent to prepare an EIS on the revision of the Forest Plan published in the <i>Federal Register</i> .
4/2/02	Open-house public meeting held in Eddyville, Illinois to explain the proposed action and answer questions.
4/3/02	Supplemental Notice of Intent published in the <i>Federal Register</i> announcing two additional public meetings and extending the comment period.
4/3/02	Open-house public meeting held in Chicago to explain the proposed action and answer questions.
4/4/02	Open-house public meeting held in Belleville, Illinois to explain the proposed action and answer questions.
4/10/02	Open-house public meeting held in Evansville, Indiana to explain the proposed action and answer questions.
4/11/02	Open-house public meeting held in Marion, Illinois to explain the proposed action and answer questions.
5/28/02	Open-house public meeting held in Murphysboro, Illinois to explain the proposed action and answer questions.
5/29/02	Open-house meeting held in Chicago to explain proposed action and answer questions.

C. ALTERNATIVES DEVELOPMENT

In order to use a collaborative approach in the development of alternatives to the proposed action, we employed the facilitation expertise of Gregg Walker, Ph.D., and Steven Daniels, Ph.D., authors of the book *Working Through Environmental Conflict*, to assist with our alternatives development. Following a meeting that introduced participants to the collaborative learning process, four meetings were held to discuss different resource issues, and participants worked in groups to discuss and record ways to improve on the situation related to the issue at hand. We used the information gathered at these meetings to develop alternatives to the proposed action. An additional meeting was held to present and discuss the draft alternatives.

Date	Alternatives Development Public Participation Activity
11/12/02	Introductory public meeting held in Harrisburg, Illinois on use of collaborative learning in alternatives development.
11/18/02	Public meeting held in Murphysboro to discuss possible alternatives in addressing watershed resources, land-ownership adjustment and minerals management.
11/21/02	Public meeting held in Harrisburg to discuss possible alternatives in addressing recreation management and wilderness, roadless areas and wild and scenic rivers.
11/25/02	Public meeting held in Murphysboro to discuss possible alternatives in addressing biological diversity, wildlife and aquatic habitat and forest ecosystem health and sustainability.
1/22/03	Public meeting held in Marion to discuss possible alternatives in addressing recreation management and wilderness, roadless areas and wild and scenic rivers.
1/28/03	Public meeting held in Murphysboro to present and discuss proposed draft alternatives.

D. PROPOSED FOREST PLAN AND DRAFT ENVIRONMENTAL IMPACT STATEMENT

In 2005, after the release of the proposed Forest Plan and DEIS, we held three open-house public meetings to present the DEIS, answer questions about the analysis and the preferred alternative, and receive comments. These meetings were important for informing the public and providing an opportunity for the public to ask questions about the proposed Plan so they could provide informed comments.

Date	Proposed Plan and DEIS Public Participation Activity
3/10/05	Planning documents posted to Forest website, and mailed or noted to about 3,000 people who expressed interest in the management of the Forest.
3/18/05	Notice of Availability of Draft Environmental Impact Statement and Proposed Land and Resource Management Plan published in the <i>Federal Register</i> .
4/19/05	Open-house public meeting held in Marion to explain the Proposed Forest Plan and Draft Environmental Impact Statement and answer questions.
4/20/05	Open-house public meeting held in Belleville to explain the Proposed Forest Plan and Draft Environmental Impact Statement and answer questions.
4/21/05	Open-house public meeting held in Vienna to explain the Proposed Forest Plan and Draft Environmental Impact Statement and answer questions.
5/20/05	Amended Notice of Availability published extending comment period to 6/20/05.

E. MEETINGS WITH OTHER AGENCIES AND ORGANIZATIONS

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

Date	Agency or Organization
1/19/00	Illinois Forestry Development Council
2/2/00	US Fish and Wildlife Service
2/23/00	Forest-Interior Habitat Specialists
3/20/00	Southern Illinois University Forestry Class
10/25/00	Illinois Department of Natural Resources
1/26/01	Phoenix Chapter of Illinois Audubon Society
7/3/01	Central Hardwoods Joint Venture
10/9/01	US Fish and Wildlife Service
11/28/01	Illinois Department of Natural Resources
2/12/02	Illinois Farm Bureau
3/19/02	Forest-Interior Habitat Specialists
5/4/03	Illinois Speleological Society
8/21/03	Illinois Department of Natural Resources
9/10/03	Student Chapter of Wildlife Society
12/8/03	Illinois Department of Natural Resources
9/21/04	Illinois Trail Riders
4/7/05	Illinois Department of Natural Resources
4/14/05	Illinois Chapter of the Society of American Foresters
5/10/05	US Environmental Protection Agency Region 5
5/10/05	Illinois Chapter of Sierra Club
6/7/05	US Environmental Protection Agency Region 5 Field Trip on Forest

F. NEWS RELEASES

At significant milestones, news releases were prepared and distributed to area media. Each release informed the public of the status of our plan revision and provided information on how to provide comments or obtain additional information.

G. WEBSITE

We posted information and pertinent documents about Forest Plan Revision on our website at <http://www.fs.fed.us/r9/forests/Shawnee>. All correspondence referenced the website.

H. SCHEDULE OF PROPOSED ACTIONS

Forest Plan revision updates have been noted in the Forest schedule of proposed actions, which is distributed quarterly and posted on the Forest's website.

V. ALTERNATIVES

A. ALTERNATIVES DEVELOPMENT

The Plan revision process was officially initiated when the Notice of Intent was published in March, 2002. Public comments received during the subsequent comment period, along with management concerns identified during the need-for-change assessment, helped the Forest Service develop a range of alternatives designed to address significant issues. The process used to formulate the alternatives is described in Chapter 2 of the FEIS.

Based on resource information, public comment and experience gained in implementing the 1992 Plan, a reasonable range of alternatives was crafted that I determined would meet the purpose and need for this revision of the Forest Plan. We solicited and reviewed alternatives from the public and documented that analysis in the record. The range of alternatives was driven by what is best for the land and those who use it. Existing resource conditions and the role of the Forest (as embodied in the purpose and need statement) were at the heart of the development of the alternatives.

The range of alternatives is not based on predetermined outputs, but rather on themes responding to issues raised by the public. Development of a programmatic, multiple-use, resource plan involves compromise and the balancing of myriad biological, physical, economic and social factors. The range of alternatives reflects these trade-offs. Alternative 1 is the no-action alternative reflecting the direction of the 1992 Forest Plan. Alternatives 2, 3 and 4 provide a range of other choices for addressing the revision topics and issues.

B. ALTERNATIVES NOT CONSIDERED IN DETAIL

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives not developed in detail (40 CFR 1502.14). Comments received from the public since the publication of the NOI and during the public alternatives development meetings provided suggestions for alternative methods of achieving the purpose and need. Some of these

suggestions were outside the scope of the Plan revision or were determined to have components that would cause unnecessary environmental harm. Therefore, some alternatives were considered but dismissed from detailed consideration. These are summarized below.

Several suggestions, such as eliminating natural areas and candidate wild and scenic river corridors as management areas, expanding the list of MIS and species of recreational interest, eliminating prescribed burning, allowing equestrian trails in all natural areas, converting all user-developed trails to Forest system trails, prohibiting all equestrian use, not expanding the Oakwood Bottoms Greentree Reservoir, and terminating the tenancy of the University of Illinois at Dixon Springs Agricultural Center, were not carried forward into detailed alternatives because they did not meet the purpose and need for the Plan revision. The following alternatives were considered but not analyzed in detail.

- **Recommending Wilderness Study for Ripple Hollow, Burke Branch and Camp Hutchins:** Many suggested that the Ripple Hollow, Burke Branch and Camp Hutchins areas should be recommended for designation as wildernesses.

Only Congress can designate wilderness. However, the Forest Service can recommend an area for wilderness study if it meets certain roadless inventory and wilderness evaluation criteria. These areas were evaluated thoroughly, along with others on the Forest, to determine if they met the roadless inventory criteria. Other than areas that Congress has already designated wilderness, no areas on the Forest were found to meet the criteria. Therefore, no areas on the Forest were further evaluated for wilderness or recommended for wilderness study. Since Ripple Hollow was tentatively recommended for wilderness study in the 1992 Plan, the wilderness study management prescription was used for this area under Alternative 1, the no-action alternative.

