

**Identification of Issues  
for the Revision of the  
Wayne National Forest  
Land and Resource Management Plan**

**Athens, Gallia, Hocking, Jackson, Lawrence, Monroe,  
Morgan, Noble, Perry, Scioto, Vinton and Washington Counties,  
Ohio**

September 2003

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## Introduction

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Regulations require that national forests conduct an extensive review and update of their forest plans every 10 to 15 years. These broad updates are called revisions. The more limited updates that occur whenever found to be necessary are called amendments.

The Wayne National Forest Land and Resource Management Plan (*Forest Plan*) was approved in 1988. There have been 13 amendments to the *Forest Plan* subsequent to signing. Since the *Forest Plan* was signed in 1988, the Wayne National Forest has also acquired an additional 54,000 acres. Implementation of the Plan over the last 15 years has resulted in a wide variety of management activities being planned and accomplished. During this time, the conditions of the Forest have changed due to land acquisition, implementation of management practices, and natural events.

The revision of the *Forest Plan* is undertaken to determine if and how the current *Forest Plan* should be updated. These updates may be in terms of modifying desired conditions, revising management areas or their boundaries, changing forest-wide and/or management area direction, and/or modifying monitoring strategies.

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## Summary

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This paper includes a brief overview of the Wayne National Forest, a description of the public involvement process that has been conducted to help determine the issues to be addressed in the revision of the *Forest Plan*, and summaries of the six issues that will guide the revision. A companion paper, *Development of Alternatives*, describes what the Forest Service considers to be reasonable ways to address the issues. We envision that some issues can best be addressed in just one way, so that alternatives to current *Plan* direction will not vary for those issues. For other issues a range of possible alternatives is described. The six revision issues and their key components are:

1. Watershed Health
  - Restoration of watersheds impacted by coal mining
  - Protection of streams and riparian areas
2. Vegetation Management
  - Providing a variety of habitats for animals and plants
  - Maintenance and restoration of the mixed-oak ecosystem
  - Control of non-native invasive species

- Vegetation management tools including commercial timber sales, prescribed fire, and pesticides (e.g., herbicides, insecticides)

### 3. Recreation Management

- Providing a variety of recreation opportunities
- Off-road vehicle use
- Protection of scenic values
- Protection and interpretation of cultural/heritage/archaeological resources

### 4. Land Ownership

- Land acquisition
- Boundary line establishment and maintenance

### 5. Minerals Management

- Leasing of federally owned mineral rights for oil and gas extraction
- Management of national forest surface owned lands over privately held mineral rights

### 6. Roadless Areas, Wilderness and Wild and Scenic River Recommendations

- Roadless Area inventory and evaluation
- Wilderness Area recommendation
- Wild and Scenic River recommendation

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## Background

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The Wayne National Forest is the only national forest in Ohio. It contains more than 232,000 acres in 12 counties of southeastern Ohio. The counties include: Athens, Gallia, Hocking, Jackson, Lawrence, Monroe, Morgan, Noble, Perry, Scioto, Vinton and Washington. The Forest has two ranger districts. The Athens Ranger District has offices in Athens and Marietta. The Ironton Ranger District has an office in Pedro, north of Ironton.

The Wayne National Forest forms the core of the hill country of southeastern Ohio, the most heavily forested part of the state. Just 200 years ago, most Americans viewed this region of the Allegheny Plateau as part of a vast wilderness. Of course it had been inhabited by various Native American cultures for thousands of years prior to the arrival of European settlers. Ongoing research is making it increasingly clear that Native Americans had extensive impacts on their environment, even if those effects are no longer obvious now.

Today many people still view the Wayne as a remnant of the forest primeval. But the impacts of historic industry and agricultural practices have left indelible marks upon the land. Virtually all of the forest that covered Ohio when American settlers arrived was cut for timber and firewood and to make way for farms and settlements. Mining for iron ore, limestone, coal and clay scarred hillsides and polluted many streams. As factories closed and farms failed in the 1930s, the Forest Service began to acquire and restore what were once dubbed “the lands that nobody wanted.”

Acquisition of land for the Wayne National Forest began in 1935. Congress set the Forest Proclamation Boundary in 1951. Administration of the National Forest was provided through the Forest Supervisor’s Office of the Wayne-Hoosier National Forest, located in Bedford, Indiana, until 1993. At that time, Congress authorized a separation of the joint forest and creation of a Forest Supervisor’s Office for the Wayne. The proclamation boundary is divided into three geographic areas: Marietta, Athens and Ironton.

After nearly 70 years, the innate resilience of the hill country forest, enhanced by the work of the Forest Service and countless partners, has created a new forest that many people now value for its opportunities: to experience nature; to enjoy a variety of recreation; to explore the unique heritage of Southeast Ohio, once a major link in the Underground Railroad; and to employ the Forest’s resources for the region’s economic development.

Today, Ohio is dominated by rich farmland, industrial cities, sprawling suburbs and busy highways, and ranks 7th among states in population and 47th in public lands per capita. This scarcity of public lands creates intense competing demands for the Wayne’s limited landbase and resources. The challenge for those who choose to participate in the revision of the *Forest Plan* is to provide information and ideas that will help the Forest Service

balance those competing demands in a way that will continue to provide for multiple uses of the Wayne National Forest. Given the significant impact that past agricultural and industrial practices have had upon the land, the *Forest Plan* management direction will continue to place special priority upon the restoration of the forest, lands, watersheds and ecosystems.

The Wayne is managed for multiple uses such as recreation, timber, minerals production, water quality, and wildlife. Minerals play an important role in the area, which has a long history of coal mining and oil and gas extraction. Former strip mining areas, some of which are currently being rehabilitated, are located on the Athens and Ironton Units.

Located in the foothills of the Appalachian Mountains, the Wayne also provides outstanding recreational opportunities. The Monday Creek, Hanging Rock and Pine Creek off-road vehicle (ORV) trail systems are popular with the state's many ORV enthusiasts, and are the most extensive ORV trail systems on public lands in Ohio. Leith Run on the Marietta Unit and Vesuvius Recreation Area on the Ironton District are favorite destinations for campers, hikers, horseback riders and fishermen. The Little Muskingum River, in Washington County, takes canoeists through pastoral farmland scenes, under several covered bridges and past wooded hills. The Little Muskingum River is one of the few remaining free-flowing streams largely on public land within the state. Its relatively good condition compared to most Ohio rivers, and its location in the midst of one of the most heavily populated regions of the country, makes it a valuable opportunity for recreation enthusiasts from throughout the Midwest.

