

# Need for Change

## Description of Proposal for Revising the Forest Plan of the Hiawatha National Forest

The Hiawatha National Forest proposes to prepare an Environmental Impact Statement, which will include a description of the proposal for revising the Forest Plan and supplementary information. This document includes a description of the proposal for revising the Forest Plan and supplementary information.

**USDA Forest Service  
Eastern Region**

**September 18, 2003**

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## I. The Forest Plan and Revision Process

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### *What is a Forest Plan?*

The Forest Plan is a management strategy that guides all natural resource management activities for each National Forest for a 10 to 15 year period. The Forest and Rangeland Renewable Resources Planning Act of 1974 and the National Forest Management Act of 1976 require that a Land and Resource Management Plan (Forest Plan) be prepared for each National Forest.

Hiawatha's Forest Plan provides guidance for implementing project-level decisions across the Forest. All project must be in compliance with the Forest Plan or the Plan must be amended.

### *What decisions are made in a Forest Plan?*

The Forest Plan provides a programmatic strategic framework for natural resource management on National Forest System lands. Within the Forest Plan, decisions are made in the following six areas:

1. ***Forest-wide multiple use goals and objectives*** (36 CFR 219.11 (b)). A **Goal** describes a desired condition of the land to be achieved in the future. In the Forest Plan, a goal responds to a management problem. An **Objective** is a concise, time-specific statement of measurable, planned results that responds to pre-established goals. The Forest Plan uses objectives to discuss the Plan's emphasis by resource area.
2. ***Forest-wide management requirements*** (36 CFR 219.13 to 219.27). The Forest Plan establishes forest-wide management requirements in the form of standards and guidelines that are applied to all management activities. Standards and guidelines establish the "bounds" or "rules" which are applied to management practices to achieve the Forest Plan's goals and objectives.
3. ***Management area direction*** (36 CFR 219.11). Management areas are "subdivisions" of the Forest with their own sets of goals, objectives, desired conditions and standards and guidelines. Each management area has a unique purpose, desired future condition and management prescriptions to move the land toward that desired condition.

4. ***Determining Lands Suited for Timber Management and the Allowable Sale Quantity*** (36 CFR 219.14 and 36 CFR 219.16)

**Land Suitability:** Forest lands are analyzed for suitability for timber management when a Forest Plan is developed. Land can be classified either suited for timber production or one of several categories of lands not suited for timber production.

**Allowable Sale Quantity (ASQ):** The quantity of timber that may be harvested from suited lands covered by the Forest Plan. The ASQ is the maximum level that can be harvested during the time specified by the Forest Plan.

5. ***Monitoring and evaluation requirements*** (36 CFR 219.11 (d)). Monitoring and evaluation determines the progress in meeting Forest Plan direction. This direction includes monitoring and evaluating the management goals, objectives, practices and standards and guidelines. Through this process, changes to the Forest Plan can be identified and the Forest Plan can be amended as necessary.

6. ***Recommendations for Wilderness Areas or Wild and Scenic Rivers. The Wilderness Act of 1964*** (36 CFR 219.17) defines wilderness as an area of undeveloped federally owned land, designated by an Act of Congress. The Forest Service is charged by Congress to manage these areas to protect and enhance the natural conditions and to provide opportunities for solitude and unconfined recreation. The **Wild and Scenic Rivers Act** allows rivers and their immediate environments that possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, be preserved in free-flowing condition to be protected for the benefit and enjoyment of present and future generations. The Forest Service makes recommendations – if any – regarding allocation of lands as Wilderness Areas or Wild and Scenic Rivers.

### ***What Factors Indicate a Need to Revise the Forest Plan?***

The National Forest Management Act of 1976 provides direction for revising the Forest Plan. In addition to the prescribed timeline for revisions (at least every 15 years), additional indicators can direct the need for a revision. According to those indicators, we may revise the Forest Plan:

1. ***When conditions of the land or demands from the public have changed significantly.*** Although there have been small-scale fires, flooding and stand blow down, there has been no significant catastrophic changes to Hiawatha's forest landscape since the Forest Plan was written.

However, the comments we received from the public helped identify some of the need for change topics in the Notice of Intent. Samples of the comments we received are included throughout Section VI.

2. ***When changes in Agency policies, goals or objectives have a significant affect on Forest programs.*** The Agency goals and objectives, Federal laws and initiatives and national guidance for strategic plans and programs, have changed since 1986 and must be incorporated into the Forest Plan.
3. ***When an interdisciplinary team recommends a revision as the result of a monitoring and evaluation process.*** Members of Hiawatha National Forest's interdisciplinary teams (IDT) completed resource assessments for aquatics, fire ecology, fisheries, heritage, old growth, plants, recreation, soils, transportation system, vegetation, visual quality, wild and scenic rivers and wildlife. These assessments are a close, evaluative look at the Forest Plan direction that was developed in 1986 and assess how it was implemented. Specialists reviewed data, information, and monitoring and evaluation reports to prepare assessments of Forest resources, then made recommendations for changes to the Forest Plan.
4. ***When new information suggests that a revision is necessary.*** Since the Plan was written, new scientific information on topics including ecological information, species viability, soils, insects and diseases, and water resources, has become available. This new information will be used to revise standards and guidelines and goals and objectives in the Forest Plan. New technology has also helped identify needed changes to the Forest Plan.
5. ***Forest Plan lawsuits and project level appeal issues and decisions.*** Decisions from appeals and lawsuits will be incorporated into the revised Forest Plan where appropriate.

### ***Why is it time to revise Hiawatha's Forest Plan?***

The Regional Forester approved Hiawatha's Forest Plan on October 24, 1986. At this time, there are three reasons to revise the Forest Plan:

1. ***The National Forest Management Act of 1976*** requires that Forest Plans be revised at least every 10-15 years.
2. ***National guidance for strategic plans and programs*** has changed since 1986. The Agency goals and objectives, along with other national guidance for strategic plans and programs, have changed.
3. ***Standards and guidelines*** should be revised to address new information and changed conditions. New research and information is available regarding management of forest lands.

### ***How did we develop the proposal to revise the Forest Plan?***

The Hiawatha National Forest solicited input from the public, our employees, other government agencies and tribal governments to determine areas of the Forest Plan that needed changing. An interdisciplinary team comprised of Hiawatha National Forest employees, reviewed all comments and proposed changes.

The results of this review, indicated that much of the information and direction in our Forest Plan is still appropriate and will be carried forward into the revised Forest Plan with little or no change.

The review also pointed out several concerns that we cannot effectively address through planning or Forest Plan revision because they are: operational, budget dependent, or outside the control of the Forest Service. (*See Part VII*).

From the remaining comments, a preliminary list of potential “need for change” issues was developed. The Hiawatha National Forest leadership team reviewed the proposed changes and recommended the proposal that is presented in this document. It is important to note that this proposal allows the Hiawatha to focus our analysis on issues identified as being most critically in need of change.