- **Use of Only Prescribed Fire To Control Maple:** Some comments on the DEIS suggested that an alternative should be developed that considers the use of only prescribed fire to control maple-beech competition in the understory, without the use of other vegetation treatments, such as timber harvesting and timber-stand improvement.

The interdisciplinary planning team considered this approach, but determined that use of prescribed fire alone would not be sufficient to control maple-beech competition in order to sustain the oak-hickory forest-type and the biodiversity dependent upon it. Due to a lack of fire and management, the shade-tolerant maple has become established in many places across the Forest and has grown to a size that would not be affected by prescribed burning alone. Several studies have shown that larger-diameter trees are not likely to be killed by prescribed burning alone. Franklin *et al.* (2003) found that burning did not affect stems greater than 3.8 centimeters diameter at breast height (DBH), and that thinning was generally necessary for the understory to respond to burning treatments. Rebbeck *et al.* (2004) found that red and sugar maples are susceptible to fire only when stems are small (less than 6 centimeters DBH). Elliott *et al.* (2004) found that most mortality from understory burning occurred in trees less than 10 centimeters DBH, and no trees greater than 20 centimeters DBH were killed.

The amount of sunlight reaching the forest floor is an important factor in the regeneration of oaks. Inadequate light often limits oak regeneration and recruitment into the overstory (Lorimer, 1993). If larger trees cannot be killed by prescribed burning, other vegetation treatments would be required to eliminate competition and provide adequate sunlight for the establishment and growth of young oaks and hickories.

- **No Commercial or Non-Commercial Timber Removal During the Nesting Season of Migratory Birds:** A comment on the DEIS suggested that, in order for the Forest Service to be in compliance with the Migratory Bird Treaty Act, an alternative should be analyzed that prohibits timber removal during the nesting season of the migratory birds.

The Forest has taken, and continues to take, many planning and administrative actions to ensure the conservation of migratory birds. This is consistent with Executive Order 13186, which directs all federal agencies, including the Forest Service, to work with the US Fish and Wildlife Service to conserve populations of migratory birds. Alternative 3 allows no timber removal for commercial or non-commercial reasons unless required for human health and safety. I believe this adequately portrays the effects of no timber removal during the nesting season of migratory birds, especially since the nesting season lasts through much of the spring and summer in southern Illinois. The 2006 Plan does not authorize any timber harvest during the lengthy migratory bird-nesting season. The timing of harvest is a factor that can be analyzed during site-specific project decision-making. Accordingly, I considered unnecessary a separate alternative that limits timber removal only during the nesting season.

- **Benchmark Alternatives:** Several “benchmark” alternatives were developed during analysis for the Forest Plan revision. Benchmarks represent production potentials for various resources and uses. Benchmarks were developed for maximum timber production, maximum oak-hickory, maximum present net value of market values, and minimum-level management.

NFMA, Multiple-Use Sustained-Yield Act, Endangered Species Act, and other laws and Forest Service policy require that national forests be managed for a variety of uses as well as resource protection. Benchmark alternatives were eliminated from detailed consideration because they would not meet the purpose and need with regard to providing balanced resource protection and management.

C. ALTERNATIVES CONSIDERED IN DETAIL

1. ALTERNATIVE 1 – NO ACTION – IMPLEMENT 1992 FOREST PLAN

Alternative 1, the no-action alternative, reflects continuation of 1992 Forest Plan direction. It meets the 1982 planning regulations (36 CFR 219.12[f][7]) and NEPA requirements that a no-action alternative be considered. ‘No action’ means that management allocations, activities and direction currently found in the 1992 Plan would continue. Output levels have been recalculated for this alternative to reflect new information, particularly new scientific and inventory data.

Alternative 1 also includes some minor changes from the 1992 Plan, such as the updated measures required for the protection of federally listed threatened and endangered species and Regional Forester-listed sensitive species, and the adoption of a revised list of MIS. The overall focus of the Plan would be unchanged. This alternative provides a mix of products and uses at about the same levels as provided in the past. Alternative 1 would continue to identify trail corridors for up to 338 miles of hiker-equestrian trails, and 286 miles of ATV-hiker-equestrian trails. Bicycle use would be allowed on open roads and ATV trails. This alternative allows cross-country equestrian riding.

Most hardwood timber would be managed with uneven-aged management and the group-selection harvest method. There would be no scheduled timber harvest in Forest-Interior Management Units, Cave Valley, Camp Hutchins, Burke Branch or Ripple Hollow. In addition, there would be no scheduled timber harvest in areas near lakes, streams, recreation areas, or other places identified as especially sensitive and popular for Forest users. Under Alternative 1, pine and pin oak are not part of the suitable timber base and would not be scheduled as part of the regular timber management program. However, pine timber could be made available for harvest as a byproduct of the restoration of natural ecosystems (through removal of the non-native pine). Some pin oak timber could also be made available as a byproduct of wildlife habitat management at the Oakwood Bottoms Greentree Reservoir.

Wildlife openings and openlands would continue to be managed at the current levels. Landscape-scale prescribed burning would not be implemented. Minerals development, including oil and gas leasing, would be allowed on most of the Forest, with special stipulations applicable in certain management areas. A land-consolidation map would guide land-ownership adjustments.

Decision Rationale

One of the major needs for change in the management direction of the 1992 Forest Plan is to provide a programmatic framework for regulating the virtually unrestricted equestrian use, especially unmanaged cross-country riding. With the notable increase in equestrian use since approval of the 1992 Plan, cross-country riding has resulted in the use of many poorly located and unmaintained user-developed equestrian trails. This has led to soil erosion in many places. I did not select Alternative 1 because it would not correct the problems caused by cross-country equestrian use. Alternative 1 also proposes the creation of a system of up to 286 miles of ATV/OHM trails. However, based on the analysis of ATV/OHM use documented in the FEIS, it is clear to me that comprehensively addressing the potential adverse effects on the environment and the natural resources of the Forest from the use of these vehicles would require an investment of funds and staffing for planning, program development and analysis that would preclude the Forest's attention to virtually any other activity. Such an investment during the life of the Plan to establish an essentially new recreational use would far outweigh the benefits of the recreational activity.

Water-supply watersheds are not specifically identified under Alternative 1. Neither does this alternative contain a prescription to guide management for water quality, as does the selected alternative. Riparian filter-strip standards and guidelines under Alternative 1 do not contain the best science for protecting water quality.

Management of wildlife openings at the level called for in the 1992 Plan would require the bulldozing and reestablishment of many openings that have been allowed to succed to trees over the last 10-12 years. This would not be economical. Large openlands would be maintained under this alternative, but they would not have a management area prescription guiding their long-term management. The prescription for forest-interior management units is no longer the best science for the management of forest-interior habitat.

Our monitoring of vegetative conditions has documented that the composition of the biologically diverse oak-hickory forest has begun to change to the less diverse maple-beech forest-type. Alternative 1 provides no landscape-scale prescribed burning to aid in establishing oak regeneration and controlling maple and beech in the understories. Research shows that the group-selection harvest method that would be primarily used under this alternative would not be as successful as even-aged harvest methods such as shelterwood for establishing the oak-hickory advanced regeneration that is essential in maintaining this forest-type and the associated wildlife habitat and biological diversity.

2. ALTERNATIVE 2 – THE SELECTED ALTERNATIVE

Alternative 2 responds to agency and citizen concerns identified during the need-for-change analysis, public comments on the Notice of Intent, and comments received during the public meetings convened for development of alternatives. Alternative 2 specifically addresses suggestions on watershed protection, biological diversity, management of recreation resources, forest health and sustainability, minerals management, wilderness, roadless areas and candidate wild and scenic rivers, and land-ownership adjustment.

Under Alternative 2, watershed protection is emphasized through the creation of a new water-supply watershed management prescription that will be applied at Kinkaid Lake, Cedar Lake and Lake of Egypt. This alternative also specifies management direction for National Forest System lands located within the Mississippi and Ohio Rivers floodplains and revises riparian filter-strip guidelines.

