

Chapter II - The Alternatives

Introduction

The National Forest Management Act mandates the development and analysis of a broad range of reasonable alternatives to respond to issues and concerns identified during the planning process. This chapter describes alternative forest management strategies and summarizes the environmental consequences of each. Chapter II is divided into the following sections:

- Developing alternatives.
- Alternatives considered but eliminated from detailed study.
- Alternatives considered in detail.
- Descriptions of each alternative.
- Comparison of alternatives.
- Preferred alternative.

Alternatives must also address the purpose and the need for change topics as identified in the Notice of Intent. When developing the alternatives in this draft Environmental Impact Statement, the Huron-Manistee National Forests used the following criteria:

- Alternatives must respond to issues raised during the planning process.
- Alternatives must respond to agency management direction.
- Alternatives must provide a range of outcomes and outputs.

Three alternatives were considered in detail. Seven other alternatives were considered but dropped from detailed study. Each has a different approach to managing the Huron-Manistee National Forests' natural resources over the next 10 to 15 years.

Developing Alternatives

Three alternatives were developed to address the resource topics identified in the Notice of Intent and to respond to the significant issues. Alternatives include proposed changes to the Forests' Land and Resource Management Plan, such as goals and objectives, Standards and Guidelines, Management Area delineations, monitoring and evaluation strategies, and reasonable foreseeable oil and gas development.

The three alternatives are Alternative A: the 1986 Forest Plan, as amended; Alternative B: the proposed action; and Alternative C. All alternatives provide a range of multiple uses, goods and services.

Each alternative was developed with the intent of being in compliance with applicable laws, regulations and Agency policies and guidelines. The steps used in the development of alternatives are summarized in Table II-1.

Table II-1. Steps for Developing Alternatives for Forest Plan Revision.

<p>1. <i>What did people say?</i> The Huron-Manistee National Forests received public comments throughout the forest plan revision process. These comments were used to determine need for change topics and define the range of alternatives.</p>	<p>Public Comments</p>
<p>2. <i>What are the issues?</i> Issues were identified from public comments, concerns of other agencies, tribes and internal evaluations.</p>	<p>Issue Development</p>
<p>3. <i>How do we address the issues?</i> An interdisciplinary team comprised of Huron-Manistee National Forests' resource specialists, managers and planners developed the preliminary alternatives. These alternatives were presented to and approved by the Forest Leadership Team.</p>	<p>Preliminary Alternatives</p>
<p>4. <i>What are the ecological objectives of the alternatives?</i> Objectives were developed using information, such as the minimum requirements for plant and wildlife species viability.</p>	<p>Ecosystem Objectives</p>
<p>5. <i>What management activities should be used?</i> Direction was developed for a range of management activities on the forest.</p>	<p>Management Areas</p>
<p>6. <i>What management approaches are considered?</i> Three alternatives were developed with an analysis of the environmental effects of each alternative.</p>	<p>Alternatives</p>
<p>7. <i>How do the alternatives relate to the proposed forest plan?</i> The preferred alternative was used to develop the proposed forest plan. When the final Environmental Impact Statement is issued, the Regional Forester will select the alternative that will become the Huron-Manistee National Forests' revised Forest Plan and publish the Record of Decision.</p>	<p>Proposed Forest Plan</p>

Alternatives Considered But Eliminated From Detailed Study

Results of evaluations associated with the Need for Change, Notice of Intent, and Analysis of the Management Situation were used to create nine initial alternative sketches. These initial alternatives were subjected to qualitative evaluations aimed at understanding how each might respond to various issues in comparison to the Current Direction. Two of these sketches and the current plan direction (no action alternative) were carried forward. The other seven initial alternatives, Minimum Management, Passive Management, Maximum Timber, Maximum Revenue, No Mineral Leasing, Maximum Multiple Use, and Maximize Range of Response were eliminated from detailed study. The remainder of this section briefly discusses each of the alternatives eliminated from detailed study.

