

Appendix D

ROADLESS AREA INVENTORY AND WILDERNESS EVALUATION

This appendix displays the process used to conduct a roadless area inventory and Wilderness evaluation and the results of that analysis. The planning record document in which the roadless inventory and Wilderness evaluation is located is titled, “*Review of Hoosier National Forest for Potential Roadless Areas*” (USDA 2001).

Introduction

Inventoried roadless areas are undeveloped areas, typically exceeding 5,000 acres that were inventoried over the last three decades during the Forest Service’s Roadless Area Review and Evaluation (RARE) process, subsequent assessments, or forest planning (USDA 2000). Inventoried roadless areas are those areas identified as part of a national effort and are described in a set of inventoried roadless area maps contained in Forest Service Roadless Area Conservation, Final Environmental Impact Statement, Volume 2, dated November 2000 (USDA 2001).

RARE I and II

In 1972, the Forest Service initiated a review of National Forest areas larger than 5,000 acres to determine their suitability for inclusion in the National Wilderness Preservation System. A second and final review process in the late 1970’s, known as RARE II, resulted in a nationwide inventory of roadless areas. In the years since the completion of RARE II, Congress has designated some areas as wilderness. On the Hoosier National Forest, Cope Hollow, Grubb Ridge, and Mogan Ridge were identified as roadless areas. In 1982, Congress designated Cope Hollow and Grubb Ridge part of the Charles C. Deam Wilderness. Mogan Ridge remained an inventoried roadless area.

Background

One of the topics for revision is to review inventoried roadless area criteria to determine if any new areas in the forest qualify or if existing areas no longer qualify. Guidance for this review is directed national policy and supplemented in an August 13, 1997 letter from Region 9 Regional Forester Robert L. Jacobs. Mr. Jacobs states, “The inventory process includes a look at RARE II areas to see if they still meet roadless criteria, as well as a look at other essentially roadless areas that may not have been previously inventoried in RARE II (Jacobs 1997). Inventory criteria are located in Forest Service Handbook 1909.12 – Land and Resource Management Planning Handbook, Chapter 7, Wilderness Evaluation. Forest Service Handbook 1909.12 identifies three primary criteria an area must meet to be considered a “potential Wilderness” (or roadless area):

- It must contain 5,000 acres or more
- It may contain less than 5,000 acres if:

- Due to physiography or vegetation, it is manageable in its natural condition
- It is a self-contained ecosystem (such as an island)
- It is contiguous to existing Wilderness, primitive areas, Administration endorsed Wilderness, or roadless areas in other Federal ownership, regardless of size
- It does not contain “improved roads” maintained for travel by standard passenger type vehicles, except as permitted in areas east of the 100th meridian (in which case the areas contains no more than ½ mile of “improved road” for each 1,000 acres, and the road is under Forest Service jurisdiction).

The Forest Service Handbook also notes exceptions for roadless areas “east of the 100th meridian”:

Specifically Section 7.11b lists the criteria for Roadless Areas in the East. Areas east of the 100th Meridian are given special criteria for inventory. It is recognized that many areas in the East show some signs of human activity and modification (USDA 1992).

- The land is regaining a natural, untrammelled (uncontrolled) appearance.
- Improvements existing in the area are being affected by the forces of nature rather than humans and are disappearing or muted.
- The area has existing or attainable NFS ownership patterns, both surface and subsurface, that could ensure perpetuation of identified wilderness values.
- The location of the area is conducive to the perpetuation of wilderness values. Consider the relationship of the area to sources of noise, air, and water pollution, as well as unsightly conditions that would have an effect on the wilderness experience. The amount and pattern of Federal ownership is also an influencing factor.
- The area contains no more than a half-mile of improved road for each 1,000 acres, and the road is under Forest Service jurisdiction. [An improved road is any constructed or existing feature or facility created on the land for the purpose of travel by passenger vehicles (four wheeled, 2 wheel drive), which are legally allowed to operate on forest roads or public roads and highways, and vehicles are greater than 50 inches in width. Said facility will have an area for vehicles to travel on and will incorporate some manner for the disposal of surface runoff (Jacobs 1997)].
- No more than 15 percent of the area is in non-native, planted vegetation.
- Twenty percent or less of the area has been harvested within the past 10 years.
- The area contains only a few dwellings on private lands and the location of these dwellings and their access needs insulate their effects on the natural conditions of Federal lands.

Region 9 Regional Forester Robert Jacobs provided additional direction in a letter dated August 13, 1997. The letter provides specific guidance on the eight criteria found in FSH 1909.12.

Several guidelines in the August 13, 1997 letter helped clarify the evaluation process. However, four critical points in the letter were very important while reviewing areas on the Hoosier. These points, taken directly from the letter are:

1. A critical issue for roadless area inventories is the criterion from Forest Service Handbook 1909.12 (7.11b - 3) requiring that: "The area has existing or attainable NFS ownership patterns, both surface and subsurface, that could ensure perpetuation of identified wilderness values."