Biological diversity and wildlife and aquatic habitat are addressed in new management direction for maintaining and enhancing forest-interior habitat. A large openland management prescription will be established, while the overall number of wildlife openings will be reduced to a more manageable number. Standards and guidelines are updated for the management and protection of threatened, endangered and sensitive species and other species with viability risks, as under all alternatives. In particular, we used the latest science and range-wide status information to develop direction to conserve and recover the Indiana bat. Natural areas will continue to be managed and protected. The opportunity for wetland and bottomland hardwood management at Oakwood Bottoms Greentree Reservoir is expanded to include recently acquired land. As under all alternatives, the list of MIS includes five species of birds that represent various openland and forest habitats, in compliance with 36 CFR 219.19(a)(1).

One of the most important elements of Alternative 2 is the restriction of horseback riding to designated system trails, and its emphasis on the development of a mapped, marked and well-maintained trail system. The restriction of equestrian use to designated trails would occur over time as the Forest completes site-specific analyses for each watershed. This alternative allows the designation of user-developed trails as system trails and requires the

closure and rehabilitation of user-developed trails not designated as part of the trail system. The trail corridor map from the 1992 Plan is withdrawn and trail-density standards and guidelines are eliminated, because trail-location decisions will be made through the watershed-by-watershed approach.

Under Alternative 2, the Forest will continue the current situation in terms of ATV use. The 2006 Forest Plan adopts the prohibition of ATV/OHM use resulting from the 1995 district court injunction and continues the 1997 Forest Supervisor decision and closure order prohibiting ATV/OHM use on the Forest. ATV and OHM use is currently prohibited and, under Alternative 2, the use of ATVs and OHMs will continue to be prohibited, except for administrative purposes, access by emergency vehicles, or as authorized by permit or contract. Licensed-vehicle use will be allowed on all open roads and bicycles will be allowed on all open roads and those system trails designated for bicycle use. The major change from the 1992 plan is that the Plan no longer includes a long-term aspirational goal of creating a system of designated trails for ATV use. The 1992 Plan did not authorize ATV/OHM use; it merely identified travel corridors for future planning. Additional developed recreational sites will be allowed, as will the designation of additional trails in natural areas, both dependent on future, site-specific analysis.

Forest ecosystem health and sustainability is a principal goal under Alternative 2, rather than the production of timber products. Maintenance of the oak-hickory forest-type is considered critically important for the maintenance of biological diversity and wildlife habitat. As a means of maintaining the oak-hickory forest-type, shelterwood harvest under even-aged management will be the probable harvest method. A variety of techniques for site preparation, reforestation and timber-stand improvement will be allowed. Proposals for prescribed burning will increase, including the landscape-scale burns required for maintaining the oak-hickory forest-type and other vegetative communities. The ecological restoration of non-native pine plantations to native hardwoods will be a priority, especially on historical oak-hickory sites. Changes in standards and guidelines regarding pesticide use will support future proposals for the control of non-native invasive species or other unwanted vegetation, further protecting and enhancing biological diversity. Since all potential, suitable range allotments conflict with wildlife-habitat objectives, the range-management objective has been eliminated, except for research purposes.

With regard to minerals management, no final agency decision is being made with respect to consent to lease federal oil and gas resources. Rather, all management areas except wilderness are identified as administratively available for oil and gas leasing. Although areas are identified as "available," this does not mean that mineral development will occur (see discussion of administrative availability in "Mineral Resources" under Decision Summary and Rationale, page 19 of this ROD). Standards and guidelines include various minimum restrictions that would apply to oil and gas operations if they were to occur, and these include a requirement that there be no surface-occupancy in certain areas. There are no other changes in minerals-management direction from the 1992 Plan.

Areas throughout the Forest, including those that were listed in the Roadless Area Review II (Burke Branch and Ripple Hollow) were evaluated to determine if they meet roadless inventory criteria and warrant further evaluation as potential additions to the national Wilderness Preservation System. The Camp Hutchins area was not included in RARE II, but was given particular attention in the roadless inventory process because of high public

interest in this area. No areas meet minimum roadless inventory criteria, so none were further evaluated for wilderness potential. Of the areas considered, Camp Hutchins and Ripple Hollow will be managed under a new non-motorized recreational area management prescription. Burke Branch will continue to be managed under the mature hardwood forest management prescription.

Since the 1992 Plan, our awareness has increased regarding the relationship of trails to the quality of the wilderness experience and protection of the wilderness character, leading us to eliminate trail-density standards in wilderness areas, as well as to allow limitations on group size. The proposed location and construction of trails will be assessed appropriately in site-specific environmental analyses prior to project-level decision-making. The increased use of some wilderness areas and the need to clearly mark trails or areas leads us to allow artificial, natural-appearing materials for trail signs and maintenance.

This alternative will revise the management of streams eligible for the national wild and scenic rivers system. Further review of the characteristics of these streams found that their highest potential classification is Recreational, except for the upper ten miles of Lusk Creek that meet the Scenic criteria. We have revised the candidate wild and scenic river management prescription to reflect these potential classifications.

Alternative 2 makes changes regarding land-ownership adjustment. Under this alternative, we have revised the priority list for land-ownership adjustment and removed the consolidation map from the Forest Plan. We are recommending a statutory adjustment of the forest proclamation boundary in order to include areas of the Mississippi River floodplain. Standards and guidelines regarding the acquisition of property rights have been changed to emphasize the acquisition of all available rights, including subsurface rights, while scenic and conservation easements will also be acceptable when appropriate for meeting management objectives.

Decision Rationale

My rationale for selecting Alternative 2 as the 2006 Forest Plan is explained in detail on pages 9 through 22 of this ROD. I find that Alternative 2 responds best to the criteria listed on pages 9 and 10.

This alternative will improve watershed resource conditions better than Alternative 1 and similar to Alternatives 3 and 4, because of the new management-area direction for water-supply watersheds and the Mississippi and Ohio Rivers floodplains. It also improves the protection of watershed resources with new riparian filter-strip guidelines and use of the state's best management practices for forest management.

Overall, diversity and wildlife habitat will be maintained and improved to a greater extent than under Alternatives 1 or 3, and similar to Alternative 4. This is primarily due to the emphasis on maintaining the oak-hickory forest ecosystem. This alternative provides for a beneficial mosaic of habitat conditions spread across the Forest. Forest-interior habitat and Indiana bats are protected under Alternative 2 to the same degree as Alternatives 3 and 4, or better.

In the first decade of Plan implementation, there is little distinction between Alternatives 2 and 4 with regard to the effects of the primary harvest methods they propose (shelterwood under Alternative 2, or shelterwood-with-reserves under Alternative 4). This is due to the fact that, under either alternative, only the initial shelterwood cuts would be made during the first decade. In weighing the benefits of the two harvest methods, I find that shelterwood with reserves would likely be less effective in maintaining the oak-hickory forest-type than shelterwood. Recent research (Miller *et al.*, 2004) indicates that the reserve trees that may be left in an area indefinitely could have a considerably adverse effect on the composition of regeneration in the harvest area. Shade-tolerant species such as maple and beech would be favored under the shade of the reserve trees, while the more shade-intolerant oak would be able to compete most successfully only in areas of greater sunlight. Alternative 2 would be more beneficial in providing the conditions necessary to maintain a high percentage of oak species in the composition of future forest stands. In the long term, Alternative 2 is expected to provide a greater percentage of oaks and hickories than Alternatives 1 and 3 and better sustain a healthy oak-hickory forest ecosystem. Similar to Alternatives 1 and 4, Alternative 2 will accelerate the conversion of non-native pine plantations to native hardwoods more effectively than Alternative 3.

Alternative 2 provides the framework for better protecting the land than Alternative 1 because it addresses the issue of unmanaged recreation resulting from the 1992 Plan's allowance of cross-country equestrian use. It will also focus the efforts of the recreation program on developing a well-designed, mapped and maintained equestrian trail system with up to approximately 700 miles of system trails.

Although no areas on the Forest were found to meet roadless area inventory criteria, Ripple Hollow and Camp Hutchins will be managed for non-motorized recreational opportunities. The Burke Branch area, which contains a relatively large number of Forest system roads, will be managed for a mature hardwood forest setting. Over 28,000 acres of Congressionally designated wilderness will continue to be managed for their unique ecological values and recreational opportunities.

Under Alternative 2, I am making no decision to consent to lease federal oil and gas resources. However, since most areas on the Forest are identified as administratively available for oil and gas leasing, the Forest will be providing opportunities for the utilization of energy reserves, should they be discovered, not provided under Alternatives 3 and 4. Additional environmental protection will be established with stipulations prohibiting surface-occupancy in natural areas and riparian filter strips.

