

Chapter 1

PURPOSE AND NEED

Overview

This chapter explains the reasons for the preparation of the Final Environmental Impact Statement (FEIS) and includes an overview of:

- The nature of the decision to be made
- Purpose of and need for action
- The Forest planning documents
- The process used to prepare these documents
- The Forest's location
- Defining "overall best management"
- The identification of issues and concerns

Nature of the Decision

The Eastern Regional Forester approved the Hoosier National Forest (the Hoosier or the Forest) Land and Resource Management Plan (Forest Plan) in September 1985. In the years since the original plan, agency goals and objectives, along with other national guidance for strategic plans and programs, have changed. To comply with the Government Performance and Results Act, the agency completed the USDA Forest Service National Strategic Plan (2004 Revision); this document can be found electronically at <http://www.fs.fed.us/plan>. This plan documents the agency's commitment to sustainable forest management and lays out the goals and objectives for the USDA Forest Service for the next 5 years. The plan has four long-term goals: ecosystem health, multiple benefits to people, scientific and technical assistance, and effective public service. The strategic plan affects programs on the Hoosier. The document *Need for Change, Description of Proposal for Revising the Forest Plan of the Hoosier National Forest* provides more information (USDA FS 2000b).

The 2006 Land and Resource Management Plan (Forest Plan for the Hoosier is a companion document to this FEIS. The Hoosier developed the Forest Plan in accord with the Regional Forester's identified "preferred alternative," which is based on public input, legal requirements, and resource needs. The Forest Plan will guide all natural resource management activities, establish management goals and objectives, guide allocation of lands to different management emphases, and provide standards and guidelines for Forest Plan implementation.

Regulations implementing the 1976 National Forest Management Act (NFMA) require that Regional Foresters revise forest plans and provide the basis for revision. In 1982, the *Code of Federal Regulations* at 36 CFR 219 included instructions to revise forest plans. The Hoosier prepared the Final Environmental Impact Statement (FEIS) and Forest Plan under these regulations. Specific instructions found at 36 CFR 219.10(g) state:

"A forest plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the plan have changed

significantly, or when changes in RPA policies, goals, or objectives would have a significant effect on forest level programs.”

In accordance with applicable Federal law, the Forest Service is proposing a revised planning framework to guide management of the Forest for the next 10 to 15 years. NFMA requires that Forest Plans be revised at least every 15 years (16 U.S.C. Sec. 1604(f)(5)). The Hoosier developed this Plan revision under the 1982 planning regulations at 36 CFR Part 219.

The National Environmental Policy Act (NEPA) incorporated environmental analysis and public participation requirements in 1969. National Environmental Policy Act procedures direct Federal agencies to make environmental information available to the public before making decisions and taking actions. The NEPA process helps public officials make decisions based on an understanding of environmental consequences and helps them take actions that protect, restore, and enhance the environment. Procedures in 40 CFR 1500-1508 require Federal agencies to use NEPA.

The purpose of this plan is to replace the 1985 Hoosier National Forest Land and Resource Management Plan as amended. The Forest Plan will guide all natural resource management activities on the Hoosier to meet the objectives from Federal law, regulations, and policy. The Forest Plan will address conditions and direction that have changed since the Forest published the original plan and subsequent amendments. The Forest has accomplished this by selecting a management strategy that best achieves a combination of these identified Forest goals:

- Conserve endangered and threatened species habitat
- Maintain and restore sustainable ecosystems
- Maintain and restore watershed health
- Protect our cultural heritage
- Provide for a visually pleasing landscape
- Provide recreation use in harmony with natural communities
- Provide a useable land base
- Provide for human and community development

Goals relate to the issues and the role of the Hoosier. Chapter 3 of the Forest Plan further explains and summarizes the Forest goals.

The Record of Decision (ROD) presents six key decisions for managing the Hoosier National Forest on a landscape scale in the long term. The six decisions are (36 CFR 219, 1982 regulations):

- Forest-wide multiple use goals and objectives
- Forest-wide management requirements for protecting resources
- Management area direction
- Land suited and not suited for timber management
- Monitoring and evaluating requirements
- Recommendations to Congress, such as Wilderness designations

Planning Documents

The Forest amended the original 1985 Forest Plan seven times. A significant amendment in 1991 changed the majority of the direction contained in the 1985 plan. This Forest Plan supersedes the 1985 Forest Plan and all amendments to it.