The 1964 Wilderness Act defines a number of wilderness values. Among these values, Section 2(c)(2) of the Act states that wildernesses must have "outstanding opportunities for solitude or a primitive and unconfined type of recreation."

Remember that we are only doing an inventory at this step, not the evaluation of the quality of wilderness that would be provided, or the trade-offs with other uses. However, the idea of "solitude" is important because it adds "design" as a factor rather than mere "size."

To quantify the idea of "solitude," we use the Recreation Opportunity Spectrum (ROS), focusing on the land providing primitive and semi-primitive recreation. As defined in the 1986 ROS Book, recreationists in areas inventoried as semi-primitive have a high to moderate "probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance...in an environment that offers challenge and risk." Primitive and semi-primitive ROS lands provide the solitude needed to meet roadless area inventory criteria.

Lands providing "primitive" recreation also provide solitude that would meet the roadless area inventory criteria, but few areas in the eastern U.S. qualify under the "primitive" ROS classification.

Lands that can provide primitive or semi-primitive recreation should generally satisfy the solitude qualities needed for inclusion in the roadless area inventory. To meet roadless area inventory criteria, a "core" of the roadless area must be manageable for conditions that would be classed as primitive or semi-primitive non-motorized.

The ROS Book states that semi-primitive areas contain at least 2,500 acres (unless they are contiguous to primitive class lands). This 2,500-acre minimum size will be used as a "coarse" screen to determine whether areas meet the solitude criteria for inclusion in the roadless area inventory. This 2,500-acre core area screen does not apply to additions to existing wildernesses.

The 2,500-acre semi-primitive "core" size is not an absolute minimum or acreage requirement. It is a guide. Some areas that are mapped as having more or less than 2,500 acres of semi-primitive or primitive recreation may or may not provide solitude. For each area, one needs to look closely at topography, influences of water bodies, proximity to type and use of roads, population centers and other sights and sounds of human activity to determine if solitude and primitive and unconfined recreation could be experienced.

The idea is to screen out "amoeba" shaped configurations that may meet the minimum acreage requirement, but could never be managed to provide the degree of solitude characteristic of wilderness.

Description of a Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) is a combination of activities, settings, and probable experience opportunities that have been arranged along a continuum. There are six classes in ROS that are defined (primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban) and these classes help planners identify areas of the National Forest

where a certain experience has the greatest opportunity to occur. (USDA 1982) ROS is important to understand so the 2,500 acre semi-primitive core area can be applied properly.

2. FSH 1909.12, section 7.11(b)(5) says that the inventoried roadless areas in the east would have no more than a half-mile of improved road for each 1,000 acres and the road is under Forest Service jurisdiction.

The definition of an "Improved" road is critical to the roadless area inventory. The following is the recommended definition to use for an "Improved" road:

Description of an "Improved" Road

An improved road is any constructed or existing feature or facility created on the land for the purpose of travel by passenger vehicles (four wheeled, 2 wheel drive), which are legally allowed to operate on forest roads or public roads and highways, and vehicles are greater than 50 inches in width. Said facility will have an area for vehicles to travel on and will incorporate some manner for the disposal of surface runoff (Bill Rees, Regional Office Engineering, 3/26/97).

3. Road jurisdiction problems are sure to arise when considering forest roads. Normally roads under State, County, Townships, or other ownerships cannot be included in a roadless area because the Forest Service does not have the authority to regulate use on those roads.
4. Improvements not allowed in roadless areas include pipelines, transmission lines, and utility corridors.

Areas Analyzed

Fourteen areas on the Forest were reviewed during the roadless area inventory completed in 2002. Thirteen of these areas were chosen based on the Hoosier National Forest Draft Final Environmental Impact Statement for the 1991 Land and Resource Management Plan Amendment (USDA 1991a). This document identifies 13 areas on the Forest which were managed as "backcountry areas." A backcountry area was defined in the 1991 DEIS as a contiguous tract of national forest land of at least 1,000 acres, more or less circular in shape, that is not dissected by permanent linear structures (paved or gravel county roads, powerlines, or pipelines) or private land ownerships. It was an area where land resources and public use were influenced primarily by natural processes. Backcountry areas were allowed to return to a natural appearing forest condition (USDA 1991b). Most backcountry areas were in management areas with direction and a desired condition to reach long-term conservation and to close roads or not construct new roads. Specifically, this included all 6.2 and 6.4 Management Areas. The Hoosier did not want to improperly disqualify an area without taking a hard look at applying the roadless characteristics to all areas on the forest that had the greatest potential of meeting those characteristics. For this reason, many areas on the forest were reviewed, even though it may have appeared they did not meet the roadless characteristics. All areas were reviewed with site visits as well as overlayed with various GIS information such as mineral rights, roads, private property, and utility corridors. No areas were disqualified prior to analysis being completed because they were less than 2,500 acres.

One additional area, Sam's Creek, was also reviewed during the roadless area inventory based on a recommendation by The Indiana Public Lands Coalition. The 14 areas reviewed can be found in Table D.1 below.