With the removal of the land-consolidation map, land-ownership adjustments are expected to be more efficient under this alternative, since Plan amendments will no longer be required for purchases outside the consolidation boundary. Alternative 2 also includes a recommendation to Congress for an expansion of the Forest proclamation boundary to include the purchase area in the Mississippi River floodplain and other areas on the west side of the Forest. This area includes important opportunities for bottomland hardwood and wetland restoration that would support the biodiversity of the area.

3. ALTERNATIVE 3

Alternative 3 takes a custodial approach to management of the Forest, with a minimum amount of active management. This alternative emphasizes the preservation of mature and future old-growth forest across the landscape, non-motorized recreation and greater restrictions on equestrian use, with a primary emphasis on creating as much habitat as possible for forest-interior wildlife and plants. Alternative 3 responds to issues raised by those who believe that management practices such as prescribed burning, timber harvesting, pesticide use, creation and maintenance of wildlife openings, ATV and OHM use, and oil and gas exploration and development are, collectively and individually, detrimental to the environment. The emphasis of this alternative is the limitation of human-caused disturbance of the Forest. To respond to concerns about the potential environmental effects of timber harvest and to concerns about below-cost timber sales, no land would be classified as suitable for timber production. Watershed-resource proposals are the same as those under Alternative 2.

Under Alternative 3, there would be no large openlands or wildlife openings and no pesticide use. There would be no removal of trees for any reason other than the protection of human health and safety, personal-use firewood, natural area management, or administrative needs such as road maintenance or special-use permits. The conversion of existing pine plantations to native hardwood forest would not be accelerated as under the other alternatives. There would be no road construction and no provisions for future ATV or OHM access. Equestrian use would be prohibited in natural areas and the current access to some natural areas would be eliminated. Trail-density standards would be eliminated from all management areas except wilderness, and trail densities would be calculated separately for each wilderness based on the miles of trail in each wilderness area.

Approximately 400 miles of non-motorized system trails could be available with Alternative 3. Prescribed fire would be used only where essential to maintain rare ecosystems and threatened, endangered and sensitive species habitats. Federal minerals would be administratively unavailable for leasing. Non-native invasive species would be controlled only through manual, mechanical, or limited biological methods, such as grazing. As under all alternatives, the lists of threatened, endangered and sensitive species would be updated. In addition to Ripple Hollow and Camp Hutchins, this alternative would manage Burke Branch under the non-motorized recreational area prescription. The activities enjoined by the court ruling on the 1992 Plan are not implemented under this alternative.

Decision Rationale

Alternative 3 would limit direct environmental effects due to the reduced amount of management and use activities. However, I am not selecting it because it would not provide for the maintenance of a healthy oak-hickory forest ecosystem. This ecosystem is a historic part of the landscape on the Forest and is essential for many wildlife habitats and the overall diversity of plant and animal communities in a multiple-use context (16 U.S.C. 1604[g][3][B]). Our concern that the oak-hickory ecosystem be maintained is shared by national forest resource specialists, experts from the State of Illinois and other federal agencies, and scientists, including those who specialize in forest-interior habitat. Over the long term under Alternative 3, the majority of the Forest would become primarily a mature

and old-growth maple-beech forest because of the lack of disturbance necessary to maintain the oak-hickory forest-type.

Although Alternative 3 would provide the greatest quantity of forest-interior habitat of any of the alternatives, the maple-beech forest that would dominate would not be as biologically diverse as an oak-hickory forest, and would not provide the same quality of forest-interior habitat as the selected alternative. Although in the short term there are no great differences in the amounts of the forest-types and habitats among alternatives, it is important to proceed with the activities necessary for the establishment and growth of oak-hickory regeneration, such as landscape-scale prescribed burning and appropriate silvicultural treatments, during the life of this revised Plan. Otherwise, in the long term, much of the Forest will convert to the less biologically diverse maple-beech forest-type.

This Forest is at a critical juncture in its management history. We can continue to allow it to evolve with only natural processes to determine its future, or we can be proactive and manage it to achieve a diverse and healthy forest ecosystem with a diversity of age-classes and plant and animal species. If we severely restrict management for another 15 years, as would occur under Alternative 3, the consequences are likely to be detrimental to certain species and adverse to diversity over the long term.

A pointed example of the results of the type of management strategy called for under Alternative 3 is the current over-mature condition of the red oak component of the Forest. Red oak is one of the shorter-lived species of the oak family and comprises a large portion of the trees on the Forest. Alternative 3 would allow trees throughout the Forest to become old growth. The problem with over-mature trees is that insects, pathogens and/or drought could cause the mortality of a major portion of the oak component. One only has to look at the recent significant losses of oak in Missouri and Arkansas to see such results. We can provide for a healthy forest by purposefully managing the age-classes of trees so as not to face massive declines and mortality in the future. Alternative 3 would provide no support to the establishment of young oak regeneration. The restriction on vegetation management under this alternative would also inhibit the conversion of non-native pine plantations to native hardwoods and, thus, would slow that improvement of biological diversity.

I am also concerned about openland and early-successional habitat. Since Alternative 3 does not manage for large openlands or early-successional habitats, the species that require these habitats would not fare well under this alternative. The prohibition on pesticide use could adversely affect diversity and some at-risk plants, since some non-native invasive species cannot be effectively controlled with manual or mechanical control methods alone and could out-compete and replace native species.

Implementation of Alternative 3 would not provide as many opportunities for equestrian recreational use as the other alternatives. Since equestrian use has become such an attraction on the Forest over the last decade, I believe it is important to address the demand for this activity. Alternative 3 does not meet this demand as well as the selected alternative because of the reduced number of miles of system trails it would allow and the trail-density limits it would set in wilderness areas. Compared to the other alternatives, it would provide slightly more non-motorized recreational opportunities, with the addition of Burke Branch to the non-motorized recreational area management prescription. However, over 40,000 acres, about 14 percent of the Forest, would be managed for non-motorized recreation

under the selected alternative. Therefore, I find that the selected alternative will provide sufficient non-motorized recreational opportunities and, because of the current high density of roads in the Burke Branch area, I believe that Burke Branch would be better managed as mature hardwood forest.

Since this alternative would make the entire federal mineral estate across the Forest administratively unavailable for development and oil and gas leasing, Alternative 3 would not provide for the utilization of mineral resources. Overall, Alternative 3 would not provide for the level of biological diversity that would be maintained under the selected alternative, and it does not provide the beneficial balance of uses and products that would be provided under the selected alternative.

4. ALTERNATIVE 4

Alternative 4 offers more recreational opportunities than the other alternatives and emphasizes a mix of motorized and non-motorized recreation, habitat for both game and non-game wildlife, and forest management to maintain the oak-hickory forest-type. Under Alternative 4, wildlife openings and openlands would be managed the same as under the 1992 Plan. Shelterwood harvest with reserves and prescribed burning would be used to favor large, mast-producing trees with open understories in order to maintain the oak-hickory forest-type. Watershed resource management would be the same as under Alternatives 2 and 3.

Trail management under Alternative 4 is similar to the 1992 Plan; however, it emphasizes providing a well-marked, mapped and maintained trail system, removes the trail corridor map, and restricts equestrian use to designated system trails, as under Alternative 2. Additional trails would be allowed in natural areas, including for equestrian and bicycle use, with up to about 700 miles of system trails available. This alternative would allow ATV/OHM use on up to 286 miles of trail, using the 1992 Plan's conceptual trail corridor scheme, as well as additional ATV/OHM recreational opportunities on up to 50 percent of the maintenance-level 1 and 2 roads. Trail-density standards would be eliminated in all management areas, and appropriate trail systems would be determined through site-specific analysis.

As under Alternative 2, no new wilderness recommendations are made. The management prescription for Ripple Hollow and Camp Hutchins would be changed to mature hardwood forest, where future timber harvesting could be prescribed for reasons other than timber management. Candidate wild and scenic rivers would be managed as provided under Alternative 2. Minerals management also would be the same as under Alternative 2; however, the no surface-occupancy stipulation would apply Forest-wide.