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## **II. Tribal, Government and Public and Employee Involvement**

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The Hiawatha National Forest used many methods to keep citizens up-to-date on the Forest Plan Revision. Citizens, Tribes, and public and private organizations were contacted by mail and e-mail and through announcements in broadcast and print media. In addition, meetings were held with Tribes, state and federal agencies, species experts and public and private organizations to get their input on changes to the Forest Plan. Outreach activities included:

**Michigan National Forests Collaborative Efforts:** The Hiawatha, Huron-Manistee and the Ottawa National Forests worked together to contact legislators, government and tribal officials, and public organizations to discuss the Forest Plan revision efforts of all three forests. The three forests sent out informational packets to individuals, organizations and government agencies in August 2002. The packets included an introductory letter about the Forest Plan Revision, signed by the three Michigan National Forest Supervisors; an invitation to participate in the Forest Plan Revision brochure; and a newsletter about the Michigan National Forests Revision process.

**Hiawatha's additional outreach activities included:**

**Public meetings:** Two series of public meetings were held throughout Michigan's Upper Peninsula to update citizens on the Forest Plan Revision process and to share the results of the comments that were received.

**Additional outreach:** Hiawatha National Forest staff had contact with a variety of individuals and organizations regarding Forest Plan revision. Contacts included:

1. Bay Mills Tribal Community meeting was held in February, 2003 in Sault Ste. Marie, Michigan;
2. Members of the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) were kept abreast of the Forest Plan Revision;
3. Members of the Friends of the Hiawatha were updated on the Forest Plan Revision at meetings held in 2002 and 2003;
4. Members of the Eastern Upper Peninsula Partners in Ecosystems Management (EUPPEM) were regularly updated on the Forest Plan Revision;
5. Hiawatha National Forest staff met with the Upper Peninsula's representative on the Michigan Natural Resource Commission and Michigan DNR staff regarding Forest Plan Revision.
6. The Hiawatha participated in the Upper Peninsula Fair in August 2003. Forest Plan Revision information was available at the Hiawatha's informational booth.
7. Hiawatha National Forest staff were guest speakers at several civic organization meetings.

**Employee outreach:** Formal employee meetings were held in December 2002 and in the spring of 2003 to update staff on the Forest Plan Revision. Employees were also sent copies of the newsletters and were notified when the Hiawatha's Intranet site was updated. Employees were encouraged to submit their comments on changes to the Forest Plan.

**Forest Plan Revision Web site:** The Hiawatha National Forest developed a Forest Plan Revision Web site which has the latest information about the revision, meetings information, comment forms, monitoring and evaluation reports, resource assessments, the current Forest Plan and amendments.

**Newsletters:** Three issues of Hiawatha's Forest Plan Revision newsletter have been written and distributed to employees, citizens, area libraries and public and private organizations. The first two newsletters covered the revision process, how to submit comments, defined forest terminology and summarized the comments we received and explained how they were analyzed. The third newsletter outlined the contents of the Notice of Intent.

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### III. Applicable Laws, Regulations, Policy and Direction

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There are a number of laws, regulations, policy and direction that provide direction to national forests and Forest Plan revision.

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#### Current Laws

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**1897 Organic Administration Act as amended:** Created the national forests and established purposes.

**1906 Preservation of American Antiquities Act:** Provides direction to protect, inventory, and manage cultural resources on lands owned by the government of the United States.

**1911 Weeks Law as amended:** Authorized the purchase of forested, cutover, or denuded lands. The Eastern National Forests were established as a result of the Weeks Law.

**1948 Clean Water Act as amended:** Provides direction to restore and maintain the chemical, physical, and biological integrity of the Nation's water.

**1955 Clean Air Act as amended:** Provides direction to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of the population.

**1960 Multiple-Use Sustained Yield Act:** Establishes multiple-use and sustained-yield policies for the management of the national forests.

**1966 National Historic Preservation Act as amended 1980 and 1992:** Established a program for preservation of historic properties throughout the nation. The National Register of Historic Places established regulations for the maintenance and expansion of this list are found at 36 CFR 60. This Act required the establishment of regulations to provide for curation of historical properties, the regulations are at 36 CFR 79. Further protection for archaeological resources are in 36 CFR 296.

**1968 Wild and Scenic Rivers Act as amended:** Provides for a National Wild and Scenic Rivers system through designation processes and prescribing standards for management of study and designated rivers.

**1968 National Trails System Act:** Provides for the establishment of a national trails system.

**1969 National Environmental Policy Act:** Establishes the Forest Service's decision-making process and how to document the effects of our actions. Committed the federal government to creating and maintaining "conditions under which people and nature can exist in productive harmony."

**1973 Endangered Species Act as amended:** Provides a means whereby the ecosystems upon which endangered and threatened species may be conserved and to provide a program for conservation of such species.

**1973 Rehabilitation Act as amended:** Provides for universal access to facilities and programs.

**1974 Forest and Rangeland Renewable Resources Planning Act as amended:** Provides for the preparation of a strategic plan for all national forests based on an assessment of renewable natural resources.

**1974 Preservation of Historical and Archaeological Data Act:** Provides for the preservation of historical and archeological data which might otherwise be irreparably lost or destroyed.

**1975 Federal Noxious Weed Act:** Provides for the control and management of non-indigenous weeds that injure or have the potential to injure the interests of agriculture and commerce, wildlife resources, or the public health.

**1976 National Forest Management Act as amended:** Provides standards and guidelines for National Forest planning and management. The Michigan National Forests will use the 1982 Forest Planning Rules

**1978 American Indian Religious Freedom Act:** Protects and preserves for American Indians their inherent right of freedom to believe, express, and exercise their traditional religions.

**1979 Archaeological Resources Protection Act as amended 1988:** Provides protection of archaeological resources and sites which are on public lands and Indian lands.

**1987 Michigan Wilderness Act:** Provides for the designation of wilderness on National Forest System Lands in the state of Michigan.

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## Current Policy and Direction

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**USDA Forest Service Strategic Plan (2000 Revision)** complies with the Government Performance and Results Act. This plan documents the Agency's commitment to sustainable forest management. The strategic plan lays out the goals and objectives for the USDA Forest Service for the next five years. It uses the findings of the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) 2000 assessment to develop long-term goals, objectives, and measures. The long-term goals are: ecosystem health, multiple benefits to people, scientific and technical assistance and effective public service.