Minimum Management:

This alternative minimized management activities wherever possible. As such, candidate Research Natural Areas, Study Wild and Scenic Rivers, Semiprimitive areas, habitat and timber management activities, and trails were all reduced in size, extent, or number compared to the 1986 Forest Plan, as amended direction. The alternative was dropped from further consideration because it failed to effectively respond to Forests' issues or to public comments received. Further, many of the potential changes contained in this alternative were covered by the minimum level benchmark.

Passive Management:

This alternative promoted “passive” management where possible, allowing “natural” processes to dictate future conditions on the Forests. Activities, such as fuels treatments, creation of early successional habitat, game species emphasis areas, and motorized recreation development, were de-emphasized in favor of mature forested habitats, nonmotorized recreation, and Wild and Scenic Rivers. This alternative was dropped from consideration because intensive management of some early successional habitat is necessary to maintain species viability, lack of fuels treatment would result in unacceptably hazardous conditions, and it failed to effectively respond to Forests' issues or to public comments received.

Maximum Timber:

This alternative maximized the production of timber products. Activities which resulted in increased timber production, such as timber harvest or creation of early successional habitat in aspen or jack pine, were emphasized. In contrast, management that would limit timber harvest, such as establishment of candidate Research Natural Areas and Wild and Scenic Study Rivers, was restricted or eliminated. This alternative was dropped from further consideration because it failed to effectively respond to Forests' issues or to public comments received. Further, many of the ideas contained in this alternative were covered by the maximum timber benchmark.

Maximum Revenue:

This alternative promoted forest management to maximize Present Net Value. Activities that generate dollars to local economies (for example, timber harvest, game species management emphasis areas, mineral development, and motorized recreation opportunity development) were emphasized. The alternative was dropped from further consideration because it failed to effectively respond to Forests' issues or to public comments received. Further, many of the changes contained in this alternative were covered by the maximum present net value benchmark.

No Mineral Leasing:

Documentation and environmental analysis of a reasonably foreseeable development scenario for oil and gas is required in accordance with the Federal Onshore Oil and Gas Leasing Reform Act of 1987 prior to making a leasing decision. The plan revision process provides the opportunity to bring the Forest Plan into compliance with this Act. The Act's implementing regulations state that the agency shall also identify an alternative of "not allowing leasing". The Huron-Manistee National Forests considered such an alternative but it was not analyzed in detail for the following reasons:

The range of alternatives formulated during Forest Plan revision address the issues identified during the "Need for Change" and scoping processes. Since oil and gas was not determined to be an issue that would be used in formulating alternatives, it was considered unnecessary to analyze such an alternative, in detail, for the sake of analysis. Oil and gas leasing/development have occurred on the Forests since the mid-1960s. The existing 32 producing oil and gas wells over the nearly million acres of National Forest System lands can be considered a modest amount of development. Foreseeable development over the next 10-15 years is projected to include an additional 88 wells drilled on National Forest System lands with 64 wells being productive. This projected level of development is consistent with historic drilling on the Forests and is insignificant when considered in context of all other resource activities. In addition, ownership of the mineral resource across the forests is split between the Federal government, State government, and private entities. Approximately 50 percent of the mineral resources are controlled by either the State or private entities. It can be estimated that roughly half of the total 88 wells projected to be drilled over the next 10-15 years would be drilled into state or private ownership. Control over leasing and development of the non-federal mineral estate under National Forest System lands is very limited and full analysis of an alternative which, in essence, only minimally decreases the already insignificant amount of projected development is not reasonable.

The production, transmission, and conservation of energy are national priorities as reflected in the National Energy Policy and the Forest Service Energy Implementation Plan. The fourth goal of the Forest Service Strategic Plan calls for us to "help meet energy resource needs." A "no lease" alternative is not consistent with current Forest Plan direction or the agency minerals policy. No comments or information were provided during the Notice of Intent/Need for Change comment period that identified a need to change current Forest Plan direction for oil and gas. Therefore, this was not considered a reasonable alternative.

Maximum Multiple Use:

This alternative maximized outputs from the Forests. It differed from the Maximum Revenue Alternative in that emphasized outputs were not required to generate revenue. As such, the Alternative sought to maximize a diverse array of outputs, such as game species habitat management, candidate Research Natural Areas, semiprimitive motorized and nonmotorized areas, habitat management for rare and sensitive species, and fire and fuels treatments. The alternative was dropped from further consideration because it failed to effectively respond to

Forests' issues or to public comments received.