The FEIS and Forest Plan focus on the condition of the land as a basis for providing multiple use goods and services to the public. The Forest Plan embodies a multiple-use concept of natural resource management. The Forest has strived to balance competing uses across the Forest landscape. Not each use can or should occur on every acre of the Forest. The vision of this Plan is to blend multiple-use resource management in such a way that the Hoosier sustains and protects the overall health and condition of the land and best meets the needs of the American people.

This FEIS analyzes the net public benefits provided by each of the five alternatives considered in detail and the environmental effects of implementing them. The accompanying Forest Plan presents the alternative selected for management of the Forest. Based on its ability to meet the Forest goals, address the issues, and provide the greatest net public benefit, the Forest has identified Alternative 5 as the selected alternative.

The Forest Plan focuses on the decade beginning with the year 2006. We expect to revise the Plan again within 15 years or whenever conditions have changed significantly. Site-specific treatments and actions are not included in the Proposed Plan. The Forest will complete site-specific analyses for management actions at the project level.

The Forest Plan does not mandate any site-specific decisions, nor does it contain a commitment to propose or select any specific project. Site-specific decisions determine exactly where, when, and how projects will occur in accordance with the Forest Plan. These decisions are not included in this programmatic Plan but instead involve a separate level of decisionmaking. Thus, the environmental effects of future site-specific proposals are not analyzed in this FEIS. Subsequent site-specific environmental analysis will occur prior to any ground-disturbing, site-specific project proposal. Public involvement is a key part of site-specific project development. Site-specific actions must be consistent with the standards and guidelines of the Forest Plan. These standards and guidelines operate as parameters within which future projects must occur, unless the Plan is amended (like a zoning variance) to allow the site-specific action to be implemented.

The Notice of Intent (NOI) to prepare an EIS for Forest Plan revision identified six topics to be addressed. These topics were:

- Watershed Health
- Ecosystem Sustainability
- Recreation Management
- Roadless Area Inventory and Evaluation
- Recommendations concerning Wild and Scenic and Recreational Rivers
- Scenery Management

Later portions of this chapter include a discussion on how issues were determined for the plan revision effort and a list of those issues.

Although the Proposed Plan will provide guidance for the next decade, the planning team analyzed each alternative over a period of 150 years. The team used a 150-year projection to determine long-term effects including long-term sustained yield. Since the Forest will revise the Plan within 15 years, this document displays some indicators of response and other measures used in comparing the alternatives only for the first two decades.

Forest Planning Process

The planning process takes place at three different levels: national, regional, and forest. By separating the levels of planning, it becomes easier to put the national, regional, and local supplies and demands in more appropriate context.

The principal laws and regulations guiding all three levels of forest planning are:

- The Forest and Rangeland Renewable Resources Planning Act (RPA), as amended by NFMA
- NFMA– Planning Regulations; Title 36, Code of Federal Regulations, part 219
- The National Environmental Policy Act (NEPA)
- The Council on Environmental Quality NEPA Regulations, Title 40, Code of Federal Regulations, Part 1500

Forest level planning considers the long-term management of the lands and resources on a national forest. In developing the Proposed Plan, the Forest has followed 10 basic steps outlined in NFMA regulations:

1. Identification of Purpose and Need
2. Development of Planning Criteria
3. Inventory Data and Information Collection
4. Analysis of Management Situation
5. Developing Alternatives
6. Estimating Effects of Alternatives
7. Evaluation of Alternatives
8. Identification of the Preferred Alternative
9. Plan Approval
10. Monitoring and Evaluation

Forest plan direction provides management goals, desired conditions, objectives, standards and guidelines, and an overview of management practices expected to be used to move resources toward the desired condition. This EIS narrows the scope of future analysis by providing direction and an estimate of effects. Project level analyses will be tiered to the Forest Plan FEIS.