**Four Threats to the Health of the Nation's Forests and Grasslands:** Forest Service Chief Dale Bosworth has identified four critical threats facing national forests and grasslands. They are:

1. ***Fires and fuels.*** Many forests have become overgrown and unhealthy, and are at risk from wildland fires that could compromise human safety and ecosystem health.
2. ***Non-Native Invasive Species.*** Invasive plants, animals and fish cause biodiversity loss, and have contributed to the decline of many rare native species.
3. ***Fragmentation.*** The rural areas that have traditionally served as corridors to national forests have been reduced because of encroaching development. Fragmentation results in break up and loss of contiguous wildlife habitat and land ownership patterns.
4. ***Unmanaged Outdoor Recreation.*** More people are using national forests for recreational use. Unmanaged outdoor recreation has created unplanned roads, trails, campsites and conflicts among users. It has resulted in excessive erosion, water degradation, habitat destruction, and damage to cultural sites. In order to protect forest resources, strategies must be developed and implemented to manage recreational use.

**National Fire Plan** protects communities, natural resources, and the lives of firefighters and citizens. It is based on ongoing cooperation and communication among federal agencies, states, local governments, tribes and interested publics. The federal wildland fire management agencies worked closely with these partners to prepare a 10-year comprehensive strategy, which was completed in 2001.

**National Healthy Forest Initiative** address catastrophic wildfires and environmental degradation caused by deteriorating forest health. It establishes a framework to protect communities and the environment through collaboration on thinning, planned burns and forest restoration projects. The initiative will improve procedures for developing and implementing fuels treatment and restoration projects; reduces the number of overlapping environmental reviews and ensures consistent National Environmental Policy Act (NEPA) procedures for projects.

**Invasive Species Initiative:** Invasive species are the greatest threat to native biodiversity and alter native communities, nutrient cycling, hydrology, and natural fire regimes. They threaten ecosystem function, water availability, economic stability, forest production and human health. Invasive plants are spreading at an estimated rate of 1.7 million acres per year across forests and grasslands, while invasive insects and diseases continue to plague millions of acres of private, state and national forests.

**Roadless Initiative:** The Roadless Area Conservation Rule (36 CFR, part 294) took effect in 2001. This rule prohibits new road construction and reconstruction in inventoried roadless areas on National Forest System lands and generally prohibits cutting, sale, and removal of timber in inventoried roadless areas with some exceptions.

**Road Management Policy:** A National Forest System Road Management Policy was published on January 12, 2001. The policy contains direction on analysis standards for assessing the need for new road construction; for evaluating the existing road network to determine what roads are necessary for future management; and for identifying what roads can be decommissioned.

**Unified Federal Policy (UFP) for Watershed Management** was published in the *Federal Register* on October 18, 2000 by the Departments of Agriculture and Interior. The policy promotes a unified approach to better watershed management to protect water quality and the health of aquatic systems on federal lands and to reduce water pollution resulting from federal management activities. Objectives include: consistent procedures for classifying watersheds, use of a watershed approach when protecting and restoring watersheds, improve compliance with the Clean Water Act, and enhanced collaboration among federal agencies, states, stakeholders and landowners.

**Report of the National Tribal Relations Program Task Force: A Vision for the Future.** Published August 2000. The National Tribal Relations Task Force provided a set of recommendations designed to improve the consistency and effectiveness of program delivery and to institutionalize long-term collaborative relationships with tribal governments. The recommendations were focused on pervasive problems and concerns that surfaced repeatedly in different contexts and were symptomatic of underlying problems in working relationships between the Forest Service and the Tribes. The recommendations were grouped in three categories designed specifically to improve program delivery: administrative, policy, and legislative. The Report of the Tribal Relations Program Implementation Team was published in June, 2003.

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## IV. Forest Niche and Summary of Current Forest Plan

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### *Hiawatha National Forest Niche Statement*

When you first enter the Hiawatha National Forest, look around. At first glance, you'll see a forest with abundant wildlife, miles of rivers and streams, and dozens of waterfalls. You'll see a forest that touches the scenic shorelines and beaches of three Great Lakes, and is home to six historic lighthouses. You'll see historical structures, archaeological sites and prehistoric Native American artifacts that are a window to our past, that are being preserved for our future.

Then look closer, and you may catch sight of rare birds like Kirtland's warblers, piping plovers and bald eagles, or hear the distinctive calls of sandhill cranes. You may hear the howl of the timber wolf or perhaps the cry of a bobcat. You'll see a forest that is home to rare plants like including the Houghton's goldenrod, dwarf lake iris, pitcher's thistle and lakeside daisy.

This is today's Hiawatha National Forest. It's a maturing forest of nearly a million acres that was created in 1931 from abandoned farms, razed logging tracts and

lands devastated by forest fires. The “land that nobody wanted,” is now a working forest that provides timber products to American citizens and is a refuge to rare plants and animals. Much of the forest we see today is due to reforestation efforts of the Civilian Conservation Corps during the Great Depression and the grassroots “Pennies for Pines” project, where children donated pennies to plant pines on national forests.

The Hiawatha National Forest is located in Michigan’s central and eastern Upper Peninsula. The lands were formed from massive glaciers that covered the area more than 10,000 years ago. When the glaciers receded, they left behind hundreds of lakes, acres of wetlands and Lake Superior’s dramatic sandstone cliffs.

The Hiawatha also a land rich in history. Native Americans were the first settlers after the glaciers retreated. When French explorers arrived, they met the Anishinabeg (Original People), who are also known as the Potowatomi, Chippewa, and Ottawa tribes. Fur traders and missionaries soon followed and founded Sault Ste. Marie and St. Ignace, which are two of the earliest named European settlements in the New World.

Finally, the Hiawatha provides a variety of recreational opportunities. Visitors can find respite in six wilderness areas and enjoy trout streams where the only sound you’ll hear is the rush of the water and the splash of a fish as you reel it in. You can play in the waters of three Great Lakes or in any of the hundreds of inland lakes that dot the forest, or you can hunt, pick berries or watch birds. You can take a hike along the Maywood trail on the shores of Little Bay de Noc to see a 200 year-old hemlock forest or explore historic Grand Island National Recreation Area. Tour the Hiawatha in the fall to see spectacular foliage that ranges from palest yellows to vibrant oranges and reds. In the winter, visitors can ride for miles on groomed snowmobile trails, or move at a slower pace while cross country skiing, snow shoeing or ice fishing.

The Hiawatha National Forest plays an important role in the Upper Peninsula’s economy and quality of life. While revising the Forest Plan, the Hiawatha will not lose sight of the needs of the public or of our obligation to effectively manage our Nation’s resources. During the revision, we will address vegetation management to provide ecological conditions for rare plants and animals and producing timber. We will also address: protecting riparian areas; developing management plans for Wild & Scenic Rivers; assessing wilderness areas, and incorporating new directives for timber, fire ecology, wildlife and watersheds.

## ***Summary of the Current Forest Plan***

Hiawatha's Forest Plan was approved on October 24, 1986 and was appealed shortly after approval. The areas of concern addressed in the Statement of Agreement between the Hiawatha and the two appellants were implemented in Amendment 5.

When the Forest Plan was developed, the public helped identify significant issues, and concerns for managing the Hiawatha. From that effort, six management problems formed the foundation of the Forest Plan. The following summarizes the Plan's major objectives, management problems and how they were addressed.