Maximize Range of Response:

This alternative aimed to respond to the fact that many of the issues the Forests face are very polarized, for example some publics ask for more timber harvest while some ask for less. This alternative increased acres, designations, or activities where the preferred alternative decreased them and vice versa. The alternative was dropped from further consideration because it would not meet requirements for a variety of species and habitats dependent on early successional conditions.

Alternatives Considered in Detail

Alternative A (The 1986 Forest Plan, as Amended):

This alternative is designed to simulate the current management direction, or “no action alternative.” It moves the Forests toward the desired conditions, goals and objectives in the 1986 Forest Plan, as amended. Under this alternative, habitat for a wide variety of game and non-game species would be maintained or improved. It would also provide diverse recreation opportunities and a mix of forest timber products. Some modifications to the desired future conditions, goals, objectives, and Standards and Guidelines of the 1986 Forest Plan, as amended would be made to make them consistent with current national policy.

Wildlife and Rare Plants:

- Provides habitat for endangered, threatened, and sensitive species.
- Provides opportunities to improve fish and wildlife habitat.
- Emphasizes a mix of forest types, related vegetative conditions and timber products.
- Maintains or increases wildlife habitat diversity.
- Protects riparian areas.
- Identifies approximately 109,000 acres for Kirtland's warbler management and allows for treatment blocks of up to 370 acres. Habitat shall be managed to maintain viable populations of existing native and desirable non-native plant and animal species.
- Establishes 16 Management Prescription Areas (Management Areas) based on Landtype Associations and the Recreation Opportunity spectrum.
- Identifies approximately 37,100 acres as deer emphasis areas to be managed intensively to provide quality deer habitat with special emphasis on providing winter thermal cover; approximately 33,700 acres are identified for wildlife emphasis; and about 62,300 acres for grouse emphasis.
- Identifies a goal of approximately 2,400 acres of aspen regeneration harvests annually to create early successional habitat for a variety of species.
- Includes 3 designated Research Natural Areas, 3 candidate Research Natural Areas, and 33 potential candidate Research Natural Areas.
- Sixteen Management Indicator Species (MIS) are recognized. They are: white-tailed deer, ruffed grouse, squirrel, chestnut-sided warbler, black-throated green warbler,

Lincoln's sparrow, Eastern bluebird, pileated woodpecker, ducks, Kirtland's warbler, bald eagle, beaver, brook trout or brown trout, steelhead, bluegill, and walleye.

Timber:

- Provides a variety of commercial forest products.
- Uneven and even-aged systems are used.
- High volumes of softwood and hardwood timber products are produced.
- The Forests provide a component of aspen-early successional habitat. The goal is to harvest approximately 2,400 acres of aspen annually.
- Red pine harvesting was planned at approximately 18.6 million board feet for the first decade, mostly from thinnings.
- Softwood clearcuts are expected mostly in jack pine for Kirtland's warbler.
- Recognizes a need for dry sand prairies for Karner blue butterfly and was permissive on activities for this species. It also provided for this species in the standards and guidelines but did not establish specific goals and objectives.
- Quality hardwood sites and opportunities for intensive management will be identified.
- Uneven-aged systems will normally only be used in northern hardwoods.
- Stands are harvested after achieving culmination of mean annual increment.
- The allowable sale quantity is approximately 858 million board feet for the first decade.

Riparian and Aquatic Resources:

- Maintains water quality and protects riparian areas.
- Provides opportunities to improve wildlife and fish habitat.
- Habitat shall be managed to maintain viable populations of existing native and desired non-native plant and animal species.
- Activities are restricted in all riparian areas with the stated objective of managing all riparian areas for late seral conditions.