Decision Rationale

One of the main reasons I am not selecting Alternative 4 is that I am convinced, based on field review and experience, as well as information from other forests, that the best use of forest resources during the next 10-15 years is to manage equestrian use rather than attempting to implement the ATV/OHM trail system and access-opportunities envisioned under this alternative. As I stated above, it is clear that comprehensively addressing the potential, adverse effects on the environment and the natural resources of the Forest from

the use of these vehicles would require an investment of funds and staffing for planning, program development and analysis, execution and monitoring that would preclude the Forest staff's attention to virtually any other activity. Such an investment during the life of the Plan to establish an essentially new recreational use of the Forest far outweighs the benefits of providing this recreational activity. Additionally, I find that Alternative 4 would provide less non-motorized recreational opportunities than any of the other alternatives, and I believe it is important to maintain at least the current level of such recreational opportunities.

In the first decade of Plan implementation, there is little distinction between Alternatives 2 and 4 with regard to the effects of the harvest methods they propose—shelterwood under Alternative 2, or shelterwood with reserves under Alternative 4. This is because under either alternative, only the initial shelterwood cuts would be made during the next ten years. In weighing the benefits of the two harvest methods, I find that shelterwood with reserves would be less effective in maintaining the oak-hickory forest-type than shelterwood. Recent research (*Miller et al., 2004*) indicates that the reserve trees that may be left in an area indefinitely could have a considerably adverse effect on the composition of regeneration in the harvest area. Shade-tolerant species such as maple and beech would be favored under the shade of the reserve trees, while the more shade-intolerant oak would be able to compete successfully only in areas of greater sunlight.

Therefore, I believe that Alternative 4 would be less successful than the selected alternative at providing the conditions necessary to maintain a greater percentage of oak species in the composition of future forest stands. I also find that management of wildlife openings at the level prescribed under this alternative would require the bulldozing and re-establishment of openings that have been allowed to grow up into trees over the last 10-12 years. This would not be economical and is not essential for providing wildlife habitat, wildlife-viewing or hunting opportunities.

D. ENVIRONMENTALLY PREFERRED ALTERNATIVE

NEPA regulations require agencies to specify the alternative or alternatives considered to be environmentally preferable (40 CFR 1502.2[b]). Forest Service NEPA policy (FSH 1909.15, Section 05) defines the environmentally preferable alternative as the one "...that best meets the goals of Section 101 of NEPA . . . Ordinarily this is the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources."

Given this guidance, I am identifying Alternative 2 as the environmentally preferable alternative because it has the fewest adverse effects on the human environment. This ROD provides an overview of the decision process and rationale for the selection of Alternative 2. Of the alternatives considered, Alternative 2 best addresses the conservation and protection of plant and animal species. The selected alternative gives priority to the conservation and recovery of threatened and endangered species. The spread of non-native invasive species is programmatically addressed, as is the control of unmanaged recreation. Equally important, Alternative 2 was developed with the protection of soil resources and improvement of water quality foremost in mind. The selected alternative is focused on the maintenance and improvement of forest health; it provides a framework for active management to work in concert with natural ecological processes.

Alternative 2 is a balanced, multiple-use framework for land management developed to respond to the resource issues the public told us were most important to them. At the heart of the 2006 Forest Plan are the goals and desired conditions for the land. The plan also includes standards and guidelines that establish guidance and limitations on future management practices necessary to ensure that desired conditions are achieved and potential, adverse environmental effects are avoided or mitigated. Through compliance with the standards and guidelines in future decision-making, management under Alternative 2 will balance resource use and ecological sustainability in a manner intended to satisfy competing public desires for the Forest and contribute toward the social and economic vitality of local communities. I find that Alternative 2 best meets the goals of Section 101 of NEPA and is, therefore, the environmentally preferable alternative.

VI. FINDINGS RELATED TO OTHER NATIONAL POLICIES, LAWS AND AUTHORITIES

The Forest Service manages the Forest in compliance with many laws, regulations, executive orders and policies. This discussion does not provide a complete list of all statutes applicable to forest plan revision, but rather highlights the principal statutes. In all cases, the 2006 Forest Plan is consistent with applicable law, policy and direction.

A. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

The Forest has compiled and generated a large amount of information relevant to the effects of each of the alternatives considered in the FEIS. 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:

- Consideration of a broad range of reasonable alternatives
- Disclosure of cumulative effects
- Use of the best scientific information available
- Consideration of direct and indirect effects
- Disclosure of unavoidable adverse effects

This decision does not authorize any ground-disturbing activities or projects. Proposals for such actions are subject to additional, site-specific, environmental analyses that tier to the FEIS and follow appropriate procedures.

The 2006 Forest Plan adopts practical means to avoid or minimize environmental harm. These include provisions for those ecological conditions required to support biological diversity and standards and guidelines to mitigate adverse environmental effects that may result from implementing various management practices. The 2006 Forest Plan includes monitoring requirements and an adaptive management approach that assure necessary adjustments are made over time.

B. 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 provide for multiple use and the 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 a way that is sustainable and best meets the needs of the American people.

The Forest has developed an integrated land and resource management plan using a systematic, interdisciplinary approach to integrate the consideration of physical, biological, economic and other sciences. Based on the analysis documented in the FEIS, I have determined that Alternative 2, the 2006 Forest Plan, maximizes net public benefit through strong conservation measures to protect, maintain and improve soil and water resources, wildlife habitat, and other forest resources within a multiple-use context. The 2006 Plan complies with each of the NFMA regulatory requirements, as explained elsewhere in this ROD and in the accompanying FEIS. Certain requirements are detailed below.

The 1982 NFMA regulations require that fish and wildlife habitat be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area (36 CFR 219.19, [1982]). A key part of our Plan revision was the evaluation of all species that occur on the Forest and the detailed evaluation of 36 species identified with viability concerns. Neither NFMA nor its implementing regulations create a concrete, precise standard for diversity. The original Committee of Scientists noted in the development of the 1982 planning regulations for NFMA that “it is impossible to write specific regulations to provide for diversity” and thus “there remains a great deal of room for honest debate on the translation of policy into management programs” (44 *Federal Register* 26600-26608, 26608). Because absolute certainty cannot be obtained regarding plant and animal community diversity, the planning process involves projections or estimates of distribution and abundance of plants and animals based upon ecological conditions necessary to maintain viable populations.

In the FEIS analysis, we used an ecological, or “coarse-filter,” approach, to identify broad land-categories of wildlife habitat. A relatively small change in the abundance and quality of wildlife habitats is likely to occur in the next decade because of actions taken as we implement the 2006 Plan. Some changes in the quality and quantity of wildlife habitat will occur through natural succession and disturbances. Neither the changes from natural succession, nor from active management as prescribed in the revised Plan, are anticipated to create any species-viability concerns. We also used a species, or “fine-filter,” analysis to ensure that Plan standards and guidelines provide for the needs of threatened, endangered, or sensitive species. Plan direction was developed to conserve habitat and avoid potential, adverse effects of future management actions. The FEIS analysis indicates that, under the selected alternative, there is a high likelihood of the continued representation of all species and important wildlife habitats on the Forest.

We selected MIS that will respond to management and use activities and assist in measuring and predicting the effects over time of implementing the Forest Plan. We selected the MIS based on our experience implementing the 1992 Forest Plan and the best available scientific information. Monitoring and management have shown that some of the MIS in the 1992 Plan were not good indicators. Some are habitat generalists not very

responsive to changes in management. Others occur on only a small portion of the Forest and, so, are of limited use in indicating overall effects. Lastly, some are difficult to find, so that regular monitoring is either impossible or unreliable (see FEIS Appendix F).

The monitoring of MIS is only one part of the overall monitoring effort. Species not designated as MIS can be, and are, monitored as well. Recognizing the discretion provided by the 1982 NFMA regulations (36 CFR 219.19[a][1]), we carefully selected MIS that meet the intent of the NFMA regulations, but do not impose an unattainable or unnecessarily burdensome monitoring requirement on the Forest. (Also see 36 CFR 219.14(f), 2005.) The relationship between habitats provided on the Forest and MIS population trends will be monitored in cooperation with state fish and wildlife agencies. Population trends may be determined by a variety of methods, including, but not limited to, data and analysis relating to habitat.

NFMA implementing regulations also require that forest plans identify the harvest methods proposed for implementation. The 2006 Plan includes a forecast of the methods likely to be chosen as the Plan is implemented. The 2006 Plan does not mandate that any particular harvest method be applied to any specific project. The choice of when, where and how to harvest timber is deferred as a future, project-level decision subject to site-specific environmental analysis.