All of the documents, files, letters, and other documentation that comprise the planning records are available for review during regular business hours at the Hoosier National Forest Supervisor's Office, 811 Constitution Avenue, Bedford, Indiana. The planning record details information and decisions made during development of the Proposed Plan, as required in the NFMA. Many of the major documents also appear on the Hoosier website: www.fs.fed.us/r9/hoosier/forestplaninfo.htm.

The FEIS incorporates comments received on the DEIS. The Forest Plan incorporates changes from the Proposed Plan made between Draft and Final EIS. The ROD records the decision and

is subject to administrative appeal in accordance with the Appeal Regulations 36 CFR 217 (1989), as amended.

Monitoring and evaluation are an important part of this planning framework. The monitoring strategy includes implementation, effectiveness, and validation monitoring. The process of plan approval, project decision-making, monitoring, evaluation, plan amendment, and revision allows a Forest Plan to be responsive to changing social and environmental conditions. This Forest Plan is a management guide that describes the Regional Forester's expectations for future conditions, and the Forest will amend and revise it as needed.

Forest Location

Located in southern Indiana, the Hoosier contains approximately 199,150 acres (as of November 2003) of National Forest System (NFS) land. The Forest was established by proclamation in 1935 and became a national forest in 1954. The land is located in two ranger districts: Tell City Ranger District and Brownstown Ranger District. There is a mix of public and private lands in each ranger district.

The Hoosier comprises approximately 25 percent of the public lands in Indiana, and is within a day's drive of several major metropolitan areas, including Chicago, Cincinnati, Evansville, Fort Wayne, Indianapolis, Louisville, and St. Louis. Principal routes to the Hoosier are State Highway 37 from the north and south, U.S. Highways 50 and 150, State Highway 64, 66, and 446, and Interstate 64 in an east-west direction.

Hardwood-covered rolling hills interspersed with small farms and pastureland characterize southern Indiana. Spring and fall color is often spectacular. The unglaciated karst topography, with cave formations and sinkholes, provides opportunity for unique scenic and recreational experiences.

Identifying Public Issues and Concerns

The Forest identified public issues through a variety of means. The Federal Register published the Notice of Intent (NOI) to prepare an EIS for Forest Plan revision on November 1, 2000. In addition, as part of the public involvement process, the agency held meetings for the public to gather input on the NOI and provide the public further explanation of the forest planning process. The Forest held the first meeting in Martinsville, Indiana on December 4, 2000 and a second meeting in Corydon, Indiana on December 6, 2000. The planning team then used the comments submitted from the public scoping process to refine the issues and to develop management indicators that would demonstrate how each alternative would address the issue and allow for comparisons between the alternatives.

The Forest also held public meetings prior to the development of alternative management strategies. The Forest designed the meetings to allow the public to assist in the development of alternatives for managing the Forest. These meetings provided the public with an overview of the process to date, a discussion of what was currently occurring in the process, and what they could expect to see in the future. The format of each meeting divided the public into working groups. Each group designed three alternatives for the planning team to consider. The alternatives were to address recommended minimum impacts on forest resources, maximum resource use they would want to implement, and something between the two. The Forest held three meetings to develop alternatives. The Forest held the first meeting to address input from

Forest employees on July 21, 2003 in Bedford, Indiana. The Forest held meetings for the public on August 2, 2003, in Jasper, Indiana, and on August 16, 2003, in Bedford.

Using these comments from the public, other agencies, and Hoosier employees, the interdisciplinary team analyzed five alternative proposals for managing the resources on NFS lands. Chapter 2 displays these alternatives.

Some issues are beyond the jurisdiction of the Forest Service, outside the scope of the planning process, or best handled case-by-case in site-specific evaluations. The planning team grouped the issues that they found to be within the scope of the planning process.

After completing the DEIS, the Forest conducted a 3-month public comment period. The Notice of Availability, published in the Federal Register (Volume 70, Number 57, March 25, 2005), stated that the comment period ended June 23, 2005. This notice was amended in the Federal Register (Volume 70, Number 102, May 27, 2005) which extended the public comment period to June 27, 2005. During this time members of the Planning Team conducted meetings for employees, the public and organizations. Three public meetings were held in Martinsville (May 10), Paoli (May 11), and Troy (May 12). The meeting in Paoli was attended by 32 people, and 43 people attended each of the other two meetings. Although not everyone in attendance claimed an affiliation with a organized group, several groups were represented at the meetings, including Monroe County 4x4, Fatboys (a 4 wheel drive group), IFWDA (Indiana Four Wheel Drive Association), the Ruffed Grouse Society, Hoosier Environmental Council, Heartwood, Backcountry Horseman Associations, Tree of Life Alliance, Midwest Trail Riders, Protect Our Woods, and Indiana Audubon Society.