Recreation, Semiprimitive Areas, Aesthetics and Access:

- Provides opportunities for dispersed and developed recreation use, such as hunting, fishing, hiking, berry picking, Off-Highway Vehicle use, and bird watching.
- Provides a mix of roaded natural, semiprimitive motorized and nonmotorized recreation environments and developed and dispersed recreation opportunities.
- Post closed areas and gate roads where necessary.
- Manage National Recreation trails in accordance with the designation.
- Roads and motorized trails may be designated for new trail uses.
- Approximately 59,600 acres are designated as semiprimitive nonmotorized, and 11,400 acres are designated semiprimitive motorized.

Wilderness, Wild and Scenic Rivers and the North Country National Scenic Trail:

- Nordhouse Dunes is Congressionally designated as Wilderness.
- National Wild and Scenic Rivers:

- Currently, sections of five rivers on the Forests are designated; the Pere Marquette National Scenic River, the Au Sable National Scenic River, the Pine National Scenic River, the Manistee National Recreation River and Bear Creek National Scenic River.
- North Country National Scenic Trail crosses through the Manistee National Forest.

Wildland Fire and Fuels Management:

- Wildfires will be suppressed under the established management direction for the area.
- Fuels treatment will be commensurate with other resource objectives.
- Fire Mobilization Plans are developed with local Volunteer Fire Departments to protect Forests' resources.

Alternative B (Preferred Alternative):

This alternative is designed as the proposed action based on the Notice of Intent and identified as the preferred alternative for the revised Forest Plan. The Forests are managed similar to Alternative A. This alternative would maintain or improve the habitat for a wide variety of game and non-game species, and it would provide diverse recreation opportunities and a mix of forest timber products. Emphasis would be placed on managing hazardous fuels in fire-dependent ecosystems and at-risk rural-urban interface and intermix areas. In addition, this alternative incorporates recent mandates, current research, and monitoring and evaluation results. Vegetation management will be similar to the 1986 Forest Plan, as amended, with increased emphasis on the needs associated with hazardous fuels treatment, barrens and prairie restoration, and species viability. Desired future conditions, goals, objectives, and Standards and Guidelines would be updated.

Activities for Alternative B are the same as those listed for Alternative A with the following changes:

Wildlife and Rare Plants:

- In addition to Alternative A, this alternative adds objectives based on the Species Viability Evaluation and increases early successional habitat.
 - Restore Kirtland's warbler nesting habitat areas in blocks up to approximately 550 acres in size and increase the total acres identified for management to approximately 136,000 acres.
 - Protect resource values by managing landforms, such as coastal plain marshes, bogs, swales, fens, and mesic prairies, consistent with ecological processes.
 - Improve habitat conditions for species, such as American ginseng, northern goshawk, red-shouldered hawk, red-headed woodpecker, Eastern massasauga rattlesnake, cerulean warbler and common loon.
 - Increase the amount of ruffed grouse emphasis areas by approximately 1,200 acres, wildlife emphasis by about 1,900 acres and decrease deer emphasis areas by approximately 13,500 acres.
 - Manage according to the Eastern Region Regional Forester's Sensitive Species Framework.

- Restore and maintain large-scale openings including: grasslands, prairies, savannahs, and oak-pine barrens up to approximately 10 percent of the sandy hills and plains land type associations (approximately 58,600 acres). The size of openings may be up to 500 acres. This activity, coupled with fuelbreak creation, is expected to produce non-chargeable volume of about 25 million board feet annually.
- Allow stands to be harvested prior to culmination of mean annual increment (achieving maximum growth) for resource needs, such as species viability and fuelbreaks.
- Update the desired conditions, goals and objectives for vegetation, wildlife, fish, and rare plants.
- Increase the number of candidate Research Natural Areas to 18 and identify 5 Research Natural Area-equivalents.
- Assess and revise management indicator species to Kirtland's warbler, Karner blue butterfly, ruffed grouse, brook trout, and mottled sculpin, and update the monitoring and evaluation requirements for these species.

Timber:

- This alternative would increase softwood, decrease management of quality hardwoods and maintain aspen harvests at current plan levels.
- Recalculate the long-term sustained yield. Add an objective/outcome for timber derived from lands classified as unsuited for timber production up to approximately 25 million board feet annually.
- The allowable sale quantity is approximately 910 million board feet for the first decade.