The Wayne is managed under the Land and Resource Management Plan adopted in 1988. The *Plan* provides overall direction for the resources of the Wayne for a period of 10-15 years, and includes an analysis of the natural resources in the Forest. Public participation was instrumental in the development of the *Forest Plan*. Meetings were held with private landowners, individuals and representatives from organizations and other agencies to help shape future management direction. National forest land management plans are dynamic and leave room for change as new information is learned and projects on the ground are implemented. The 1988 Wayne National Forest *Plan* has been amended 13 times since it was signed. The main points addressed in these amendments are:

Amendment 1 (12/90) corrects an error in language related to oil and gas development.

Amendment 2 (12/90) eliminates Management Area 9.1 allocation.

Amendment 3 (12/90) changes standards for stream crossings by oil and gas pipelines.

Amendment 4 (12/90) increases width of vehicles on motorized trails to 50 inches.

Amendment 5 (12/90) clarifies use of high-clearance 4WD vehicles on public roads.

Amendment 6 (12/90) clarifies policy on retaining Little Muskingum River as a free-flowing stream.

Amendment 7 (1/92) classifies three potential special areas (MA 9.2) as special areas (MA 8.2).

Amendment 8 (3/93) changes *Forest Plan* guidance for the management of special uses, minerals and geology to clarify resource protection needs associated with oil and gas development.

Amendment 9 (3/93) classifies Morgan Sister's Woods as a special area (M.A. 8.2).

Amendment 10 (3/95) reclassifies three potential special areas as special areas.

Amendment 11 (2/98) adds two tables to *Forest Plan*: 1) a table showing actual timber sale acreage for the first decade of the plan, 2) a table showing anticipated harvest for the next 5 years under the plan.

Amendment 12 (5/99) designates Buffalo Beats as a Research Natural Area and revised management area designation for the RNA.

Amendment 13 (5/03) addresses protection of Threatened and Endangered species. At the time that the *Forest Plan* was signed, there were no known federally listed Threatened or Endangered species (TES) within the Forest Proclamation Boundary. There are now eight known TES on or adjacent to the forest, including the Indiana Bat and the American burying beetle.

In 1991, the Sierra Club and other environmental groups sued the Forest Service over the implementation of the 1988 Land and Resource Management Plan. The plaintiffs' complaint was that the Wayne's *Forest Plan* heavily favored timber production at the expense of other ecosystem management benefits. The U.S. Court of Appeals found in favor of the plaintiffs. However, the Ohio Forestry Association appealed that finding to the U.S. Supreme Court. In 1997, the Supreme Court found that the case was not ripe for judicial review, in essence ruling that the plaintiff could not demonstrate injury because a forest plan sets general management direction, but does not authorize specific ground-disturbing activities.

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## **The Need for Change Process**

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### **Planning Decisions**

The Plan Revision process requires that six decisions be addressed:

1. Forest-wide multiple-use goals and objectives. Goals describe a desired condition to be achieved sometime in the future. Objectives are concise, time-specific statements of measurable planned results that respond to the goals.
2. Forest-wide management requirements (standards and guidelines.) These are limitations on management activities, or advisable courses of action that apply across the entire forest.
3. Management area direction applying to future activities in each management area. This is the desired future condition specified for certain portions of the forest, and the accompanying standards and guidelines to help achieve that condition.
4. Lands suited and not suited for resource use and production of timber and minerals.
5. Monitoring and evaluation requirements needed to gauge how well the plan is being implemented.

6. Recommendations to Congress, if any (such as Wilderness or Wild and Scenic River designation).

The Wayne National Forest began evaluating the need for changing the *Forest Plan* in 1997, when it was anticipated that the Forest was going to be revising its *Plan* beginning in 1998. That initial evaluation began with an assessment of new information and changed conditions that may have led to a change in the existing *Forest Plan*.

Information reviewed prior to initiation of consultation with the public included:

- Results of monitoring and evaluation
- Review of the major decisions made in the existing *Forest Plan*
- Review of issues raised in appeals and litigation
- Comments from Forest Service specialists on areas of the *Forest Plan* that required modification

Prior to public involvement in the need for change process, language in the FY1998 Congressional appropriations bill halted all forest plan revision expenditures on the Wayne National Forest. Once Congressional appropriations for planning were available, starting in 2002, the Wayne National Forest was able to initiate public involvement, and begin analysis of the Forest's ecological and social and economic environment.

### **Identifying Revision Topics**

In January 2002, the Wayne National Forest invited public comment as part of the need for change analysis in preparation for drafting the Notice of Intent to Revise the *Forest Plan* (NOI). A variety of public involvement strategies were employed including:

1/14/02 A letter was mailed to 1,400 addressees drawn from all existing mailing lists maintained by the Wayne National Forest on January 14, 2002. The mailing lists include Native American Tribes with possible interest in management of the Wayne National Forest.

1/14/02 A news release was sent to more than 40 media outlets in Ohio.

1/17/02 A section for plan revision was added to the Wayne homepage.

1/22/02 A public listening session was held in Nelsonville, Ohio.

1/23/02 A public listening session was held in Marietta, Ohio.

1/24/02 A public listening session was held in Ironton, Ohio.

More than 150 individuals attended the three sessions, and more than 70 took the opportunity to speak for three minutes. Their statements were recorded by a stenographer for later review by the Planning Team for use in writing the NOI, as well as the letters, responses and oral comments received outside the meetings. A total of 264 comments were received.

After the public meetings were completed, the Planning Team reviewed the comments gathered in 1997 from the Forest employees and those gathered in the January 2002 public meetings.

The 1997 review by Forest employees resulted in a list of over 100 recommendations for change, which broke down into three general classifications. First, many of these recommendations were edits to the wording of standards and guidelines that didn't really change the standard or guideline. Second, there were recommendations that were specific items related to implementation of the standards and guidelines for specific resources. The final grouping was recommendations that were general in nature and not tied to specific resource programs.

Comments from the January public meetings were received on nearly every resource and program on the Forest. Almost all individuals made a comment related to some form of recreation, usually expressing a preference for the Forest to provide for more or less of specific forms of recreation, such as ORV trail riding. Fewer comments were received on a wide variety of other management issues. Topics, other than recreation, which were mentioned most frequently were: vegetation management (primarily centered around timber harvest); land acquisition; plant and animal species diversity; minerals management; and wilderness. A number of comments were related to the Forest not implementing the direction in the current *Forest Plan*, or the Forest not providing the quantity of a specific output (for example, not providing the amount of ORV trails, or not harvesting as much timber, as listed in the current *Forest Plan*).