1. ***Restricted Motorized Use Areas:*** The availability of non-motorized experiences within a natural setting, is a recreational opportunity offered on the Hiawatha. This recreation problem involved conflicts between motorized and non-motorized uses on the Forest.

The Plan established Management Areas (MA) 5.1, 6.1, 6.3, 8.1 and 8.3 to provide a semi-primitive non-motorized experience. These areas were selected for their potential to provide a quality experience, closeness to nature, and isolation from human sights and sounds. The Plan also established recreation standards and guidelines for four types of recreation uses: semi-primitive non-motorized; developed recreation; trail development and hunting and fishing.

2. ***Managing Wilderness:*** This problem involved determining what management policies and practices would best preserve wilderness values for Hiawatha's six wilderness areas which were designated in 1987. The wilderness areas included: Big Island Lake, Carp River (Mackinac), Delirium, Horseshoe Bay, Rock River Canyon, and Round Island.

The Plan resolved this problem by placing the Wilderness Areas in MA 5.1, with direction to address many of the public concerns about wilderness management. In addition, the Plan used an interdisciplinary approach to address concerns specific to individual wildernesses.

3. ***Access To and Use of Riparian Areas.*** This problem dealt with how people get to rivers, streams, inland lakes and the Great Lakes and what they do while there. An analysis indicated that there was more demand than what was available for water-oriented semi-primitive motorized and non-motorized areas, improved inland lake access sites and Great Lakes boating access.

The Plan called for increasing Great Lakes access sites, redistributing inland lakes access sites, eliminating some duplicate accesses, reconstructing substandard accesses and constructing new accesses in some high use lakes. In addition, several inland lakes were to be managed for a semi-primitive and secluded recreational experience and for sensitive species such as loon or bald eagle.

The Plan recognized that many major rivers were in a degraded condition due to 19<sup>th</sup> century logging practices, and addressed environmental restoration issues, improved recreational fishing and developing local tourism.

4. ***Managing Cedar in Forested Wetlands.*** There was concern that cedar regeneration could not be ensured using traditional management practices. Wildlife biologists were concerned that without regeneration of cedar, future deer herds may lack thermal cover and winter browse. Analysis determined that it was necessary to manage the northern white cedar type to maintain cedar ecosystems and associated wildlife species.

The Plan extended the age when cedar would be harvested to allow short-lived species that competed with cedar to die out of the stands. The Plan also allowed limited harvest (40 acres/year) to evaluate, research and to test management practices that could result in successful cedar regeneration.

5. ***Vegetation Management for Timber, Wildlife Habitat and Other Uses.*** Vegetation management is a complex, comprehensive problem that impacts many areas of the Hiawatha, including timber products and wildlife habitat management. Vegetative management also includes managing the Hiawatha so visitors enjoy the beauty of the Forest while participating in a variety of recreational activities.

The Plan provided a desirable mixture of species and level of harvested wood products, while maintaining or enhancing desired visual conditions and wildlife habitats. This mixture consisted of various vegetative composition objectives, rotation ages, harvest and other noncommercial vegetative treatment methods and reforestation practices. Standards were developed to guide management practices so that desired timber products, wildlife habitats, and recreational settings were provided.

**Specific areas regarding vegetation management for timber, wildlife habitat and other uses that were addressed in the Forest Plan are:**

- ◆ ***Identifying special management areas.*** Areas of the Forest that were unusual, or unique because of their history, landform, flora or fauna, were identified as special management areas. The areas consisted of research natural areas, candidate research natural areas, wilderness areas, special stands of trees, wildlife areas, national historic register sites, an experimental forest, wild and scenic rivers and unique areas of wetlands.
- ◆ ***Setting timber harvest levels for the first two decades of the Forest Plan.*** The first decade of timber harvest was established at 700 million board feet (mmbf) and 930 mmbf for decade two.
- ◆ ***Assigning visual quality objectives (VQO) standards and guidelines.*** Public comments encouraged more emphasis on scenic beauty, so VQOs were assigned to the Forest. VQO Standards and guidelines were based on user sensitivity and the natural variety of the Forest landscape.

- ♦ ***Addressing needs of the Great Lakes Coastal Zone.*** Public comments suggested that because of the unique features of the coastal zones, these areas should have special management. The areas were mapped as visually sensitive areas and are protected by standards and guidelines.
  - ♦ ***Responding to wildlife concerns.*** Public comment supported managing habitats for both game and non-game species and providing habitats to protect threatened or endangered species.
6. ***Implications for Resource Users From Conditions of Major Public Use Roads.*** Access and mobility within the Forest was hindered by the condition of existing arterial and collector roads. Although the network was essentially in place, a number of roads were rough, narrow, structurally inadequate, expensive to maintain, and contributed sediment to wetlands and streams. This resulted in high user costs and safety concerns.

The Plan included guidance for reconstructing the arterial/collector road network. Numerous road construction projects were planned and most have been completed as funding permitted. Many projects were completed in cooperation with county road commissions. Road density standards and guidelines reflected the goals of each management area.

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## V. Planning criteria for developing the Revised Plan

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As directed by the National Forest Management Act (NFMA) (36 CFR 219.12[c]), the U.S. Forest Service has identified criteria to guide the planning process. Under NFMA guidelines, criteria must be included that achieve the objectives of maximizing net public benefits (the overall long-term value of positive effects less negative effects). These criteria may be derived from a variety of sources including:

- ♦ Laws, executive orders, regulations, and agency policy as set forth in the Forest Service Manual;
- ♦ Goals and objectives in the Resource Planning Act Program;
- ♦ Recommendations and assumptions developed from public issues, management concerns, and resource use and development opportunities;
- ♦ Plans and programs of other federal agencies, along with those of state and local governments;
- ♦ Ecological, technical, and economic factors;
- ♦ Resource integration management requirements (36 CFR 219.13 thru 219.27).