Riparian and Aquatic Resources:

- Include Standards and Guidelines based on the Species Viability Evaluation to allow vegetation management for early successional habitat in riparian areas to better mimic natural disturbance regimes. Management in Streamside Management Zones (100 feet from each side of the stream) will be permitted in response to species viability concerns. Activities now permitted in the riparian area, but outside of the Streamside Management Zones, will be performed to benefit a variety of species and protect sensitive areas.
- Incorporate the aquatics ecological classification and inventory system into the desired conditions, goals and objectives for aquatics.
- Categorize lakes in the desired conditions, state goals and objectives in terms of baseline trophic status and morphological/hydrological sensitivity.
- Incorporate the terms and conditions of applicable Federal Energy Regulatory Commission license orders as standards and guidelines.

Recreation, Semiprimitive Areas, Aesthetics and Access:

- Areas classified as Rural in the Recreation Opportunity Spectrum are increased to approximately 128,500 acres to reflect changes in private land use within and adjacent to the forest proclamation boundary

- Combine all semiprimitive motorized areas into a single management area, Management Area 6.2 (currently there are three semiprimitive motorized management areas). Increase the area of semiprimitive motorized to about 17,150 acres.
- Update the desired conditions, goals and objectives for semiprimitive recreation areas.
- Combine all semiprimitive nonmotorized areas into a single management area, Management Area 6.1 (currently there are three semiprimitive nonmotorized management areas). Increase the area of semiprimitive nonmotorized to about 64,300 acres.
- Include forest wide standards and guidelines to implement the National Scenery Management System.
- Evaluate and incorporate into the Forest Plan, as needed, new trail uses as they are identified.

Wilderness, Wild and Scenic Rivers, and the North Country National Scenic Trail:

- Wild and Scenic Rivers
 - Adjust the Au Sable River Management Area boundary to the existing roads, except where Kirtland's warbler essential habitat exists.
 - Change the designation of the area between the western boundary of the Pine River Wild and Scenic Area and M-55 from "lands in holding" to Management Area 9.2, Wild and Scenic Study Rivers, for addition to the Pine National Scenic River.
 - Suitability of the Little Muskegon and Muskegon Rivers for national Wild and Scenic River designation will be determined outside the Forest Plan revision process. These rivers will be managed under Management Area 9.2, Wild and Scenic Study Rivers.

Wildland Fire and Fuels Management:

- Add goals and objectives for Fire Management since large portions of the Huron-Manistee National Forests are fire dependent ecosystems located in urban-rural interface and intermix areas.
- Incorporate the National Fire Plan and the Huron-Manistee National Forests' Fire Management Plan.
- Describe desired condition, goals and objectives for each management area.
- Identify and address fire risks.
- Fire suppression is commensurate with the values of the resource to be protected.
- Develop and include fire response strategies for the urban-rural interface and intermix.
- All management area prescriptions have been developed with the following considerations: fire history frequency, forest type, fuel loadings, and site factors. Fire Management direction is integrated with other resource management direction.

Fuels Management:

- Fuels management activities will be designed to emulate natural fire regimes.
- Hazardous fuel loadings will be identified and reduced to avoid catastrophic fires.
- The Forests will maintain a hazardous fuels risk map that identifies fire dependent ecosystems and at-risk urban-rural interface and intermix areas.

- Allow stands to be harvested prior to culmination of mean annual increment (achieving maximum growth) for resource needs, such as species viability and fuelbreaks.
- The hazardous fuels program consists of: Fuelbreaks, approximately 2,000 acres created or maintained per year; individual fuelbreaks may be up to approximately 8 miles in length and wide enough to create a change in fire behavior; hazardous fuels reduction of approximately 8,000 acres treated per year; temporary and permanent openings in fuel treatment areas may be up to approximately 500 acres in size in high risk fuel types.
- Integrate natural resources and other program objectives with fuels management. Some examples are barren, prairie and opening creation, and maintenance activities will be coordinated, as will a variety of silvicultural treatments.
- Conduct, as needed, project-level hazard fuel reduction effectiveness monitoring.

Other Changes:

Minerals:

- Conduct required analysis of reasonably foreseeable development for oil and gas as required by Federal Onshore Oil and Gas Leasing Reform Act of 1987.
- Identify conditions under which National Forest System lands may be considered for oil and gas leasing.