### **Criteria for Evaluation of Revision Topics**

Comments were considered from nearly 300 external and internal sources. The objective of this step was to identify those subjects with the significance and relevance necessary to become revision topics. Criteria used to identify key factors or conditions for the potential need for change topic to be incorporated into the revision topics discussed in the NOI were:

1. Need for change topic must be consistent with federal laws and policies and relate to the mission of the Agency.
2. Need for change topic must be within the Responsible Official's decision-making authority.
3. Need for change topic is not adequately addressed in the current *Plan*.

4. Need for change is proposed because there is new information that warrants a reevaluation of one of the six decisions made in the *Plan* cited above in the first criterion.

Some of the suggestions made concerning need for change in the *Forest Plan* will not be addressed during *Forest Plan* revision. In nearly all cases, the reasons those suggestions are not being addressed is due to the application of the evaluation criteria discussed above. Some of the more common reasons are:

- Suggestion is already addressed in the current *Forest Plan* or recent decision;
- Suggestion would require a change to law, regulation or rule outside the scope of the *Forest Plan*;
- Sufficient information or rationale is not provided and does not exist to support a change to the *Forest Plan*;
- Outside the mission or authority of the Forest Service;
- Research or data needed to evaluate if a change is needed;
- Suggestion is an implementation item that may be addressed at the project level.

The evaluation of external and internal comments identified two categories of potential changes in the current *Forest Plan*. These categories are:

1. Revision Topics.

This category of possible changes relates directly to one or more of the six plan decisions listed above.

2. Concerns Outside Major Revision Topics and Editorial Changes and Clarifications

This category of possible changes includes changes needed to explain or clarify direction in the existing plan.

To ensure the revision is completed in a timely manner, the *Forest Plan* revision will focus on high priority topics and changes. It is within the discretion of the Responsible Official to select the topics to be addressed in the *Forest Plan* revision. However, other narrowly focused topics and changes that are not critical for revision may be deferred until *Plan* revision is complete. Narrowly focused topics could be addressed through the course of on-going *Plan* maintenance and amendments.

### **Notice of Intent and Public Participation**

Based on the analysis of the need for change, the Forest Service published a Notice of Intent to revise the Wayne National Forest Land and Resource Management Plan in the Federal Register on April 4, 2002. There was an initial comment period of 90 days; 626 responses were logged.

We held 10 public meetings during the 90-day public comment period after the Notice of Intent was published. All 10 meetings were held in June 2002. Nine meetings were held in Ohio, one was held in Huntington, West Virginia. The Huntington location was selected because it is a large population center on the south side of the Ironton Ranger District. Comments resulting from these meetings were included in the content analysis process.

#### Public Meeting Locations During the 90-Day NOI Comment Period

- June 3, Wright State University, Dayton, Ohio
- June 4, Clarion Hotel, Cincinnati, Ohio
- June 5, Radisson Hotel, Huntington, West Virginia
- June 10, Embassy Suites Hotel, Dublin, Ohio
- June 13, Logan-Hocking Middle School, Logan, Ohio
- June 22, Graysville Community Center, Graysville, Ohio
- June 24, Holiday Inn, Independence, Ohio
- June 25, Four Points Sheraton, Canton, Ohio
- June 26, Holiday Inn, Zanesville, Ohio
- June 29, University of Rio Grande, Rio Grande, Ohio

#### Form Letters

We received four unique form letters in response to the NOI. A form letter is one in which everything is exactly the same from letter to letter; there may be one or more signatures on each letter. Since content analysis is not a voting process, we coded the unique letters. We did identify support of the positions taken in the letters by entering names and addresses of signatories into the database and recognizing geographic concentrations of individuals who are interested in our process and care about decisions made in the *Forest Plan Revision* process.

#### Petitions

We received three petitions. The names of the signatories were entered on the log of persons commenting. The text of the petition was coded. The petitions received in response to the Notice of Intent were provided by:

- Friends of the Wayne National Forest
- Rivers to Trails, Inc.
- Southwest Ohio Green Party.

#### Record of Public Comments

The original submission of all comments, including tapes of the verbal comments provided at the public meetings, are on file in the Forest Supervisor's Office, Wayne National Forest, 13700 US 33, Nelsonville, OH 45764.

In order to best understand and use information provided during this phase of the *Forest Plan* Revision, a process known as content analysis was used. The purpose of content analysis is to help focus those issues that will guide the revision of the *Forest Plan*.

### ***Overview of Content Analysis Process***

All letters received were reviewed and are retained in the planning files. A summary of the review process and the comments received is documented in a Content Analysis, which is posted on the Wayne National Forest website. The original comments are available for inspection at the Forest Supervisor's Office.

### ***Summary of Response Statistics***

It is important to note that content analysis is not a vote counting process. It is a tool for decision makers that displays collected information. In other words, it provides information on public input to the decision makers, so they understand the issues and concerns of the public. Content analysis provides a summary of the extent, content, and nature of public input, without any attempt to pass judgment on comments received. This approach attempts to process every comment in an objective fashion to ensure equal consideration.

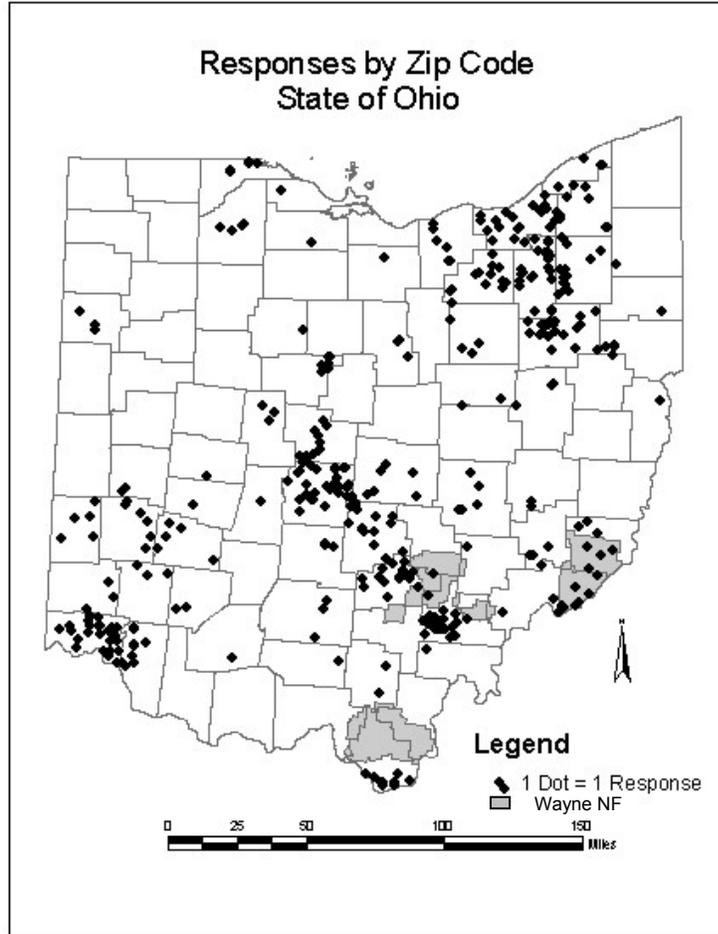
1. We received 626 responses to the Notice of Intent. Of these, 57 numbered responses were duplicated submissions, so we actually analyzed 566 responses. Responses were considered duplicate if they contained identical content and were submitted by the same individual. Form letters that contained the same content but were submitted by different persons were not considered duplicates.
2. Of the 566 responses coded, we received 218 form letters. There were four unique form letters. Responses that modified or added information to the content of the form letter were not considered form letters.
3. In addition, 151 persons commenting were signatories to one of three petitions received.
4. At the 10 public meetings held in June, we received 237 verbal comments that appear in the transcripts and were coded.