The U.S. Forest Service has identified and will use the following criteria to develop the proposal for revising National Forest Plans:

1. ***Role in Providing Public Benefits:*** The revised Forest Plan will describe the Hiawatha National Forest's role in identifying the values and benefits it is best able to provide in the region. It will also identify the Hiawatha's unique role in providing goods, services, and forest uses, and will consider:
  - ♦ The scarcity or abundance of resources, ecological conditions and public uses in the region's forests;
  - ♦ The ability of the Hiawatha to provide these benefits; and
  - ♦ The costs associated with providing them.
2. ***Integrating Program Goals and Protecting Resources:*** The revised Plan will comply with NFMA management requirements (36 CFR 219.13 through 219.26), including requirements for integrating program goals for timber, vegetation management, recreation, fish and wildlife, soil and water, and research natural areas. Additional requirements exist for resource protection, vegetative manipulation, silvicultural practices, riparian areas, soil and water, and biological diversity. (Specific management requirements that must be met when accomplishing goals and objectives are defined in 36 CFR 219.27).
3. ***Conserving Biological Diversity:*** The revised Plan will provide for diversity of plant and animal communities and tree species consistent with the Forest's overall multiple-use objectives. While the legal planning area is the area within the national forest boundary, the landscape includes areas outside the planning area and under other ownership and management. In the planning process, the effects of surrounding land management and use as it relates to the conservation of biological diversity will be considered. The concepts of planning at appropriate landscape scales, considering spatial habitat distribution, and the range of natural variability, will be applied.
4. ***Social Needs:*** The revised Plan will contribute to a range of public needs, expectations, and concerns that maximizes benefits (36 CFR 219.12[c]). Recognizing many paths to achieving ecological sustainability, the revised Plan will integrate public needs, expectations, and concerns about the Hiawatha National Forest into the decisions about maintaining ecosystem health and diversity, and providing for social and economic needs, goods and services.
5. ***Collaborative Stewardship:*** The revised Forest Plan will be the product of collaboration with Tribes, local units of government, public and private organizations, landowners and concerned citizens.
6. ***Consistency Among the Michigan National Forests:*** The revised Forest Plan will strive for consistency among the three Michigan National Forests, to provide for more consistent management and better service to the public.

7. ***Tribal Consultation:*** The Forest Service will continue to work collaboratively through the consultation process as outlined in the Memorandum of Understanding Regarding Tribal – USDA Forest Service relations On National Forest Lands within the Territories Ceded in Treaties of 1836, 1837, and 1842 (Sec.VI.B), in consideration of Executive Orders EO11593 Protection and Enhancement of Cultural Environment; EO13007 Indian Sacred Sites; EO13175 Consultation and Coordination with Indian Tribal Governments.
8. ***Need for Change Proposed Actions:*** Comments received from the public, Tribes, other agencies, and employees were categorized into one or more of the following categories:
  - ◆ **Forest Plan Proposed Changes:** These are Forest Plan proposed changes that are directly related to the six major decisions made in a Forest Plan and there is clear rationale for a warranted change.
  - ◆ **Forest Plan Editorial Changes:** These are Forest Plan changes that are editorial in nature. These changes provide improved understanding of the current Forest Plan, but do not represent a change in the Forest Plan direction, goals, or objectives. The intent is to improve the clarity of the Forest Plan.
  - ◆ **Scientific Research Needed:** These are suggestions or issues that require scientific research in order to evaluate if a change is needed.
  - ◆ **Implementation Item:** These are suggestions that are not changes related to Forest Plan decisions, but the way the Forest Plan is being implemented. These suggestions are better addressed through Forest Plan implementation, project-level analysis, or at the administrative level.
  - ◆ **Outside Mission or Authority of Forest Service:** These are suggestions for change that are beyond the authority or outside the mission of the Forest Service.

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## VI. The Proposal for Revising the Forest Plan

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Hiawatha's revised Forest Plan will be a living document and will be crafted so we can quickly respond to the changing needs of the Forest and our citizens. Since our goal is to complete the Forest Plan revision by 2006, only the most urgent "need for change" topics are included. As part of the revision process, we will revise, add, or remove standards and guidelines, appendices and table objectives.

After reviewing resource assessments, evaluations, and public comments, an interdisciplinary team (IDT) of Hiawatha National Forest employees determined that much of the information and direction in the 1986 Forest Plan is still appropriate. The changes to the Forest Plan that the IDT judged to be the most crucial to managing the Hiawatha National Forest were presented to the Forest Leadership Team (FLT), who reviewed the recommendations and approved the proposed changes.

When developing the proposed changes to the Forest Plan, we used the USDA Forest Service Strategic Plan mission statement, goals and objectives to guide us. Each of these goals has a number of objectives. We will refer to specific objectives in the proposed change items.

**Mission:** *“To sustain the health, diversity and productivity of the nation’s forests and grasslands to meet the needs of present and future generations.”*

**Goals:**

1. **Ecosystem Health:** *“Promote ecosystem health and conservation using a collaborative approach to sustain the Nation’s forests, grasslands and watersheds.”*
2. **Multiple Benefits to People:** *“Provide a variety of uses, values, products and services for present and future generations by managing within the capability of sustainable ecosystems.”*
3. **Scientific and Technical Assistance:** *“Develop and use the best scientific information available to deliver technical and community assistance and to support ecological, economical and social sustainability.”*
4. **Effective Public Service:** *“Ensure the acquisition and use of an appropriate corporate infrastructure to enable the efficient delivery of a variety of uses.”*

## 1. Sustainable Ecosystems Conditions and Uses

The Hiawatha National Forest has diverse ecosystems that provide habitat for numerous plants and animals, serve as a setting for recreational activities and provide a mix of forest products. Since the Forest Plan was implemented, new information on the ecological function and capability of the forest landscape has been developed. In addition, the Hiawatha has completed mapping of ecological units using updated criteria and information.

In the Forest Plan Revision, this new ecological information will be used to:

- ◆ Determine the most effective mix of tree species, their sizes and locations;
- ◆ Determine whether the mix will provide for species viability, habitat for game species, recreation, and forest products;
- ◆ Determine the best location to manage for old growth characteristics;
- ◆ Determine what lands are suitable for timber harvest.

This new information helped us determine the proposed change topics that will be addressed during the revision process.

***Strategic Plan Reference:***

**Goal 1 – Ecosystems Health:** *“Promote ecosystem health and conservation using a collaborative approach to sustain the Nation’s forests, grasslands, and watersheds.”*

**Objective 1.b:** *“Provide ecological conditions to sustain viable populations for native and desired non-native species to achieve objectives for Management Indicator Species (MIS)/focal species.”*

**Objective 1.c:** *“Increase the amount of forests and grasslands restored to or maintained in a healthy condition with reduced risk and damage from fires, insects and diseases, and invasive species.”*

**Goal 2 – Multiple Benefits to People:** *“Provide a variety of uses, values, products, and services for present and future generations by managing within the capability of sustainable ecosystems.”*

**Objective 2.c:** *“Improve the capability of the Nation’s forests and grasslands to provide desired sustainable levels of uses, values, products, and serves.”*

## **A. Vegetation Management**

**Current Situation:** The Forest Plan vegetation goals and objectives were developed to manage these resources and to provide guidance for timber harvests and managing species and age classes.

Some of the vegetation composition and structure goals have not been met. This is due to numerous factors, including changed market demand, natural events (such as insect and disease infestations, wind events and fire), and the discovery of new rare plant and animal species. Species most affected were jack pine and the aspen group.

Jack pine harvest exceeded the amount proposed in the Plan. This was attributed to salvaging over mature jack pine stands following budworm outbreaks, fires, fuels reduction and managing for federally threatened Kirtland's warbler. In addition, market demand for jack pine increased more than the Plan predicted, especially in the Eastern Upper Peninsula. Over time, this may result in a different age class structure than predicted.