Alternative C:

This alternative provides a widened range of response to the three issues and related comments by either decreasing or increasing the management intensity of some activities in a number of program areas. While the management activities proposed under this alternative are similar to Alternative B, the quantity and/or implementation rate are different. Vegetation management for barrens and prairie restoration, to address species viability, will increase in this alternative. As with Alternative B, desired future conditions, goals, objectives, and standards and guidelines would be updated.

Activities for Alternative C are the same as those listed for Alternative B with the following exceptions:

Wildlife and Rare Plants:

- Increase restoration activities beyond those identified in alternative B for a variety of species and habitats. The most noticeable impacts will be for activities associated with barrens and prairies.
- Incorporate conservation measures developed through the species viability evaluation into the revised Forest Plan goals, objectives, and Standards and Guidelines. Increased rate of implementation for barrens compared to Alternative B.
- Increase openings including: barrens, prairies and savannahs and oak/pine barrens will result in an increase in non-chargeable timber volume to approximately 52 million board feet annually.

- Increase the amount of ruffed grouse emphasis areas by approximately 1,200 acres, but increase the rotation age in these areas to 50 years.
- Decrease the total acres of aspen harvest to approximately 1,500 acres annually.
- Designate 3 new Research Natural Areas and identify 15 candidate Research Natural Areas and 5 Research Natural Area-equivalents.

Timber:

- Provide a variety of both hardwood and softwood timber products. Manage less aspen compared to Alternatives A and B (see table II-2).

Recreation, Semiprimitive Areas, Aesthetics and Access:

- Reclassify all semiprimitive motorized areas to semiprimitive nonmotorized management. There will be no semiprimitive motorized areas.

Wildland Fire and Fuels Management:

- Hazardous fuels reduction will occur on approximately 6,000 acres annually; temporary and permanent openings in fuel treatment areas may be up to approximately 500 acres in size in high risk fuel types.
- Create or maintain approximately 2,000 acres of fuelbreaks annually.

Alternative Comparison

Table II-2 displays a summary of the alternative comparisons.

Table II-2. Alternative Comparison.

Evaluation Criteria	Issue(s)	Alternative A	Alternative B <i>Preferred Alternative</i>	Alternative C
Age of Stand Entry	1. Wildlife and Rare Plants 5. Wildland Fire and Fuels Management	Current standards and guidelines are applied on a stand level basis when vegetation treatments occur. The Forest Plan currently allows for retention of a variety of structural components to meet viable population objectives.	Allow stands to be harvested prior to reaching rotation age for resource needs, such as species viability and fuelbreaks.	Allow stands to be harvested prior to reaching rotation age for resource needs, such as species viability and fuelbreaks.
Deer Emphasis	1. Wildlife and Rare Plants 2. Timber Management	The Forest Plan identifies areas to be managed intensively to provide quality deer habitat with special emphasis on providing winter thermal cover (deer yards). 37,105 acres were identified as deer emphasis areas.	Overall reduction in deer emphasis areas (total of 24,051 acres). Habitat management at same intensity as Alternative A.	A further reduction in the number of proposed deer emphasis areas to 15,173 acres.
Wildlife Emphasis	1. Wildlife and Rare Plants	Approximately 242,000 acres will be managed intensively to improve wildlife habitat. 33,728 acres are designated for wildlife emphasis.	Slight increase in wildlife emphasis areas (total of 35,901 acres).	Same as Alternative B.
Grouse Emphasis	1. Wildlife and Rare Plants	Early-successional forest habitat is necessary to maintain woodcock and grouse populations within their range. 62,291 acres were identified as grouse emphasis areas.	Overall increase in grouse emphasis acreage (total of 63,494).	Lengthen aspen rotation age to 50 years in proposed grouse emphasis areas. Acres in grouse emphasis areas will be the same as Alternative B.
Kirtland's Warbler	1. Wildlife and Rare Plants	Approximately 109,000 acres were identified as Kirtland's warbler habitat. Management for Kirtland's warbler is established under standards and guidelines for Management Area 4.5.	Increase in the acres of essential Kirtland's warbler habitat to 88,300 acres. Direction will be found in MA 4.2(KW – Kirtland's warbler).	Same as Alternative B.
Aspen/Paper Birch	1. Wildlife and Rare Plants 2. Timber Management 5. Wildland Fire and Fuels Management	The Forests will provide a component of aspen-early successional habitat. The existing Forest Plan goal is 2,410 acres annually of aspen early-successional habitat.	Same as Alternative A-2,410 acres harvested annually for decade 1.	Reduce acres of aspen managed outside of grouse emphasis areas. 1,500 acres treated annually in the first decade.