### ***Geographic Analysis of Responses***

1. The geographic information is based on self-reporting by the respondents. No independent effort was made to verify identity, addresses, or state of residence. In some cases, respondents who used e-mail did not provide demographic or geographic information.
2. Geographic location of respondents.
  - a. 21 respondents, or 3.7 percent of the responses coded, identified themselves as from outside Ohio.
  - b. Approximately four percent of the responses came from states other than Ohio: Arizona, Georgia, Indiana, Kentucky, Michigan, Minnesota, Nebraska, Pennsylvania, Puerto Rico, West Virginia.

- c. Two respondents with return addresses in Australia indicated that they were Ohio residents working overseas.
- d. 92 respondents, or approximately 16 percent of the responses coded, provided an address with a zip code that corresponds to a county in which Wayne National Forest land is located.

The scattergraph on the map below shows the location of addresses provided by respondents. Concentrations of responses reflect the population centers of Ohio, and the locations of the public meetings.



3. Response Type:

- a. Manner in which comments were submitted.

Respondents used several methods to submit comments; written letters, comment forms, form letters, electronic mail, telephone, and verbal comments at public meetings.

Electronic versions of all coded comments were made. E-mails were converted to word-processing documents. Transcripts were provided by a legal stenographer. Persons commenting who provided lengthy documents were asked to submit their comments electronically.

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## Issues

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### Development of Issues from Revision Topics

Analysis of the comments on the Notice of Intent (NOI) confirmed that the six revision topics set out in the NOI addressed the principal concerns of the public and the Forest Service regarding management of the Wayne National Forest. Those revision topics have been distilled into six issues. Each issue discussion is divided into four parts:

- Issue components
- Issue statement
- Current *Forest Plan* direction
- Information indicating a need to consider changing current *Plan* direction

A number of comments did not fall within the six revision topics. These comments are summarized briefly following the six issue discussions.

### 1. Watershed Health

#### *Issue Components*

- Restoration of watersheds impacted by coal mining
- Protection of streams and riparian areas

#### *Issue Statement*

Watershed health includes treatments to protect and restore in-stream conditions and the associated riparian areas. Active stewardship of the land and water within the Wayne National Forest is fundamental to protecting and restoring watershed health. Management activities that protect and improve upland and riparian areas benefit aquatic resources within and downstream of the Forest's boundaries. Public comments indicated that people were interested in seeing more wetland habitat restoration and protection.

#### *Current Forest Plan Direction*

Direction for management of streams, riparian areas and floodplains focuses primarily on protection of water quality. Standards and guidelines for the reclamation of mined areas are also included.

#### *Indicators of Need for Change*

Restoration of abandoned mine lands has been ongoing. Management emphasis has shifted from treatment of eroding uplands to the treatment and elimination of acid mine drainage. *Plan* direction on abandoned underground coal mines does not reflect this shift in emphasis.

An evaluation of plant and animal species whose continued viability is potentially at risk indicated that over one-third of these species are dependent on quality riparian and aquatic habitats. Examples include the Louisiana waterthrush that depends on good water quality for a key food source—aquatic insects, the Ohio muskellunge which requires aquatic vegetation beds and large woody debris for spawning and hiding, and the mud salamander that relies on stable spring habitat. Three stream systems on the Wayne National Forest (Little Muskingum River, Symmes Creek, and Pine Creek) provide habitat for a diverse assemblage of aquatic and semi-aquatic species. The health of these relatively high quality systems can be improved, as can those of more degraded systems, such as those on the Athens Unit.

Project implementation and monitoring has indicated that current *Plan* direction for protection of streams, riparian areas and floodplains can be improved by including management direction to better protect and restore their structure and function in the landscape. In addition to providing clearer definitions and delineation methods for these resources, *Forest Plan* direction could be enhanced by incorporating conservation approaches for species whose continued viability is potentially at risk, and by updating wetland and stream restoration guidance.

## **2. Vegetation Management**

### ***Issue Components***

- Providing a variety of habitats for animals and plants
- Maintenance and restoration of the mixed-oak ecosystem
- Control of non-native invasive species
- Vegetation management tools including commercial timber sales, prescribed fire, and pesticides (herbicides, insecticides, etc.)

### ***Issue Statement***

The regulations implementing the National Forest Management Act require national forests to provide habitat in order to maintain viable populations of existing native and desired non-native plants and animals. Forest managers employ various vegetation management techniques to encourage the development and maintenance of a variety of habitats to meet this requirement. Vegetation management techniques include a variety of timber harvest techniques, as well as prescribed fire, mowing, herbicide application, planting of trees, grasses and other plants, and non-commercial tree thinnings and weedings, to encourage development of the various habitats upon which native species are dependent.

Broadly speaking, the habitats found on the Wayne include mature hardwood forest, early and mid-succession hardwood forest, native pine forest, non-native pine plantations, reclaimed strip mine grasslands, prairie remnants, shrub communities, and aquatic and wetland habitats. How habitats occur geographically and in time are critical considerations in providing for the viability of species.

Public comments reveal a diversity of opinions regarding both what habitats the Wayne should focus on providing, and what vegetation management techniques are appropriate to produce those habitats. Some people believe the Wayne should focus exclusively on providing mature or “old-growth” hardwood forest, and not employ any commercial timber harvest. Others support the creation of early and mid-succession forest habitat, and the use of commercial timber harvest as a means to create such habitats and provide economic benefits to local communities.