The vegetation goals in the Forest Plan provided for a mix of the aspen group in various age classes across the Hiawatha to provide ruffed grouse, deer, and other wildlife species habitats. Management Area 1.1 and 1.2 objectives emphasizes aspen management, and other management areas incorporated an aspen component. Since 1986, the volume of aspen sold from the Hiawatha has been declining, resulting in the Forest selling less than 70 percent of planned aspen acres. The Plan’s goal was to maintain 76,320 in the aspen group. Based on current data, the Hiawatha has approximately 89,600 aspen acres in the suited land base, however

approximately 23,000 acres in later age classes may be lost to longer-living forest types.

To maintain an even flow of jack pine and aspen in the future, adjustments may need to be made in our current mix of species and acres of harvest.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change.

“Manage based on ecological principals instead of ASQ or outdated management techniques”

“Consider the decline in aspen Forest communities”

“Consider converting jack pine and aspen to mixed species”

“Focus red pine management on existing plantations”

“Emphasize ecosystem management rather than harvesting timber”

“Continue clearcutting as a means of regenerating aspen”

“Address management concerns of early successional wildlife species”

**Rationale for Change:** Evaluation of Forest Plan monitoring, new information on species habitat needs and forest ecosystems, and public comments, created a need to re-evaluate the Plan’s vegetation composition and age class objectives.

- ◆ Disease, insect infestations and fires have resulted in higher than projected harvests of jack pine and lower than projected harvests of other species such as aspen.
- ◆ The discovery of the Kirtland’s warbler on the Hiawatha, requires new approaches to jack pine management to protect this federally endangered species.
- ◆ Aspen has deteriorated faster than Plan projections, and is succeeding to other forest types. There is a need to determine if the Hiawatha can maintain projected aspen goals.
- ◆ Forest vegetation structure and composition goals must be reviewed to account for habitat needs of threatened, endangered and sensitive species.
- ◆ New research and information about forest ecosystem dynamics and species habitats must be incorporated to provide ecological conditions for plant and animal species.
- ◆ There is a need to maintain permanent or temporary openings to provide ecological conditions for species that are dependent on open habitat.
- ◆ Some management areas contain a majority of lands in the unsuited land base. Vegetation goals for these areas may not be achievable because of the large amount of land classified as unsuited. There is a need to review the vegetation goals for these areas.

**Proposed Change:** The Hiawatha will review and make necessary changes to the vegetation objectives to incorporate species viability needs and biological diversity requirements, as well as meet public demands for timber products and recreational uses. Changes may affect forest-wide and management area vegetation composition objectives for forest cover types and age classes.

Improved information about forest ecosystems will be used to better align management prescriptions where ecosystem capabilities favor their applications. This may result in changes to the number of acres managed for uneven-aged and even-aged forest conditions, species composition, and age class distribution. This will improve the direction for managing short- and long-lived tree species and the amount of permanent forest openings by identifying ecological characteristics that best fits their management. In addition, the amount and location of early successional species, including aspen and jack pine will be adjusted as necessary to support the conservation of federally threatened and endangered and Regional Forester's sensitive species (RFSS), as well as provide habitat for game and other species.

**Proposed Vegetation Management Goals and Objectives:**

**Goal 1:** Provide a healthy, sustainable forest that has vegetation composition and structure that meets the needs for plant and animal species habitats and provides timber products.

**Objective 1:** Develop timber management strategies that will create a healthy forest by reducing the incidence of disease, insect infestation and fires and will provide sustainable products and uses.

**B. Threatened, Endangered, Proposed, Sensitive and Management Indicator Species**

**Current Situation:** Congress passed the Endangered Species Act in 1973 to identify and protect animals and plants that are in imminent danger of extinction or could be become endangered in the near future. In addition, the Eastern Region (R9) Regional Forester has also developed a list of sensitive plants and animals. National Forests are required to provide ecological conditions for rare species located within their boundaries. Many new species have been added to the lists since the Forest Plan was approved. The Hiawatha Forest Plan includes lists of threatened and endangered and RFSS which are outdated and have not been amended.

The Hiawatha National Forest has many identified threatened, endangered or sensitive plant and animal species. These species require an array of ecological conditions ranging from savanna conditions for sharp-tailed grouse, specific size and density of jack pine for Kirtland's warbler to dense late seral forested conditions for rare plant species. The Plan

provides for a mix of vegetative desired conditions to provide for ecological conditions for rare species.

The Canada lynx was listed as a Federal threatened species in 2000. As part of the Fish and Wildlife Service agreement, the Hiawatha, along with other national forests, is implementing the Lynx Conservation Strategy, until the Plan is revised. Current Forest Plan direction provides desired conditions, goals, objectives for lynx habitat, however there is little management direction specific to Canada lynx. The Hiawatha started the process to amend the plan in 2001, but decided to defer the amendment and address lynx as part of the revision process.

The Forest Plan designated 22 management indicator species (MIS) and 8 species of concern. Monitoring MIS species, assesses the effects of management activities on the habitats those species occupy. Species of Special Concern are species whose viability was in question at the time the Plan was written. The Hiawatha evaluated a number of rare plants and animals in the spring of 2003 to determine if the current and projected ecological conditions would provide the mix of habitats to support viability of these species. The viability analysis was done based on the current Plan direction.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change.

“Consider management for lynx and cougar”

“Expand wildlife management to include non-game species”

“Provide an emphasis on developing forest and stand structure that provides a high degree of species diversity and sustainability”

“Assess populations of threatened & endangered and at-risk species (botanical, avian, amphibian & reptilian)”

“Consider using work being done by the U.S. Fish & Wildlife Service (USFWS) on the effects of deer herbivory on vegetation and wildlife species”

“Continue to maintain acreage that is currently benefiting all open-land species”

**Rationale for Change:**

- ◆ There have been changes to both the Federal threatened and endangered species and Regional Forester’s Sensitive Species lists since the Forest Plan was written. There is a need to evaluate viability of these species in relationship to the Plan’s goals and objectives.
- ◆ There is new science regarding conservation of rare species.
- ◆ The Forest Plan provided direction for managing wildlife and fish, but had little guidance for rare plants.
- ◆ Species lists and conservation measures in the Forest Plan are outdated. Species lists are dynamic and are based on new information

and should be incorporated by reference. This will allow the Hiawatha to quickly address these changes without the need to complete Forest Plan amendments.

- ◆ The Canada Lynx Conservation Strategy provides national direction for the conservation of the Canada lynx. Forest Plan direction provides desired conditions, goals, objectives for lynx habitat, however there is no management direction specific to lynx. There is a need to revise the Plan to provide direction for Canada lynx based on ecological conditions on the Hiawatha.
- ◆ New information and new science necessitates review of MIS species.
- ◆ The Forest Service Planning Rule requires that national forests preserve and enhance the diversity of plant and animal species to the extent possible.
- ◆ Species viability evaluation indicated that changes in goals, objectives, standards and guidelines may improve ecological conditions for rare species.