Adaptive management is an important part of ensuring compliance with the NFMA and is a philosophy that runs through the 2006 Forest Plan. Recognizing that perfect information and resource inventories are impossible in an imperfect world, we anticipate that new scientific information and changes in resource conditions will require “course corrections” during the 10-15 year life of this plan. The 2006 Forest Plan is dynamic and will respond to new information.

The 1982 planning rule requires identification of the alternative that maximizes the present net value (PNV) and how the selected alternative compares to this alternative. According to the economic analysis presented in the FEIS, Alternative 3 maximizes PNV due to its low recreation and vegetation-management costs. The selected alternative has the third-highest PNV of the four alternatives considered. FEIS Appendix B includes a detailed description of the economic analysis.

C. 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 (August 30, 2000) that 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 would most effectively protect threatened, endangered and sensitive species. The 2006 Forest Plan was developed with our responsibilities concerning the conservation of listed species (Section 7[a][1]) foremost in mind. Based on consultation with the US Fish and Wildlife Service, their concurrence with our biological assessment of the effects of the proposed 2006 Plan, and the non-jeopardy finding in their biological

opinion of the 2006 Plan, I have determined that the 2006 Forest Plan is in compliance with the Endangered Species Act.

D. MULTIPLE-USE SUSTAINED-YIELD ACT

The Multiple-Use Sustained-Yield Act of 1960 (MUYSA) states that the national forests shall be managed for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. The Secretary of Agriculture is authorized and directed to develop and administer the renewable surface resources of the national forests for multiple use and the sustained yield of the several products and services obtained from them.

The MUYSA defines multiple use as:

The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

Accordingly, I have carefully considered the relative values of the various resources of the Forest and southern Illinois to ensure that they are utilized in the combination that will best meet the needs of the American people. The FEIS discusses many of the relationships regarding national forest resources and those found on other ownerships. For instance, wilderness areas, found only on National Forest System lands and on Crab Orchard National Wildlife Refuge, but not on private property, are managed on the Forest with the primary purpose of encouraging native ecosystems and protecting wilderness character.

Although most of the timber harvested in southern Illinois is from private lands, I am deciding to continue a modest timber management program on the Forest, not for the production of timber, but for the benefit of other resources, such as wildlife habitat and the biological diversity of a healthy, oak-hickory forest. As a byproduct, the harvesting of some timber from the Forest will utilize a renewable resource needed by the American people. Large blocks of forested land, generally not found on private property in southern Illinois, will be managed on the Forest to provide habitat for forest-interior species. Equestrian trail-riding opportunities, in demand on National Forest System lands, will be provided under the 2006 Plan. However, ATV riding opportunities, which are being offered currently on other ownerships near the Forest, will not be provided under the 2006 Plan.

Some lands on the Forest will be used for less of their resources than others. However, I have given equal consideration to the relative values of the various resources on the Forest to make what I believe is the most judicious use of the land.

E. 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 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 be incorporated in specific forest plans. Accordingly, I find that the 2006 Forest Plan complies with the Forest Service Strategic Plan, and contributes to its goals, which are:

- **Reduce the risk from catastrophic wildland fire**
The 2006 Forest Plan contains management direction in the form of desired conditions and objectives to increase the amount of forest restored to, or maintained in, a healthy condition to reduce risk and damage from wildland fires.
- **Reduce the impacts from invasive species**
Through Forest-wide standards and guidelines, the 2006 Forest Plan addresses the spread of terrestrial or aquatic non-native invasive species that pose a threat to native ecosystems, as well as the conditions desired on the ground that foster native species. All management areas in the 2006 Plan allow for the treatment of non-native invasive species, including wilderness with proper approvals. The Plan emphasizes the reduction of non-native invasive species, but makes no decisions on site-specific treatments.
- **Provide outdoor recreation opportunities**
As outlined elsewhere in this ROD, the 2006 Forest Plan places emphasis on recreational use of the Forest. One of the most important aspects of the 2006 Plan is the direction restricting horseback riding to designated system trails and emphasis on the development of a mapped, marked and well-maintained trail system. It corrects the unmanaged recreation problem that has resulted from cross-country equestrian use and offers the potential for new trail opportunities for hikers and bicyclists.
- **Help meet energy resource needs**
This ROD makes no consent to lease federal oil and gas resources, but does allow for the utilization of energy resources on suitable areas of the Forest. Standard or special lease stipulations are applicable in each management area.
- **Improve watershed conditions**
The 2006 Forest Plan employs a proactive approach to the management of watersheds and riparian areas. Two new management prescriptions have been established, one for water-supply watersheds and another for the Mississippi and

Ohio Rivers floodplains; new riparian filter-strip guidelines have been established; and the state's best management practices for forest management have been adopted to improve watershed conditions.

- **Mission-related work in addition to that which supports agency goals**
This goal addresses processes. While the 2006 Forest Plan focuses on desired conditions and objectives and not the processes to achieve them, we will improve our productivity and efficiency as we implement the Plan.

F. ENERGY POLICY ACT OF 2005

I find that the 2006 Forest Plan is consistent with the Energy Policy Act of 2005. This act emphasizes that domestic energy production from both renewable and nonrenewable sources is a national priority.

G. HEALTHY FOREST RESTORATION ACT

I find that the 2006 Forest Plan is consistent with the Healthy Forest Restoration Act. It provides for the protection of old growth when conducting covered projects, and 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 2006 Forest Plan also emphasizes the protection and enhancement of riparian areas and watershed health, as directed under the Healthy Forest Restoration Act.

H. 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 and/or low-income populations. I have determined from the analysis disclosed in the FEIS that the 2006 Forest Plan is in compliance with this executive order. My conclusion is based on the fact that the risk of disproportionate effects on minority and/or low-income populations resulting from implementation of the 2006 Forest Plan is very low. The selected alternative was developed as a programmatic framework to avoid adverse environmental effects in future decisions.

I. NATIONAL HISTORIC PRESERVATION ACT (NHPA)

The 2006 Forest Plan is a programmatic action that authorizes no site-specific activity. Projects undertaken in response to direction in the 2006 Plan will comply fully with the laws and regulations that ensure protection of cultural resources. The 2006 Plan contains direction for cultural resource management, including the integration of cultural resource management with other resource management activities. Since the 2006 Plan does not authorize ground-disturbing activities, consultation with the Illinois State Historic Preservation Officer under the NHPA is not required. It is my determination that the 2006 Plan complies with the NHPA and other statutes related to protection of cultural resources.

J. MIGRATORY BIRD TREATY ACT AND EXECUTIVE ORDER 13186

The 2006 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 2006 Plan focuses on the maintenance or enhancement of ecological health and plant and animal community diversity for the benefit of wildlife species, including migratory birds. I find that the management direction in the 2006 Plan was developed with full consideration of the broad objectives and intent of Executive Order 13186 and complies with the Migratory Bird Treaty Act.

K. DATA QUALITY ACT

The Data Quality Act and its federal guidelines address the quality of information used in the work of federal agencies. The 2006 Forest Plan and EIS were developed by an interdisciplinary planning team of agency scientists and resource specialists using the best available scientific information. Data quality was of paramount concern during the planning process, as the objectivity and quality of scientific data is key to development of a realistic resource management plan. The planning team was familiar with the USDA information guidelines and devoted considerable effort to 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 guidelines are not intended to be legally binding regulations, they were carefully observed during development of the 2006 Plan and EIS.

L. FOREST SERVICE TRAVEL-MANAGEMENT RULE

The Travel Management Rule (70 *Federal Register* 68264), dated November 9, 2005 (36 CFR Parts 212, 251, 261, and 295) revised regulations regarding travel management on National Forest System lands to clarify policy related to motor vehicle use, including off-highway vehicles. This rule prohibits the use of motor vehicles off the designated system or use inconsistent with those designations, once designations are published. Further site-specific analysis will be required, as appropriate, when changing the transportation system with the designation of roads, trails and areas open to motorized uses. The 2006 Forest Plan makes no change in the current opportunities for motorized vehicle use on the Forest. ATV use has been enjoined by court order since 1996 and by Forest Supervisor's Closure Order since 1997. The 2006 Plan retains this prohibition on ATV use and makes no site-specific decision to limit motorized use on any particular road or trail. The only difference in terms of ATV use is that the aspiration, or desired condition, of the 1992 Plan was to eventually establish an ATV travelway system through future site-specific decision-making and the desired condition of the 2006 Plan is to retain the current prohibition of ATV use on the Forest.