Table II-2. Alternative Comparison (Continued).

Evaluation Criteria	Issue(s)	Alternative A	Alternative B <i>Preferred Alternative</i>	Alternative C
Short Lived Conifer (SLC)	1. Wildlife and Rare Plants 2. Timber Management 5. Wildland Fire and Fuels Management		Increase activity and intensity due to Species Viability Evaluation for Kirtland's warbler and through conversions for fuelbreaks, savannahs and barrens.	Increase implementation rate for barrens according to Species Viability Evaluation as compared to Alternative B.
Lowland Conifer (LC)	1. Wildlife and Rare Plants 2. Timber Management	No Change, very little activity in this type.	Decrease in activity, compared to Alternative A, due to slight decrease in acres of deer emphasis areas and Species Viability Evaluation for cedar swamps.	Same as Alternative B.
Lowland Hardwood (LH)	1. Wildlife and Rare Plants 2. Timber Management 5. Wildland Fire and Fuels Management	No Change	Decrease intensity of management due to reduction in acres of deer emphasis areas.	Further decrease in activity as determined by the decrease in acres in proposed deer emphasis areas.
High Site Oak (HSO)	1. Wildlife and Rare Plants 2. Timber Management 5. Wildland Fire and Fuels Management	No aspen or oak conversions are projected for Decades 1-3. The Forest Plan allows for management of northern hardwoods on the Forests' most productive land type associations.	No change from Alternative A.	Decrease intensity of management compared to Alternative B, resulting in conversion to northern hardwoods.
Low Site Oak (LSO)	1. Wildlife and Rare Plants 2. Timber Management 5. Wildland Fire and Fuels Management	Fire is a tool that can be used to regenerate oak, and the Forest Plan does not preclude its use. Prescribed fire/fuels and wildfire suppression have new direction via the National Fire Plan since the approval of the current Forest Plan.	Decrease acres of low-site oak and increase activities to allow for increased management for Species Viability Evaluation, fire management and fuels reduction.	Species Viability Evaluation activities will increase compared to Alternative B, fuel treatment activity will be less, and fuelbreaks will be the same.

Table II-2. Alternative Comparison (Continued).

Evaluation Criteria	Issue(s)	Alternative A	Alternative B <i>Preferred Alternative</i>	Alternative C
Northern Hardwoods (NHW)	1. Wildlife and Rare Plants 2. Timber Management 5. Wildland Fire and Fuels Management	Generally northern hardwoods are managed under uneven-aged silvicultural systems. Northern hardwoods should only be managed on sites ecologically capable of sustaining this vegetation group.	Decrease intensity to meet Species Viability Evaluation for Ginseng. Slight increase in acres of northern hardwood due to conversions.	Ginseng habitat same as Alternative B, uneven-aged management only in this type group.
Early Successional Vegetation (scrub-shrub)	1. Wildlife and Rare Plants 5. Wildland Fire and Fuels Management	Current Situation	Increase acres for golden-winged warbler according to Species Viability Evaluation. Increased management activities due to Standards and Guidelines changes for Streamside Management Zones.	Same as Alternative B.
Barrens and Savannahs in LTAs 1 and 2	1. Wildlife and Rare Plants 5. Wildland Fire and Fuels Management	The Forest Plan recognizes the need to identify and protect dry sand prairies, which provide key habitat for the Karner blue butterfly, but does not have specific management objectives or standards and guidelines for this species or its habitat.	Increase acres due to Species Viability Evaluation for dependent species. Implement barrens creation in the first 5 decades. 9,318 acres restored in decade 1.	Increase implementation rate from Alternative B. Implement barrens creation in the first 3 decades. 26,217 acres restored in decade 1.
Non-chargeable volumes	2. Timber Management	It should be noted that other timber products should be expected from non-chargeable allowable sale quantity management activities, such as opening creation; old growth, wetland and habitat restoration; fuels treatments and fuelbreaks. 4.2 million board feet projected annually for decade 1.	Increase for short- and long-lived conifer and low site oak due to fuelbreaks, openings, savannahs, and barrens. 25.0 MMBF projected annually for decade 1.	Increase implementation rate from Alternative B for barrens. 52.2 MMBF projected annually for decade 1.
Acres Manipulated				
Early Successional Riparian Habitat	3. Riparian and Aquatic Resources	Limited management activities are permitted in riparian areas.	Increase acres for golden-winged warbler (5,000). Increased management activities due to Standards and Guidelines changes for Streamside Management Zones.	Same as Alternative A but activities can occur for Species Viability Evaluation (5,000 acres).