Table D.1:

AREAS REVIEWED DURING THE ROADLESS AREA INVENTORY

Area	Management Area	Approximate Acres	County
Danner Cemetery	6.2	1,870	Orange
Deckard Ridge	2.4	3,244	Brown
Felknor Hollow	6.4	4,896	Orange
Happy Hollow	6.2	3,868	Perry
Hickory Ridge	6.4	5,520	Jackson
Lick Creek	6.2	2,942	Orange
Middle Deer Creek	6.4	3,249	Perry
Mogan Ridge	6.4	7,956	Perry
Mount Pleasant	6.4	1,327	Perry
Mt. Nebo Church	6.4	2,763	Brown
Nebo Ridge	6.2	7,467	Brown
Porter Hollow	6.2	2,687	Brown
Sams Creek	2.8	6,214	Orange and Martin
Tincher Hollow	8.2	4,896	Lawrence

The 14 areas were reviewed for agreement with Forest Service Handbook 1909.12 and additional direction provided by Region 9 Regional Forester Robert Jacobs.

Public Involvement

The Forest hosted a workshop for the public to evaluate potential roadless areas on the forest. The purpose of the workshop was for the public to assist the Hoosier in evaluating backcountry areas and to submit individual comments with their opinion if any of the existing backcountry areas qualified for roadless inventory. The public reviewed all 14 areas. The Forest did not disqualify any areas for consideration as roadless prior to the workshop.

Results

After reviewing public comments submitted from the workshop and completing an internal review, no areas on the Hoosier National Forest qualified as a roadless area. This includes Mogan Ridge, which previously qualified as an Inventoried Roadless Area. Specifically, road density, the presence of non Forest Service jurisdiction roads, powerlines, pipelines, and inability for an area to be conducive to the perpetuation of wilderness values disqualified all the areas. Tables D.2 and D.3 show the results for the 14 areas when compared with the criteria in FSH 1909.12, 7.11 and FSH 1909.12, 7.11b.

Since no areas qualified as roadless areas, a wilderness evaluation was not required.

Forest Supervisor Kenneth G. Day signed a letter on December 31, 2002 that informed everyone on the planning mailing list of the results of the roadless area inventory. The letter was sent to 971 people and the Forest only received two comments from this mailing. None of the comments received disagreed with the findings.

Table D.2:

AREAS COMPARED TO CRITERIA IN FSH 1909.12, 7.11

Area	5,000 acres or more	Manageable in natural condition¹	Self-contained ecosystem¹	Contiguous to existing wilderness¹
Danner Cemetery	No	No	No	No
Deckard Ridge	No	No	No	No
Felknor Hollow	No	No	No	No
Happy Hollow	No	No	No	No
Hickory Ridge	Yes	NA	NA	NA
Lick Creek	No	No	No	No
Middle Deer Creek	No	No	No	No
Mogan Ridge	Yes	NA	NA	NA
Mount Pleasant	No	No	No	No
Mt. Nebo Church	No	No	No	No
Nebo Ridge	Yes	NA	NA	NA
Porter Hollow	No	No	No	No
Sams Creek	Yes	NA	NA	NA
Tincher Hollow	No	No	No	No

¹ Only for areas less than 5,000 acres

Table D.3:

AREAS COMPARED TO CRITERIA IN FSH 1909.12, 7.11b

Area	Land is regaining a natural appearance	Changes to the land are being affected by the forces of nature	The area has existing or attainable NFS ownership patterns	Location of the area conducive to perpetuation of wilderness values	Area contains less than a half-mile of improved road for each 1,000 acres ¹	Less than 15 percent of the area is non-native, planted vegetation	Less than 20 percent of the area has been harvested within the past 10 years	The area contains only a few dwellings and their access needs insulate their effects
Danner Cemetery	Yes	No	No	No	No	No	Yes	Yes
Deckard Ridge	No	No	No	No	No	Yes	Yes	No
Felknor Hollow	No	No	No	No	No	Yes	Yes	No
Happy Hollow	No	Yes	No	No	No	No	Yes	Yes
Hickory Ridge	No	No	No	No	No	Yes	Yes	Yes
Lick Creek	No	No	No	No	No	Yes	Yes	Yes
Middle Deer Creek	No	Yes	No	No	No	Yes	Yes	Yes
Mogan Ridge	No	No	Yes	No	No	Yes	Yes	Yes
Mount Pleasant	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Mt. Nebo Church	No	No	No	No	No	Yes	Yes	No
Nebo Ridge	Yes	Yes	No	No	No	Yes	Yes	No
Porter Hollow	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Sams Creek	No	No	No	No	No	Yes	Yes	No
Tincher Hollow	No	No	No	No	No	Yes	Yes	No

¹ Roads must be Forest Service jurisdiction

This appendix displays the process used to conduct a roadless area inventory and wilderness evaluation and the results of that analysis. The planning record contains *Review of Hoosier National Forest for Potential Roadless Areas* (USDA 2002), which documents the roadless inventory and wilderness evaluation.