**Proposed Change:**

1. Revise desired future conditions, goals, objectives and standards and guidelines to address rare species. Analyze forest vegetation objectives as they relate to species viability.
2. Remove outdated Federal Threatened and Endangered Species list and Regional Forester Sensitive Species lists and incorporate by reference.
3. Evaluate and change Management Indicator Species, as necessary, based on monitoring and new information.
4. Assess current and projected Canada lynx habitat to determine the amount and distribution of suitable habitat. Develop standards and guidelines that incorporate the Canada Lynx Conservation Strategy when appropriate.

**Proposed Endangered, Threatened and Sensitive Species Goals and Objectives:**

**Goal 1:** Provide for landscapes, habitats and/or conservation measures that maintain or improve ecological conditions for and facilitate the recovery of federally threatened and endangered species and Regional Forester Sensitive Species (RFSS).

**Objective 1:** Develop conservation strategies that include a landscape level approach for resources that may impact species habitat such as vegetation management at the landscape level and aquatic and riparian conditions at the watershed scale. Develop site level management strategies for species with definite locations and/or specific limited habitats.

**Objective 2:** Maintain, protect or improve ecological conditions for all threatened, endangered and sensitive species by emphasizing and working toward the objectives of Federal recovery plans, conservation strategies, and Forest Plan management direction.

**Objective 3:** Eliminate, reduce or lessen adverse effects on threatened, endangered and sensitive species from management activities on National Forest System land.

**Objective 4:** Provide structure, composition, connectivity, function and spatial patterns of aquatic and terrestrial habitats that maintain or restore opportunities for species to interact, disperse and migrate. Consider temporal needs, a variety of landscape scales and biological communities and physical environments.

**Objective 5:** Contribute to the conservation and recovery of Federally-listed threatened and endangered species and the habitats that these species depend on.

## C. Land Suitability

**Current Situation:** The Plan classifies all Hiawatha lands as suited for timber production or one of several categories of lands not suited for timber production. Examples of unsuited lands are those withdrawn such as wilderness, lands not physically suited for timber harvest, non-forested lands and water, and lands not needed for timber production.

Current Forest data identifies approximately 386,600 acres as unsuited and approximately 510,200 acres as suited. The lands identified as suited for timber production include upland hardwood forests, lowland swamp conifer forest, and the drier outwash plains that support jack, red and white pine, and approximately 58,000 acres designated as old growth. The majority of the lands classified as unsuited for timber production are lowland swamp conifers, wetlands and marshes with significant acreage in Congressionally-designated areas or special management areas.

When the Plan was developed, analysis assumed a significant amount of jack pine in the unsuited land base. This was a result of low timber value on the east side of the Forest and high regeneration costs. Since 1986, there has been an increase in the value of jack pine and improved regeneration success at lower unit cost. Approximately 17 percent of the jack pine on the Forest is classified as unsuited.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change. Comments include:

- “Re-evaluate land suitable/unsuitable for timber management”
- “Place more emphasis on managing timber
- “Discontinue all timber harvest”
- “Revise the Plan to include current scientific thinking”
- “Emphasize ecosystem management rather than harvesting timber”

**Rationale for Change:** There is a need to review Hiawatha’s lands that are allocated as suited for timber production. National Forest Management Act (NFMA) requires that all lands within the National Forest System be reviewed for timber suitability during Forest Plan revision.

New ecological classification information has been developed which has improved our ability to determine lands suited for timber production. In addition, we have better scientific information of ecosystem capability of the different land units since the Forest Plan was developed. This provides an opportunity to better align management of Forest resources with changing forest landscape ecosystem capabilities.

**Proposed Change:** The Hiawatha will review and change, as necessary, lands identified as suited and not suited for timber production, incorporating new information on ecosystems sustainability and capability. The analysis will reflect new and updated ecological classifications information that will improve suitability determination. As a result, the number of acres of lands suited and not suited for resource use and timber production may change.

## D. Old Growth

**Current Situation:** The Forest Plan defines old growth stands as trees that are older than normal rotation age. Because of extensive logging and devastating fires at the turn of the 19<sup>th</sup> century, the Hiawatha has very little old growth forest. The Plan directed developing an old growth system comprised of lands suited and unsuited for timber production. It set a minimum of 51,988 suited acres to be designated as old growth with additional unsuited lands complementing the designated old growth. The Plan also set minimum requirements for old growth acreage by management area and species.

An old growth team, with public involvement, developed an interdisciplinary plan (prototype) to inventory and identify any existing and potential old growth stands. The team also developed a new definition of old growth for the Forest. Although the Hiawatha has been managed based on the team’s recommendations, the recommendations have never been formally adopted in the Forest Plan.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change.

Comments include:

- “Provide large and more contiguous old-growth forests”
- “Address the risks of establishing or increasing old growth”
- “Remove old growth designations from the revised Forest Plan”
- “Consider the incorporation of all native Forest types into old growth designations”
- “Develop goals or standards & guidelines to guide the landscape design and connectivity of the old growth system”
- “Utilize current set-aside areas for old growth and don’t increase the acreage designated as old growth”
- “Consider a percentage of young forest habitats comparable to old growth areas”

**Rationale for Change:**

- ◆ In addition to providing needed habitat for a variety of plants and wildlife, old growth forests are highly valued by many citizens who would like these forests to be identified and protected for future generations.
- ◆ The definition in the Forest Plan does not reflect the desired condition for old growth on the Forest. The Hiawatha needs to adopt the definition developed by the old growth interdisciplinary team.
- ◆ New scientific information suggests that larger blocks of old growth may be preferred to smaller, scattered stands. The larger stands would provide greater connectivity to better meet species viability needs. Additionally, current science suggests using an ecological function approach when designating old growth areas rather than by simply designating portions of each management area for old growth. By using an ecological function approach, it would better address the needs of species viability.
- ◆ Lands classified as suited for timber production implies that timber harvest will occur because the land is available to contribute the Forest’s timber volume goals. Because of the time that it will take for these stands to attain old growth characteristics, the Hiawatha proposes that designated old growth should be set aside from timber production, and be classified as unsuited for timber production.

**Proposed Change:**

1. Review old growth system design, focusing on ecological function.
2. Designate core old growth areas to include: wilderness, research natural areas, semi-primitive non-motorized areas (Management Areas 6.1, 6.3) and Grand Island National Recreation Area.
3. Maintain current Plan minimum of 51,988 areas of designated old growth, in addition to core areas; reclassify designated old growth stands from suited to unsuited for timber production.
4. Develop desired future conditions, goals, objectives and standards and guidelines for old growth.
5. Eliminate the objective of minimum percentage of old growth by management area and species; allocate old growth on a forest-wide basis.