Table II-2. Alternative Comparison (Continued).

Evaluation Criteria	Issue(s)	Alternative A	Alternative B <i>Preferred Alternative</i>	Alternative C
Acres Change in Management Areas				
Semiprimitive Motorized	4. Recreation, Semiprimitive Areas, Access	11,375 acres of semiprimitive motorized areas designated.	Complete the designation of semiprimitive motorized areas proposed in the existing Forest Plan. A total of 17,148 acres of semiprimitive motorized areas designated.	There will be no semiprimitive motorized areas in this Alternative. All areas will be semiprimitive nonmotorized.
Semiprimitive Nonmotorized	4. Recreation, Semiprimitive Areas, Access	59,626 acres of semiprimitive nonmotorized areas designated.	Complete the designation of semiprimitive nonmotorized areas proposed in the existing Forest Plan. A total of 64,397 acres would be semiprimitive nonmotorized.	Increase in the number and acres of semiprimitive nonmotorized areas compared to Alternatives A and B. A total of 81,545 acres would be semiprimitive nonmotorized.
Acres of Activity				
Acres Treated for Fuels	5. Wildland Fire and Fuels Management	The Forest Plan provides little or no direction for wildland fire and fuels management. The National Fire Plan provides recent direction for wildfire suppression and hazardous fuels management.	Increase fuelbreaks (create or maintain 2,000 annually). Increase hazard fuels treatment to 8,000 acres per year.	Fuelbreak activity will be the same as Alternative B, acres of fuel treatments will be reduced by 25% to 6,000 acres per year.
Scenery Management System				
Scenery Management	Other	The Forest Plan includes information on Scenic Classes but does not provide direction on Visual Quality Objectives. The Settlement Agreement called for the establishment of Visual Quality Objectives through Opportunity Area Analysis. Some work has been completed by the Ranger Districts.	Replace Visual Quality Objectives with Scenery Management System.	Same as Alternative B.

Table II-2. Alternative Comparison (Continued).

Evaluation Criteria	Issue(s)	Alternative A	Alternative B <i>Preferred Alternative</i>	Alternative C
Minerals Management				
Minerals	Other	<p>Forest Plan direction specifically addresses objectives and standards and guidelines for common variety (sand and gravel) and energy (oil and gas) minerals.</p> <p>The Forest Plan provides the framework for management of oil and gas resources by identifying areas available and not available for leasing.</p> <p>There is no forest-wide programmatic level analysis of foreseeable oil and gas development and its associated effects to meet current direction.</p>	Complete foreseeable development analysis for oil and gas on National Forest System lands to comply with current regulation and identify lands which may be considered for lease.	Same as Alternative B.

Preferred Alternative

The Huron-Manistee National Forests submitted three Forest Plan alternatives to the Regional Forester for the Eastern Region. The Regional Forester considered the comments and the analyses, and selected Alternative B, as amended, as the Preferred Alternative. The 1986 Forest Plan, as amended, (the “no-action alternative”) remains in effect until the Regional Forester signs the Record of Decision for the revised Forest Plan.