### ***Current Forest Plan Direction***

The current *Forest Plan*, when signed in 1988, emphasized the use of clearcutting to produce early successional habitat and timber volume. Annual allowable vegetation treatment acreages were set at 410 acres of clearcutting, 280 acres of selection harvest, 60 acres of commercial thinning harvest; 100 acres of shelterwood harvests, and 68 acres of pre-commercial timber stand improvement. *Forest Plan* Amendment 11 shows that implementation of the original *Plan* emphasis on clearcutting was substantially curtailed after 1990 and no clearcutting at all has occurred on the Wayne since 1994. Amendment 11 projects that only thinning and selection harvests (annual average of 500 acres) would occur from 1998 through completion of the *Plan* revision. Consultation with the US Fish and Wildlife Service on protection of threatened and endangered species resulted in a 2001 Biological Opinion, and subsequently *Forest Plan* Amendment 13, which are based on continuation of Amendment 11 (i.e. only thinning and selection harvests) direction.

The following tables summarize key aspects of current *Forest Plan* direction for vegetation management.

<b>Comparison of the desired future condition of forest age classes between the 1988 Forest Plan and the 1988 Amended Forest Plan.</b>		
Age Class	DFC <b>1988 Plan</b> Percent of Suitable Acres	DFC <b>Amended Plan</b> Percent of Suitable Acres*
0-9	8.2	
10-39	24.7	
40-79	32.4	
80-99	7.5	
100+	7.6	
Uneven-aged	19.5	100*

\* *The amended Forest Plan does actually state this change in desired age class distribution, but it can be inferred from the types of harvesting techniques that are to be employed. See following table.*

<b>Comparison of the projected annual harvest (by harvest category) between the 1988 Forest Plan and the 1988 Amended Forest Plan.</b>		
	<b>1988 Plan</b> (Acres)	<b>Amended Plan</b> (Acres)
Average Annual Acres of Clearcut Harvest*	410	0
Average Annual Acres of Shelterwood Harvest	100	0
Average Annual Acres of Commercial Thinning Harvest	60	50
Average Annual Acres of Selection Harvest	280	450

\* *When the current Forest Plan was completed in 1988, 71% (126,107 acres) of the Forest was classified as suitable for timber production, and 29% was classified unsuitable. Average commercial timber harvesting was projected to be 850 acres per year, or 0.7% per year of the suitable acres. Note that clearcutting in the first decade was projected to be 410 acres per year on 100,603 acres to be managed under even-aged management regimes. In order to meet the stated target rotation ages on that area, clearcutting would eventually have had to reach an average of 1041 acres per year.*

This table summarizes management area acreages in the current *Forest Plan* and key vegetation management strategies by management area.

<b>Key vegetation management strategies by management area.</b>					
Mgmt. Area	Acres	Percent of Forest	Even-aged Timber Mgmt./ Rotation Age*	Uneven-aged Timber Mgmt.*	No Timber Harvest
2.1	8,263	3.5		X	
2.2	12,773	5.4		X	
2.3	19,850	8.4		X	
3.1	57,266	24.2	X/80		
3.2	25,034	10.6	X/80		
3.3	74,881	31.6	X/120		
6.1	12,656	5.4	X/120		
6.2	18,543	7.8			X
7.1	1,222	0.5			X
8.1	94	0			X
8.2	2,901	1.2			X
9.2	3,403	1.4			X
Totals	236,886	100.0	72%	17%	11%

Little direction is provided in the form of desired future condition, objectives, standards and guidelines, or monitoring for the maintenance and restoration of the mixed-oak ecosystem, or the control of non-native invasive species. Use of herbicides and prescribed fire are permitted, if necessary to accomplish *Forest Plan* objectives, but specific objectives for such use are not spelled out.

### ***Indicators of Need for Change***

Evaluations of the viability of populations of species, which may be at risk on the Forest, indicate that a variety of habitats is required to maintain their viability. The evaluations identified seven bird species whose viability may be at risk. Several of these bird species use a variety of habitats during their life cycles, but nesting success for each species is generally dependent on a specific habitat structure and composition. For example, the worm-eating warbler and Louisiana waterthrush need large tracts of mature forest, the ruffed grouse needs early to mid-successional hardwood forest, the prairie warbler needs

early-successional habitat, and the Henslow's sparrow requires grasslands. Current research indicates that even mature forest dependent species, such as the cerulean warbler, prefer stands with canopy gaps (i.e. conditions more like historic forests), and make use of early-successional forests after fledging their young.

The Wayne National Forest is comprised of lands heavily impacted by centuries of past human inhabitants. Research indicates that in both pre-historic and historic periods Native American cultures routinely used fire to modify their environment. Considerable evidence indicates that fire was used to accomplish objectives including driving game during hunts, facilitating travel, improving habitat for favored game species, facilitating detection of approaching enemies near their settlements, and clearing croplands. When European settlers arrived in Ohio in the late 18th Century, they found large expanses of oak-dominated mature forest canopy over an open, grass and herb covered forest floor. This open oak forest was interspersed with more dense, shade-tolerant forest on the wetter slopes and coves, dense riparian forest, and small patches of prairie.

The settlers cleared large areas of forest to create subsistence farms, using the lumber to build their homes and warm their hearths. Later, industries cut down swaths of forests to fuel the furnaces of the Industrial Revolution. Evidence indicates that fires were much more common and extensive during the period of European settlement and industrial development (1800-1920), than they have been since the advent of fire suppression around 1920. Settlement era fires were largely caused by clearing for farming, escaped charcoal production fires, and fires ignited by trains. Much of the forest cleared by settlers in southeast Ohio has sprouted and seeded back vigorously, with the result that today the Wayne is covered with dense stands of trees mostly 80-100 years old or younger. Older-growth stands are rare, although scattered individual remnant older trees do occur within the predominantly younger stands.

Miners removed iron ore, coal, clay, sand, gravel and salt from the region, each leaving behind their imprint on the land. In addition to the underground coal mining that occurred under most of what is now the Wayne National Forest, about 5% of the Forest has been strip-mined.

When the USDA Forest Service began to acquire land in Southeast Ohio during the 1930s, much of the land was no longer suitable for farming because of erosion, and the underground mineral wealth accessible with the technology of the day had been largely depleted. The regenerative power of the hill country's ecosystem, coupled with early conservation efforts directed at erosion control and reforestation, has resulted in a vigorous new forest. However, research into the pre-European settlement conditions suggest that the forest covering southeast Ohio today is outside the range of historic variability: younger, with a denser overstory, and with more shade tolerant understory trees than ever occurred before.