By the close of the public comment period, approximately 1,545 letters were received. Approximately 1,010 of them were form letters. Appendix A contains a summary of the process used to define comments and Appendix J contains the responses to the comments and copies of the letters received from other agencies. Comments were used to modify alternatives, develop and evaluate alternatives not previously considered, supplement, improve or modify the analysis, and make factual corrections. Appendix J further addresses the comments received and how they were used,

Issues

The issues addressed in the Proposed Plan and this FEIS are:

- Watershed Health
- Ecosystem Sustainability
- Recreation Management

Appendix A further discusses public involvement, issues, and concerns. A number of concerns have been gathered and grouped into the three issue areas listed above. These are important challenges in managing the Hoosier resources for “the greatest good of the greatest number in the long run.”

Indicators of response are included for each of the issues presented. The planning team used indicators of response to measure how the alternatives respond to the issues. At least two points of view exist concerning how to address trade-offs among resources and how land should be allocated for various uses to maximize public benefits. The issues in this Proposed Plan focus on these larger differences in perspective and not on details of management, such as specifics of trail management.

One of the six topics identified in the Notice of Intent, Roadless Area Inventory and Evaluation, is required for consideration by regulation (36 CFR 219.17). Direction states that roadless areas should be evaluated and considered for recommendation as potential wilderness areas (36 CFR 219.17(a)). In 1978, the Secretary of Agriculture identified three roadless areas in the Hoosier: Cope Hollow, Grubb Ridge, and Mogan Ridge. In 1982, Congress designated the Charles C. Deam Wilderness in two units separated by the Tower Ridge Road. Cope Hollow is the southern unit of the wilderness while Grubb Ridge and Terrill Ridge comprise the northern unit. Mogan Ridge remained an inventoried roadless area. On June 29, 2002, the Hoosier sponsored a workshop to review criteria for further roadless designation. During the summer of 2002, the Forest compiled information gathered and produced a white paper (USDA FS 2002b). Based on this input, on December 20, 2002, the Forest Supervisor determined that no areas on the Hoosier qualified as roadless, including Mogan Ridge. Appendix D documents the analysis of areas considered as potentially suited for roadless.

In 1991, the USDA Forest Service determined the eligibility and potential classification of the Little Blue River and the Lost River for Wild and Scenic River status. During this Forest Plan revision, few comments concerning Wild, Scenic, and Recreational Rivers were received in response to scoping. Scattered land ownership complicates the ability to designate the identified rivers as Wild or Scenic. Following consideration and analysis, the Hoosier decided that the Proposed Plan would continue to maintain the rivers in Management Area 2.4 in a manner that provides protection to the values that might one day allow them to be designated Wild, Scenic, or Recreational.

Discussion occurred about reevaluating the scenery management system prior to initial scoping for Forest Plan revision. Since no one has demonstrated an overriding need to change the existing system of managing Visual Quality Objectives (VQO), the Forest will maintain the VQO system and considered it throughout this analysis.

The Hoosier considered the following issues in detail in the *Need for Change, Description of Proposal for Revising the Forest Plan of the Hoosier National Forest* (USDA FS 2000b).

Issue One: Watershed Health

The maintenance of watershed health has been an objective of the Forest Service since the beginnings of the agency. The Organic Act of June 1897 states that, "No national forest shall be established, except...for the purpose of securing favorable conditions of water flows...."

The Hoosier provides watershed protection where there are many private forests, small farms, livestock operations, pastures, cultivated fields, permanent homes, and small communities. Hardwood forests dominate the landscape and provide protection to the watersheds by reducing erosion and sedimentation. Natural succession maintains riparian vegetation along streams, lakes, and rivers. Roads and trails are located to minimize impacts to riparian areas. The Forest restores and creates wetlands where feasible.