M. OTHER LAWS, POLICIES AND REGULATIONS

I find that the 2006 Forest Plan and FEIS are in compliance with the following policies and regulations: National Energy Policy (Executive Order 13212), Transportation Rule and

Policy, Clean Air Act, Clean Water Act, Energy Requirement and Conservation Potential, Executive Order 13112 on Invasive Species, Secretary of Agriculture's Memorandum No. 1827 on Prime Farmland, Rangeland and Forestland, Executive Order 1099 on the Protection of Wetlands and Floodplains, and the body of national direction for managing national forests.

N. 1995 DISTRICT COURT RULING - COUNTS II, V, VI, and VIII

The 1995 Memorandum and Order of the United District States Court for the Southern District of Illinois regarding the Sierra Club and Regional Association of Concerned Environmentalists lawsuit against the 1992 Amended Land and Resource Management Plan ruled in favor of the plaintiffs on Counts II, V, VI and VIII. Count II pertained to the viability of MIS, challenging NEPA compliance, ensured viability of the species and compliance with the Migratory Bird Treaty Act. Count V pertained to oil and gas leasing and Count VI with all-terrain vehicles. Count VIII related to the cumulative effects analysis in the Final Supplemental EIS (FSEIS) for the 1992 Plan. For the reasons stated below, I have determined that the FEIS on the proposed 2006 Plan satisfies all the requirements of the Court order.

1. COUNT II

With regard to Count II, the Court ruled that the cumulative effects analysis in the FSEIS did not meet the requirements of NEPA. The Court found that the Forest Service failed to disclose all of the effects of the various activities that would be allowed under the Plan, as well as the incremental effects of the various activities in combination, and that the Forest Service must have actual monitoring data about current populations in order to monitor population trends and the relationship to habitat changes. The Court found that there was no discussion of whether the effects of the activities, when taken together, would have a more serious impact; and that it is insufficient to merely state that the cumulative effects are insignificant.

In the FEIS for the proposed 2006 Revised Plan, the effects of all of the various activities proposed under the several alternatives evaluated in the FEIS have been addressed. A list of activities that could possibly be implemented is presented at the beginning of Chapter 3, and the effects of those activities are analyzed for each resource area. The cumulative effects analysis for each resource area considers the incremental effects of the proposed activities of each alternative together with the effects of past, present and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

The effects analysis in the current FEIS uses the Habitat Suitability Index (HSI) Model, an updated version of the Habitat Evaluation Program (HEP model) of the 1992 Plan, only to predict the quality and quantity of habitat available to the MIS, expressed as "habitat capability" (HC): $HC = HSI \times \text{acres of habitat}$. Although the model does not predict potential population numbers resulting from each alternative, it has been used to predict population trends on the Forest. On-the-ground transect counts carried out during the last decade in order to monitor MIS population trends were used to develop the 2006 Plan, and this monitoring and data collection will be continued as part of future monitoring under the 2006 Plan.

With regard to projections of viability of MIS, the court was unable to determine whether the Forest Service considered its plan to be in compliance with the mandate of ensuring viability. In the 2006 Plan, five MIS are selected that represent the major wildlife-habitat management issues on the Forest. The worm-eating warbler, scarlet tanager and wood thrush were selected to represent effects on forest-interior species, while the northern bobwhite and yellow-breasted chat were chosen to represent effects on species of large openlands and early-successional habitats. The HSI Model utilized new field data collected specifically for the modeling of the effects of each of the alternatives on MIS. The habitat suitability indices and habitat capability units have been used to predict the viability of MIS on the Forest. The analysis, based on the best available science, shows that the cumulative effects on MIS of Alternatives 1, 2 or 4 would likely result in stable or slightly increasing population trends for all five of the MIS and, thus, viable populations of these species on the Forest. Under Alternative 3, population trends of the openland species are expected to decline slightly.

Compliance with the Migratory Bird Treaty Act was also challenged as it pertains to the viability of MIS. Under the 2006 Plan, we will continue our efforts to improve the conservation of populations of migratory birds. The Forest is in compliance with Executive Order 13186 that directs all federal agencies to work with the US Fish and Wildlife Service to conserve populations of migratory birds. We have consulted formally with the US Fish and Wildlife Service on our proposed Plan and management direction for migratory birds (see planning record). Since publication of the 1992 Plan, Courts have held that this Act is related to hunting and poaching, not intended by Congress to apply in the land-management planning context. Indeed, the Multiple-Use Sustained-Yield Act and the NFMA, enacted subsequent to the Migratory Bird Treaty Act, both contemplate the harvest of timber.

Bird conservation is of paramount importance to the Forest. The 2006 Plan requires reasonable precautions to mitigate possible effects on migratory birds. Additional mitigation, and consideration of seasonal restrictions on actions, may be considered, as appropriate, during project-level decision-making. As stated above, the environmental analysis has shown that the 2006 Plan, with the possibility of future site-specific timber harvesting proposals during portions of the nesting season, would lead to stable or slightly increasing population trends for all five MIS and, thus, viable populations of migratory bird species on the Forest.

2. COUNT V

The Court ruling on Count V pertained to oil and gas leasing and the failure of the Forest to conduct an adequate analysis of the effects of an oil spill in the FSEIS. The FSEIS for the 1992 Plan analyzed the effects of likely exploration and development of oil and gas resources and a ROD was issued documenting the Regional Forester's decision to consent to lease. However, in the 2006 Plan the Forest Service proposes no consent to lease and, in this ROD, I am making no decision to consent to lease. However, an analysis is included in the FEIS for the proposed 2006 Plan regarding the possible effects of oil and brine spills on soil and water, the resources most likely to be affected should a spill occur.

3. COUNT VI

Count VI challenged the Forest's analysis of the use of ATV/OHM. In the 1992 Plan, the Forest had identified corridors for future trail decisions, but had not designated trails. The Court ruled that the FSEIS for the 1992 Plan failed to discuss the likelihood of keeping ATV/OHM users on designated trails, or what the increased environmental effects would be due to an inability to keep such users on the trails. It also stated that there was no attempt to explain why the Forest Service considered the Shawnee National Forest suitable for this type of recreation when the Hoosier National Forest was not. The 2006 Plan includes no ATV/OHM use other than that allowed for administrative purposes, access by emergency vehicles, or as authorized by permit or contract. However, the FEIS discloses the environmental effects of unauthorized ATV use on the Forest at the programmatic level. The 1996 injunction on the 1992 Plan did not prevent the authorized use of ATV/OHMs by people with disabilities, and this use is consistent with the 2006 Plan. No discussion is included here regarding the suitability of ATV/OHM recreation on the Shawnee National Forest versus the Hoosier National Forest, since general ATV/OHM use is not allowed under the 2006 Plan.

4. COUNT VIII

Count VIII related to the cumulative effects analysis in the FSEIS for the proposed 1992 Plan. The Court found the cumulative effects analysis to be insufficient because it merely listed the individual effects of each contemplated activity on the environment without engaging in an analysis of the effects of those projects taken as a whole, that oil and gas leasing was not discussed with respect to fish and wildlife, and that the effects of ATV/OHM trails were mentioned only in passing. In the FEIS for the 2006 Plan, the cumulative effects analysis considers the direct, indirect and incremental effects of the proposed and probable management practices and use activities of each alternative together with the effects of past, present and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

VII. IMPLEMENTATION, MONITORING, EVALUATION

A. IMPLEMENTATION BEGINS IN 30 DAYS

The 2006 Forest Plan becomes effective 30 calendar days after the Notice of Availability of the ROD and FEIS are published in the *Federal Register* (36 CFR 219.10 [c][1], 1982 planning rule).