It is estimated that in the late 1700s Ohio was 95% forested. Forest clearing proceeded rapidly with European settlement and development from 1787 through about 1900. A slower pace of clearing continued until 1940, when Ohio's forest cover went to its lowest point of about 12%. Since 1940, abandonment of more marginal farms and pastures has resulted in an increase of forest cover to about 30% in 1991.

Research increasingly indicates that the forests of what is now southeast Ohio were predominantly oak-hickory. Stands dominated by the more shade tolerant-species and/or fire-intolerant species, such as maples and tulip-poplar, were confined mostly to north slopes and other wetter sites. Recent forest inventory and analysis, based on satellite analysis and ground surveys, shows that the proportions of oak and hickory species on the forest is declining throughout southeast Ohio, while more fire-intolerant and/or shade-tolerant species, particularly red maple, tulip-poplar and cherry, are increasing. Current research indicates that a key factor in the decline of oaks has been the virtual elimination of fire from eastern forests since the 1920s. While it appears very unlikely, given current and foreseeable land ownership patterns, that fire can be reintroduced to the extent necessary to reverse the decline of oaks across their entire range, that may well make it all the more important to attempt to use fire to maintain the mixed oak ecosystem on public land.

The Nature Conservancy has completed an assessment of the Western Allegheny Plateau Ecoregion. This assessment provides a perspective of how the Wayne National Forest fits within its broader ecological context. This landscape view confirms that large, intact forest communities are limited within the Western Allegheny Plateau. The Nature Conservancy identified areas with the best potential to provide relatively large and intact blocks of forest habitat within the Wayne National Forest.

The introduction of non-native pathogens has changed ecological conditions, virtually eliminating important tree species such as American chestnut and American elm. Ecological change continues to be caused by non-native invasive species (NNIS). Such species have been transplanted outside their original range, so they often lack natural controls, such as diseases, predators or parasites. This allows them to out-compete, and in some cases nearly completely replace, more sensitive native plant and animal species. Worldwide, NNIS are considered to be the second-leading threat to biodiversity; only habitat loss is a greater threat. NNIS plants are estimated to infest 100 million acres in the U.S., and invade an additional three million acres annually.

The presence of NNIS plants is increasing in southeast Ohio. Forty-two plant species that have been targeted by the State of Ohio, The Nature Conservancy, or Region 9 of the USDA Forest Service as currently or potentially invasive may occur on the Wayne. These invasive plants include kudzu, purple loosestrife, multi-flora rose, Japanese honeysuckle, garlic mustard and tree-of-heaven. These plants often completely dominate their niche (e.g. understory shrub layer or herbaceous layer) crowding out native wildflowers, hindering native tree regeneration, and altering wildlife habitat. The most significant invasive insect is the gypsy moth, which has been identified within the National Forest. The gypsy moth often causes heavy defoliation and extensive tree mortality. Its preferred hosts are oaks, so it has the potential to exacerbate the ongoing decline of oaks relative to more fire-intolerant and/or shade-tolerant species.

Direction in the *Forest Plan* calls for reforestation of reclaimed strip-mined lands, which make such areas unsuitable for Henslow's sparrow and other grassland dependent species.

### **3. Recreation Management**

#### ***Issue Components***

- Providing a variety of recreation opportunities
- Off road vehicle (ORV) use
- Protection and interpretation of cultural/heritage/archeological resources

#### ***Issue Statement***

The national forests play a key role in helping to meet the Nation's growing demand for outdoor recreation. National forests must balance the provision of high quality outdoor recreation opportunities with the responsibility for stewardship of the health, diversity, and productivity of the land. The potential for conflict between these competing responsibilities is high on the Wayne because Ohio has a large population relative to the amount of public land available (47<sup>th</sup> out of the 50 states in terms of public land per capita). About 12 million people live within 100 miles of the Wayne National Forest.

Demand is increasing for most types of recreation opportunities available on the Wayne. Demand is high for additional off-road vehicle (ORV) trails, horse trails, hiking trails, and mountain bike trails. Fishing pressure at Forest ponds and lakes has been documented to be nearly twice the state average. Hiking, backpacking, hunting, nature viewing, and visiting historical sites, continue to be popular activities. While interest in primitive camping remains stable, campers using developed campgrounds are demanding more amenities, such as improved RV pads, electricity, and sewer hookups.

Public comments reveal a diversity of opinions regarding what recreation opportunities the Wayne should focus on providing. Some people believe the Wayne should provide more ORV trails, while others believe ORV use should be excluded from the Forest, as part of an emphasis on providing opportunities for wilderness or near-wilderness experiences. User groups for activities such as horseback riding, hiking, and mountain biking also petition for increased emphasis on providing opportunities for their favored uses. These groups often express the view that permitting more than one user group (e.g. ORVs and horse-back riding) on the same trail, or in the same area, detracts from the quality of the recreation experience.

#### ***Current Forest Plan Direction***

The current *Forest Plan* restricts ORV use to designated trails within specific management areas where such use is permitted. Use of these trails is limited to all-terrain vehicles (ATVs) and off-highway motorcycles (OHMs) 50 inches or less wide. This ORV management was one of the most significant decisions made in the 1988 *Forest Plan*; prior to 1988 ORV use was not restricted to designated trails or specific areas of the Forest. The *Forest Plan* projected that by the end of 1995 there would be 250 miles

of ORV trails, and that by the end of 2002 there would be 285 miles of ORV trails. There currently are 116 miles of designated ORV trails on the Wayne NF.

Direction for development and maintenance of hiking and horseback riding trails is included, but mountain biking is not mentioned.

Also included is direction and the allocation of management areas for developed recreation sites (campgrounds and picnic areas).

Interpretation and education direction for heritage resources, such as the iron furnaces, the Underground Railroad, and pre-historic sites, is minimal.

### ***Indicators of Need for Change***

ATVs/OHMs are restricted by *Forest Plan* direction to designated trails, but the ORV areas have many illegal, user-developed trails. The presence of illegal trails, and inadequate signing on some legal trails, results in some confusion among ATV/OHM users regarding which trails they may use. In addition, some ATV/OHM users have expressed dissatisfaction that *Forest Plan* projections for construction/reconstruction of ATV/OHM trails for 1998 – 2002 have not been met.

The demand for recreation opportunities on the Wayne has increased since the *Forest Plan* was developed. National recreation trends are reflected locally, including an aging population, increase in demand for mountain biking opportunities, and faster growth in demand for non-consumptive nature-based recreation (bird watching, photography, sight-seeing) as compared to the traditional consumptive activities like hunting and fishing, though these activities remain popular on the Wayne.