Indicators of Response for Watershed Health

- Suitable Areas for Vegetation Management (acres in each management area)
- Roads (miles of construction and reconstruction)
- Vegetation Treatment (prescription and acres)

Vegetation management, road building, and other forest management activities can have both negative and positive effects on watershed resources. The indicators chosen cover a range of activities and features that could, without proper guidance and mitigation measures, result in impacts to watershed health. The management areas allow different levels and types of uses and management, including vegetation management, openings maintenance, and other activities that have potential to affect watershed health both positively and negatively. Even though some activities would benefit watershed health, the acreage suitable for management in each alternative provides a measure of the intensity of activities. Roads may contribute to watershed degradation. The amount, type, and location of roads in the watershed can cause the effects to vary. The effects of vegetation treatment on watershed health differ according to the type of treatment and the acreage involved.

Issue Two: Ecosystem Sustainability

Ecosystem sustainability is the maintenance of the various functions of different plant and animal communities and species and their interactions with the non-living components of the biosphere—air, geology, soil, water, and so forth. Like biological diversity, ecosystem sustainability is too complex to be evaluated, measured, or managed as a single entity. Biological communities, air quality, climate, genetic variability, habitat, interactions with humans, landscape, species, water quality, and weather events are all components of ecosystem sustainability.

Endangered, threatened, and sensitive plant and animal species, or species that warrant special attention, are important considerations for public land managers. The Hoosier provides a wide range of habitats including closed canopy hardwood forests, forest openings, cave and karst ecosystems, barrens, cliffs, riparian habitat, and limited amounts of early successional shrubland and young forested stands. These areas provide habitat for a wide variety of species. There are several large parcels of NFS land, but the majority is interspersed to varying degrees with private land. The resulting block size of suitable habitat for various species is small in many locations, which makes sustaining viable populations difficult.

A national forest identifies management indicator species (MIS), which are used to gauge management success and identify needed changes. The Forest developed a new list of MIS for this planning effort.

Historically, fire played a role in establishing and maintaining forest ecosystems and biological diversity. Direction in the 1985 Forest Plan, as amended, regarding the use of fire as a tool for maintaining ecosystem sustainability is limited. The Forest Service's Strategic Plan (2004 Revision) recognizes that maintaining or restoring sustainable forest ecosystems is an important element of the Forest Service mission. The reintroduction of fire into ecosystems on the Hoosier that evolved with fire will be an important tool.

A fundamental role of a national forest is supplying renewable natural resources to Americans while being sensitive to environment and social standards. Trees grow rapidly in the soils and climate of southern Indiana. How much, when, and where trees should be harvested, as well as which tree species the Forest should be managing, are basic questions that influence how the Forest responds to issues pertaining to ecosystem sustainability.

To best display the effects on ecosystem sustainability, this analysis focuses on the sustainability of viable populations of plant and animal species and the types and extent of vegetation management applied across the landscape.

The Hoosier proposes to enhance and protect population viability of plant and animal species over time. It will emphasize an ecosystem approach that emphasizes ecosystem integrity and complements the focus on species viability in assessment and management. Forest biologists used a species viability evaluation to compare alternatives and their contributions toward viability on NFS lands.

Vegetation management may affect habitat for wildlife species.

Indicators of Response for Ecosystem Sustainability

- Acres of Available Habitat (from species viability evaluation of plants and animals)
- Forest Openings Maintained (acres)
- Species Composition (acres and percent)
- Age Class Distribution (percent of forested area by age class)
- Vegetation Treatment (prescription and acres)

The analysis used “acres of available habitat” to indicate whether viable habitat components are maintained for plant and animal species. A shortage of early successional shrubland and young forest habitats exists on the Hoosier, and several species are largely dependent on such habitat. The Forest used “acres of maintained forest openings” as an indicator of the extent to which an alternative would maintain this type of habitat. A diversity of plant and animal species is preferred to a more simplified forest dominated by only a few climax species. A forest dominated by a few climax species would be more nearly homogeneous, potentially more severely damaged by a single disturbance element, and thus potentially less sustainable. A more diverse forest (both in species and structure) is better able to sustain itself in the face of change through time and better able to ensure that young trees are growing to replace older trees. To understand the nature of an alternative and its potential for effects, one also needs to consider the types and amounts of various vegetation treatments. The NFMA states that a forest should be able to maintain a sustained yield of forest products through time.