B. TRANSITION FROM THE 1992 PLAN TO THE 2006 FOREST PLAN

The 2006 Forest Plan direction will apply to all implementing projects on or after the effective date of this ROD. Because this Plan is a revision of the 1992 Plan, many aspects and much of the management direction of the 1992 Plan are carried forward relatively unchanged into the 2006 Forest Plan. Therefore, most existing projects and ongoing actions that are consistent with the 1992 Plan will be consistent with the 2006 Plan. However, the ROD and 1992 Plan were vacated and remanded by the court, which in 1996

permanently enjoined commercial hardwood timber sales, ATV/OHM use, and oil and gas leasing until new or revised planning documents were issued consistent with the court's ruling.

I find that the 2006 Plan and FEIS are consistent with the court's ruling. The FEIS provides adequate analysis of direct, indirect and cumulative effects of hardwood timber harvest to support a decision to prescribe harvest activities as called for in the 2006 plan. The consent to lease for oil and gas leasing was not made as a part of this Plan decision, but the FEIS analysis includes adequate basis for the 2006 Plan's identification of areas administratively available for future oil and gas development and the minimum stipulations that would be required if those activities occur in the future. The potential effects of providing a system of travelways for ATV and OHM use were considered, and our review of those potential effects led to my decision that the Plan's desired conditions and goals are to continue the current prohibition on ATV/OHM use.

Many management actions decided prior to the issuance of this ROD are routine and ongoing. Those decisions generally will be allowed to continue unchanged because their anticipated effects are part of the baseline analysis considered in the FEIS and biological assessments and evaluations of the revision. NFMA 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. 1604[i]). In the context of plan revision, NFMA 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 in order to bring them into compliance with the standards and guidelines of the 2006 Forest Plan. The statutory criteria "as soon as practicable" and excepting "valid existing rights" are useful in exercising that discretion.

There currently are no timber-sale contracts on the Forest to be brought into compliance with the 2006 Forest Plan. Other use and occupancy agreements are substantially longer than timber contracts. These use and occupancy agreements will be reviewed to determine whether or when the Forest Supervisor should exercise discretion to bring them into compliance with the 2006 Plan. Recent project decisions that have not yet been implemented will be reviewed and adjusted by the decision-maker, if necessary, to be consistent with the 2006 Plan.

C. KEY CONSIDERATIONS IN PLAN IMPLEMENTATION

The 2006 Forest Plan provides broad, strategic, landscape-level direction for managing the Forest. Working toward the desired conditions and achieving the objectives in the 2006 Plan will be accomplished through site-specific project decisions, using the appropriate analyses and processes necessary to comply with the requirements of NEPA and other laws and regulations. The 2006 Plan, of itself, makes no project-level decisions.

The FEIS for the 2006 Forest Plan considered and evaluated the management that likely would be necessary to implement the objectives of the 2006 Plan. It addressed those issues and concerns relevant at a larger, landscape or Forest-wide level. Therefore, in essence, the FEIS is itself a cumulative-effects document, because it analyzed the broad effects of the management direction that may be expected in the first decade (and in the longer term) and disclosed the totality of effects Forest-wide.

By tiering to the FEIS, we will make use of this Forest-wide analysis to streamline our environmental analyses of project-level decisions. We will use this as a Forest-wide or landscape-scale disclosure, applicable to a wide range of findings appropriately done at the Forest-wide level. Analysis and findings related to threatened or endangered species should be greatly simplified when projects are within the bounds of the 2006 Plan and the FEIS.

Implementation of the 2006 Forest Plan is dynamic and depends upon many factors. Plan appendices contain information concerning proposed management techniques and projected outputs. The projected outputs, shown in Plan Appendix B, are a forecast of what may occur over the life 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.

OIL AND GAS LEASING

Subsequent to this decision, which only identified those areas of the Forest administratively available for minerals development, leasing could occur. Parcels with federally owned oil and gas rights would be nominated to the BLM Eastern States Office, which would then forward the nominated parcel(s) to the Forest Service Regional Office for processing, whereby each parcel is subject to the following (36 CFR 228.102[e]):

- Verification that oil and gas leasing of the specific parcel has been adequately addressed under NEPA and is consistent with the Forest Plan.
- Assurance that the conditions of surface-occupancy identified in Plan Appendix H are properly included as stipulations in resulting leases.
- Determination that operations and development could be allowed somewhere on each proposed lease, except where stipulations prohibit all surface-occupancy.

If new information or circumstances requiring further environmental analysis are discovered during the processing of nominated lease parcels, then such analysis will be completed before nominated parcels are forwarded to BLM with final Forest Service consent to leasing. After the Forest Service has provided BLM confirmation that the above three conditions have been met for each parcel and consented to leasing the parcel(s), the BLM may include the parcel(s) in a sale notice and sell the parcel(s) in a competitive oral auction (43 CFR Subpart 3120). The sale and issuance of a lease is a Department of the Interior action subject to BLM protest and appeal procedures.

D. FUTURE CHANGES TO THE PLAN

1. MONITORING AND EVALUATION

Monitoring is designed to answer questions regarding implementation of the 2006 Forest Plan. Monitoring and evaluation will focus on accomplishment of the goals and objectives of the 2006 Plan and whether there is a need for change in the Plan. Evaluation reports will display how 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 strategy in Plan Chapter VI ties in well with the strategic nature of forest plans. This monitoring strategy has four key components:

- 1 The overall strategy described in Plan Chapter VI;
- 2 A monitoring implementation guide based on the Plan, detailing how monitoring will be accomplished;
- 3 An annual monitoring plan that outlines annual, specific tasks for the current year;
- 4 Annual monitoring and evaluation reviews that, together with comprehensive evaluations conducted every five years, provide a forum to review current annual and longer-term findings and identify specific modification as necessary.

Another important part of our adaptive management approach is the establishment of an environmental management system (EMS) for the Forest, as required by the 2005 planning rule (36 CFR 219.5). The EMS will focus on monitoring, performance-improvement and the reduction of the environmental effects of selected significant aspects of our management under the 2006 Plan. The EMS will complement the overall monitoring and evaluation strategy of the Forest.

2. AMENDING THE FOREST PLAN AND ADAPTIVE MANAGEMENT

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. This is adaptive management. The 2006 Forest Plan is well-structured for adaptive management because it describes the desired conditions toward which we will strive as we implement the Plan. In fact, the desired conditions will be the basis for the projects we accomplish during the life of the Plan.

In making this decision to approve the 2006 Forest Plan, I am also deciding that the Plan will be adaptive and subject to change as we monitor, learn and gain new information. The Plan revision has incorporated much that has been learned since implementation of the 1992 Plan. However, this Plan could still be improved as we learn more about ecosystem functions and processes. The Plan is not cast in stone, to be unquestioningly observed for the next 15 years. We will track progress toward reaching the desired conditions, and modify management actions when required, depending on the results of our actions or new information. 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 necessary, change.

Changes to the 2006 Plan generally will take the form of amendments or corrections, as determined by the Forest Supervisor. They will be accomplished following the appropriate procedures specified in NFMA and its implementing regulations. The correction of simple errors may take the form of an errata statement.

VIII. 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

Electronic Mail: Appeals may also be filed via e-mail to: appeals-chief@fs.fed.us. The use of Microsoft Word (.doc), WordPerfect (.wpd) or Adobe (.pdf) is recommended. In the Subject line please note the title of the Plan and FEIS.

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

Simultaneous electronic filing to the deciding officer should be sent to: appeals-eastern-regional-office@fs.fed.us. In the Subject line please note the title of the Plan and FEIS.

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 by title and subject of the document in which the decision is contained
- Date of the decision and name 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

IX. CONTACTS

More information on this decision, the 2006 Forest Plan and/or the FEIS can be obtained by contacting:

Hurston A. Nicholas
Forest Supervisor
(618) 253-7114

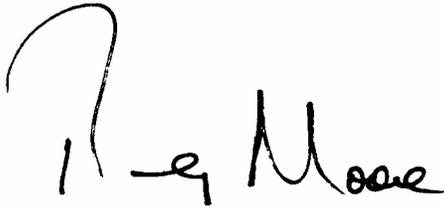
or

Richard Blume-Weaver
Planning Staff Officer
(618) 253-7114

or

Stephen Hupe
Forest Planner
(618) 253-7114

Mailing address: Shawnee National Forest, 50 Highway 145 South, Harrisburg, IL 62946.
Electronic copies of the FEIS, the Executive Summary, the 2006 Forest Plan, and the ROD are available at: www.fs.fed.us/r9/forests/Shawnee.



Randy Moore, Regional Forester

March 20, 2006

Date