Interest in heritage resources, especially pertaining to the Underground Railroad found in the Wayne National Forest, is increasing.

## **4. Land Ownership**

### ***Issue Components***

- Land acquisition and exchange
- Boundary line establishment and maintenance

### ***Issue Statement***

The USDA Forest Service began acquiring land in southeast Ohio in 1935, at the invitation of the State of Ohio. The original purchase units were established to provide for the restoration of key watersheds that had been heavily impacted by farming and mineral extractive industries in the 1800s. Despite an active land acquisition program, the Wayne still has one of the most fragmented ownership patterns of any national forest: currently 24% National Forest ownership within the proclamation boundary of the Marietta Unit; 27% within the Athens Unit; 33% ownership within the Ironton Ranger District; and 28% for the Forest as a whole.

Virtually all of the National Forest lands in Ohio were acquired from private individuals or corporations through purchases on a willing seller basis, dependent upon available funding. Occasionally the Forest acquires land through exchange. Eminent domain/condemnation has never been used.

The fragmented ownership pattern of the Wayne complicates resource protection and management. It also results in a high total mileage of boundary lines between national forest and private ownership, currently nearly 2000 miles. This largely unmarked boundary creates a potential for trespass by Wayne National Forest visitors onto private lands and encroachment by adjacent landowners onto National Forest lands.

The Wayne's land acquisition program is the subject of considerable public and political interest. In 2000, the Ohio Legislature considered but did not pass a bill to revoke the State's consent for further land acquisition by the Forest. On the other hand, support for the Forest has been substantial in the US Congress with several recent annual appropriation bills including line items for further land acquisition on the Wayne. Some area residents and local community leaders express the belief that National Forest ownership adversely affects local tax bases and school funding, and precludes potentially beneficial commercial or residential development. Others support additional land acquisition because they see resource protection, economic development, and recreation opportunity benefits in public land.

### ***Current Forest Plan Direction***

The 1988 *Forest Plan* decision set an ultimate goal of having 322,000 acres in National Forest ownership, and estimated the Wayne National Forest would contain approximately 250,000 acres by the year 2000. As of March 31, 2003 the National Forest ownership was approximately 233,000 acres.

The Forest Plan Land Adjustment Strategy is included in Appendix A to the *Forest Plan*, as amended in Annex A to Amendment 8. This direction states that private land within Management Areas 2.1, 6.1, 6.2, 6.3, 8.1, and 8.2 have the highest priorities for acquisition. The priority for acquisition of areas within other management areas is to be judged on their ecological, recreation, and cultural resource characteristics, and the effect of the acquisition on the goal of consolidating National Forest ownership.

### ***Indicators of Need for Change***

An analysis by the Wayne National Forest of local property tax statistics indicates that National Forest ownership does not reduce tax bases and school funding as compared to undeveloped privately-owned forested land. A study by the General Accounting Office of the US Congress in 2003 reached a similar conclusion.

## **5. Minerals Resource Management**

### ***Issue Components***

- Leasing of federally owned mineral rights for oil and gas extraction
- Management of national forest surface owned lands over privately held mineral rights

### ***Issue Statement***

Oil, gas, and coal are the most economically important minerals found on the Wayne National Forest, and make an important contribution to the national goal of domestic energy production. The Wayne is located in the heart of Ohio's oil/gas and coal deposits. Ohio's oil and gas industry dates back to the mid-1800s, with the first oil produced in Washington County in 1860. The first production of gas in Ohio occurred in 1884. Ohio ranks fourth nationally in the total number of wells drilled (269,790 as of 2001), exceeded only by Texas, Oklahoma and Pennsylvania. The peak year for oil production in Ohio was in 1896 at almost 24 million barrels. The peak year for gas production in Ohio was 1984 at 186 billion cubic feet. Oil and gas production in Ohio has generally declined from 1992 to 2001.

As is typical of a mature oil and gas field, most wells in Ohio have relatively modest production, usually less than 10 barrels of oil per day, and/or less than 60,000 cubic feet of gas per day. With current technology, most remaining oil and gas deposits in Ohio, and particularly on the Wayne, are considered to be economically recoverable only where surface occupancy is permitted.

Oil and gas production on the Wayne have generally followed State trends. There are about 1000 oil and gas wells currently operating on the Wayne National Forest, and many other closed wells no longer in operation. Most wells are owned by small independent local producers. The ownership pattern of oil and gas rights is even more complex than surface ownership. Of the 1000 active wells located on national forest surface ownership, only about 70 occur on federal leases. The great majority of wells on the Wayne are located on National Forest surface with private oil and gas rights beneath. These rights include both reserved rights—rights retained by the owner when the surface rights were acquired by the Forest Service, and outstanding rights—rights retained by a third party when the surface was acquired by the Forest Service. More than 65% of national forest ownership on the Wayne is underlain by privately owned mineral rights. Laws governing minerals rights requires the Wayne to provide access to those individuals and corporations who own such rights under national forest surface ownership.

Coal is Ohio's most valuable mineral resource. Coal mining was essentially unregulated in Ohio until 1950. Initially, coal mines were exclusively underground operations and largely powered by manual labor. Early underground mines were small, discontinuous, poorly mapped, and highly prone to uncontrolled subsidence. Subsidence is the collapse of sections of the land surface/mine roof into the cavities left by underground mining. As better machinery and technology was developed, surface or "strip" mining became a viable alternative to underground mining. Since 1800, over 3.6 billion tons of bituminous coal has been mined in Ohio. Production peaked in 1970 at 55 million tons, and has declined to 25.8 million tons in 2001. Coal production in Ohio in 2001 was nearly equally divided between 102 surface mines and 10 underground mines.

Coal production on the Wayne has generally followed State trends. In addition to the underground coal mining that occurred under most of what is now the Wayne National Forest (especially the Athens Unit), about 10% of the Athens Unit and 5% of the Ironton District (or about 5% of the entire Forest) has been strip-mined. There are currently no active strip mines on the Forest, although the owner of surface mining rights of a tract on the Ironton District is currently conducting exploration for a possible mine. One underground coal mine is currently in operation within the Athens Unit, and exploration for a possible second mine on the same Unit is currently underway. The subsurface ownership pattern of coal rights, and the laws governing access to those rights, are similar to those described above for oil and gas rights.

Public comment regarding minerals management on the Wayne ranges from those who want to see no additional leases of federally owned oil and gas rights, to oil and gas producers and industry proponents who favor more lease offerings and streamlining the leasing and environmental analysis processes.