Issue Three: Recreation Management

The Hoosier provides recreational experiences on large blocks of public land and water based facilities. The Hoosier accounts for approximately one quarter of the public land available for outdoor recreation in Indiana. NFS land represents less than one percent of the State's total land base. Population growth, increased urbanization, and development of private land resources have resulted in increased use of the Hoosier for recreation.

Several factors limit the Hoosier's ability to fulfill the public's recreation expectations for both developed and natural environments. Scattered land ownership patterns and a high density of roads limit opportunities for recreation or solitude. These same roads, however, provide access for people to drive for pleasure, view scenery and wildlife, camp, hunt, fish, and so forth.

Competing demands for space by a variety of forest users, such as horse riders, hikers, hunters, and mushroom and berry pickers, add to complex issues that forest managers face. Other forest management objectives, such as providing diverse ecosystems, wood, clean water, and wildlife, occasionally conflict with some recreational desires.

The Hoosier provides areas for mountain biking. Indiana also ranks high in equestrian use. The Forest and the Indiana Department of Natural Resources are the only two major providers

of these opportunities, and they complement each other by providing trails and horse camps at strategic locations in southern Indiana.

In a 1987 ROD for off-road vehicle (ORV) use, the Hoosier determined that no use areas would be provided on the Forest. In 1987, ORV was a general classification for motorized vehicles. The 1987 decision noted that all roads open to the public are available for use by ORV users.

Since 1987, terms defining vehicles have changed. For the purpose of this document, off-highway vehicle (OHV) is a general classification for a variety of vehicle types. Please refer to Chapter 3, Table 3.52 for vehicle definitions.

Over time, the popularity of OHV use has grown, and the public raised the subject during the scoping period for this analysis. For the purpose of this analysis, the term “ATV” (all-terrain vehicle) refers to motorized, floatation-tired vehicles with at least three but no more than six low-pressured tires, 50 inches or less in width. This analysis considers limited ATV use on the Forest.

Water-based recreation is at a premium due to the lack of natural lakes. Human-made lakes are extremely popular, and recreation facilities located adjacent to them are in high demand. The Forest’s premier developed recreation facilities are located on reservoirs and provide swimming, boating, fishing, and camping opportunities.

The Forest provides other outdoor recreational opportunities, such as dispersed camping, hunting, fishing, and gathering forest products. Tourism is an important industry in southern Indiana. National Forest System lands provide the scenic backdrop for driving tours such as those promoted by Historic Southern Indiana. Visitor guides feature Hoosier campgrounds beaches, lakes, trails, sites for watching wildlife, scenic overlooks, scenic cliffs, and boat ramps.

The Hoosier manages the 12,953-acre Charles C. Deam Wilderness for wilderness values, and it offers the most primitive recreation.

Indicators of Response for Recreation Management

- Access/Transportation (miles of road)
- Output, Jobs, and Income Supported by Recreation
- National Forest Visits

These measures indicate important aspects of the effects an alternative would have on recreation. In this instance, the Forest uses “miles of road” as an indicator of access to NFS lands for enjoyment. The output, income, and jobs available from trail-related activities, approximate the value of an alternative. National forest visits indicate the expected use rate of the Forest by various user groups. Given the types of management proposed in the various alternatives, recreation use would vary by alternative.

Conclusion

The issues provide the threads that tie the subsequent analysis together. The following summary of the succeeding chapters depicts the way the issues contribute to the overall analysis.

Chapter 2, Alternatives, displays how each of the alternatives responds to the issues.

Chapter 3, Affected Environment and Environmental Consequences, shows the existing condition of the Forest as well as the expected results from implementing each of the alternatives.

Chapter 4, List of Preparers, displays contributors to the FEIS.

Chapter 5 is the FEIS/Forest Plan mailing list.

Chapter 6 is an index.

Chapter 7 lists references used in this analysis.

Appendices follow on various subjects of particular interest.