### ***Current Forest Plan Direction***

The 1988 *Forest Plan* recognizes oil and gas exploration and development as a suitable use of the Forest and determines that the entire federally owned oil and gas mineral estate is administratively available for leasing, although surface occupancy is prohibited in some management areas. *Forest Plan* Amendment 8 (1992) establishes a three-step process for leasing federally owned oil and gas rights:

- Step 1 is the *Forest Plan* and associated environmental impact statement and record of decision, specifically decisions regarding mineral rights availability and surface occupancy permissibility by management area;
- Step 2 are decisions to authorize leasing of specific tracts of federally owned minerals for oil and gas development;
- Step 3 are decisions regarding applications to drill (APDs) wells, build access roads, and install related structure on specific leases.

### *Indicators of Need for Change*

Oil and gas operators and oil and gas trade associations have expressed interest in seeing the leasing/ADP process streamlined. Some national forests have adopted a 2-step process, wherein the authorization to lease decision is made in the forest plan. The Wayne has recently completed an inventory and computer-based mapping (GIS) of subsurface ownership of the Forest. This inventory indicates that 72,912 acres (31% of surface national forest ownership) also has federally-owned oil and gas rights. Of these 20,006 acres have been leased, leaving 52,906 acres currently available for leasing. Of the 52,906 acres available for leasing, 41,604 acres are currently in management areas that permit surface occupancy.

## **6. Roadless Areas, and Wilderness and Wild and Scenic River Recommendations**

### *Issue Components*

- Roadless Area Inventory and Evaluation
- Wilderness Area Recommendation
- Wild and Scenic River Recommendation

### *Issue Statement*

#### Roadless Areas/Wilderness

The concept of wilderness was codified into law by the Wilderness Act of 1964, which defined wilderness as areas of national forests and other public lands where natural processes are predominant, and where the presence and effects of humans are minimal. Wilderness, unlike other management areas, must be designated by Congress, generally after first being recommended for such designation by the land management agency. The Wayne National Forest currently has no designated wilderness.

For the Forest Service to recommend an area for wilderness, it must first qualify as a roadless area. Criteria for identifying roadless and potential wilderness areas in the eastern United States recognize virtually all of what is now public land was previously privately owned, and shows some signs of human activity and modification, even though Eastern ecosystems are very productive and resilient. Forest Service regulations require national forests be evaluated for roadless character during forest planning.

Some individuals and organizations favor wilderness designation on the Wayne. Others perceive a lack of wilderness character and the potential for such designation to conflict with current uses of the Forest.

## Wild and Scenic Rivers

The Wild and Scenic Rivers Act of 1968 provides for designation of selected rivers or sections of rivers to preserve their natural, free-flowing condition. To be eligible for designation, rivers must possess outstandingly remarkable scenic, recreational, or other natural values. Wild and Scenic River must also be designated by Congress. The Wayne National Forest currently has no designated Wild, Scenic or Recreation Rivers.

Some individuals and organizations favor designating the Little Muskingum a Scenic River, while others oppose such designation.

### ***Current Forest Plan Direction***

A roadless area analysis was conducted for the 1988 *Forest Plan*. This analysis determined that there were no areas of the Forest that met the definition of a roadless area. Based on this lack of roadless character and the Forest's fragmented surface and subsurface ownership patterns, no areas were recommended for wilderness designation.

The Forest's streams were assessed for characteristics meeting the Wild and Scenic River Act. No streams were determined to have such character, and none were recommended for Wild or Scenic River designation.

### ***Indicators of Need for Change***

#### Roadless Areas/Wilderness

No roadless areas were identified in the Roadless Area Review and Evaluation process (RARE or RARE II) completed as part of the 1988 *Forest Plan*. Since 1988 the Wayne National Forest has acquired over 50,000 acres of land. An inventory of the current National Forest ownership completed in March 2003 found that there are still no areas on the Forest that meet roadless area criteria. Several of the eight criteria are not met including:

- areas with less than 0.5 miles of roads for each 1000 acres, with such roads being primarily under Forest Service jurisdiction
- areas with surface and subsurface ownership patterns that would ensure perpetuation of wilderness values
- areas without improvements (e.g. electric transmission lines) or where such improvements are relatively unobtrusive
- areas relatively remote from sources of noise, air and water pollution that affect the potential for wilderness experience

## Wild and Scenic Rivers

The Little Muskingum River Eligibility Determination for Wild and Scenic River System was completed in 1990. This study determined that the Little Muskingum did not have outstandingly remarkable characteristics, as defined in the Wild and Scenic Rivers Act and related regulations and Forest Service directives. A watershed assessment of the Little Muskingum was completed in 2002, which determined that no substantial changes had occurred in the River that would warrant a change in eligibility. A review of land ownership changes indicates that less than 200 acres of land with frontage on the Little Muskingum have been added to the Forest since 1990.

## **Other Issues and Editorial Corrections / Clarifications**

Comments and management concerns not related to the six major revision issues included the following general areas:

Planning process – In consultation with the Eastern Regional Office (Region 9 in Milwaukee) of the USDA Forest Service, we have determined that the Wayne’s forest plan revision process is consistent with appropriate regulation and policy.

Public involvement - In consultation with Eastern Regional Office of the USDA Forest Service, we have determined that the public has had adequate opportunity to be involved in the Wayne’s process for forest plan revision process.

Use of the Forest for military training – We have determined that the Forest’s fragmented ownership pattern provides very limited opportunity for military training.

Conversion of all or part of the Forest to a national park – Conversion of national forests to other designations, managed by other agencies, requires Congressional action. It is not within the jurisdiction of the USDA Forest Service to make this kind of decision.

Location of a nuclear power plant on the Forest - Not a USDA Forest Service decision. Additionally, we have determined that creation of a management area for such use is inconsistent with forest management objectives.

Additionally, we have determined that there are a number of management concerns of sufficiently narrow focus that any necessary change in *Forest Plan* direction would be better handled as specific *Plan* amendments, rather than as part of the revision. These include wildfire prevention and suppression, road management (almost all roads on the Wayne are under the jurisdiction of the State, counties and townships), and the possibility of locating communications facilities such as telecommunications towers on the Forest.

In addition to the six major revision topics discussed above, we anticipate making other minor changes of an editorial nature. These could include changes needed to explain or clarify direction in the existing plan, removing items that don’t pertain to the six forest plan decisions, or removing direction that can be found elsewhere, such as in the Forest Service Directives System. These changes would not represent a change in the direction, goals or objectives in the Plan.