**Proposed Desired Future Condition:** Old growth forests are ecosystems where natural biological processes predominate and are characterized by older larger trees, native species, low road and trail densities, and minimal human disturbance. Old growth structural diversity includes multi-layered canopies, canopy gaps, tip-up mounds, and an accumulation of dead woody material. Old growth tracts vary from small isolated forested areas to larger landscape complexes that may include ecologically important non-forested openings, younger patches produced by natural disturbances, wetlands and water bodies.

**Proposed Goal:** Develop an old growth system comprised of late successional ecosystems characterized by older, larger trees, native species, and structural diversity.

**Proposed Objectives:**

1. Identify and map a system of varying size, existing and potential old growth to function as late successional communities at both the local and landscape levels.
2. Ensure designated old growth is representative of the Forest ecosystem and includes a mix of forest types in the later seral condition and from a variety of land types.
3. Manage designated old growth stands for old growth characteristics. Evaluate the need to replace old growth stands that are affected by catastrophic natural disturbances such as fire, blowdowns, etc.

## E. Management Areas

**Current Situation:** The Hiawatha's Forest Plan has 26 different management areas that range from Congressionally-designated wilderness and wild and scenic river areas, to areas that emphasize managing habitats for wildlife and timber products. Each management area has a defined purpose, desired condition, prescriptions and standards and guidelines.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change. Comments include:

“Revise management area boundaries using ecological classifications”

“Do not artificially divide waterways by management areas”

“Consider matching management area boundaries to Land Type Association (LTA) outlines”

“Review vegetative composition guidelines by management area”

“Review current land use designations and management areas to determine if the area is still being managed as intended”

**Rationale for Change:** National direction supports developing Forest Plans that are more strategic, programmatic, outcome-based, and easier to understand. Because of changing conditions, new and revised national direction, policies and initiatives and new scientific information, there is a need to have Forest Plans that are more flexible and adaptable.

The Hiawatha has recently updated and mapped its ecological land types (ELT). This information improves the Forest's ability to implement ecosystem management. The use of ELTs provides an opportunity to better define the inherent ecosystem capabilities and limitations that change across the forest landscape.

In order to move toward this national direction, there is a need to modify management goals and objectives so management is better aligned with the ecological capability of the land and multiple use objectives.

**Proposed Change:** The Hiawatha will review and change Forest management areas to incorporate ecological land types, new information on ecosystems, sustainability and capabilities concepts and other pertinent resource information.

## F. Research Natural Areas

**Current Situation:** Research Natural Areas are examples of important forest, shrubland, grassland, alpine, aquatic and geologic types that have special or unique characteristics of scientific interest and importance to complete the national network of RNAs. Potential research natural areas (RNAs) were identified during development of the Forest Plan in 1986. Currently there are 3 designated RNAs and 18 candidate RNAs (cRNAs) on the Hiawatha. Standards and guidelines for management area 8.1 provide for management and protection of both the candidate and designated RNAs.

**Representative Comments on Need for Change:** “Complete the process of determining Research Natural Areas on the Forest.”

**Rationale for Change:** In light of new ecological information (ecological landtype mapping), there is a need to review the existing candidate RNAs.

**Proposed Action:** The Hiawatha will review the current pool of candidate research natural areas based on new ecological information.

## G. Timber Output

**Current Situation:** The Forest Plan’s projected timber output was based on an analysis of land suitability, management areas and vegetation goals.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change.

“Re-evaluate land suitable/unsuitable for timber management”

“Implement a quality red pine management program”

“Place more emphasis on managing the timber”

“Consider the other importance of food trees when marking them for cutting”

“Discontinue burning red pine plantations to control hardwoods”

“Re-evaluate current vegetative composition objectives for hemlock and oak”

**Rationale for Change:** The National Forest Management Act requires that projected timber outputs be reviewed and evaluated during Forest Plan revision. Hiawatha’s projected timber harvest may change in response to changes in land suitability, management prescriptions and vegetation goals. Changes to lands identified as suited for timber production and vegetation objectives, may effect timber volumes.

**Proposed Change:** The Hiawatha proposes to adjust, as necessary, the Plan’s timber projections based on changes to land suitability, vegetation goals, management prescriptions and management areas.

**Proposed Goal:**

1. Maintain the health, productivity and diversity of the Hiawatha National Forest.

**Proposed Objectives:**

1. Maintain a diversity of forest age classes and successional stages sufficient to support all native and desired non-native species.
2. Maintain the total areas of forested lands and areas available for timber production to sustain domestic wood production and game production.
3. Reduce the risk of ecologically destructive wildland fires and mortality from insects and disease infestations in forest and wetlands ecosystems.

## 2. Watershed Health, Riparian Areas, Aquatic Ecosystems and Soils

***Strategic Plan Reference:***

**Goal 1 – Ecosystem Health:** *“Promote ecosystem health and conservation using a collaborative approach to sustain the Nation’s forests, grasslands, and watersheds.”*

**Objective 1.a:** *“Improve and protect watershed conditions to provide the water quality and quantity and soil productivity necessary to support ecological functions and intended beneficial water uses.”*

### A. Watershed, Riparian and Aquatic Health

**Current Situation:** Approximately 46 percent of the Hiawatha is designated as wetlands. The Forest has approximately 1,850 miles of streams and 28,700 acres of lakes, and ponds. Many of these were impacted as a result of 19<sup>th</sup> century logging practices.

The goals addressed in the Forest Plan correlate with the Federal Clean Water Act of 1977. The Act’s objective is to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters.” The Forest Plan identified many standards that were designed to protect and enhance riparian area resources and habitats. Riparian standards were incorporated in a variety of resource areas including recreation, watershed, wildlife and fisheries and fire management.

Forest-wide desired conditions and goals for watershed management were not identified in the Forest Plan, but may be derived from objectives for several ecological components of watersheds including soils, coastal zones and riparian areas. The objectives identify protection and enhancement as the overriding Forest goals for water resources. Elements of riparian and aquatic habitat structure and character are not well-defined in the Forest Plan, but are important to achieving Forest goals in fisheries management and enhancing water quality.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change.

“Consider a study on the value of Forest wetlands and its role in water flow”

“Re-evaluate water quality standards”

“Incorporate provisions for young forest habitat in riparian management”

“Consider a study of the carrying capacity of shoreline areas”

“Consider greater protection from illegal use on shores of streams and lakes”

**Rationale for Change:** The Forest Service Strategic Plan emphasizes watershed protection and improvement of watersheds. Although the Forest Plan does provide some direction for watersheds, riparian areas, and aquatic ecosystems, there are no clear forest-wide desired conditions, goals or objectives. As such, it is difficult to determine if the Forest is moving toward the national goal of improving and protecting watershed health. The Plan lacks criteria against which to measure.

Monitoring and evaluation reports have identified concerns with stream temperatures, soils compaction in riparian areas, changes to hydrologic processes, lack of large woody debris and sedimentation. New science since the Plan was approved also needs to be incorporated. The Michigan Best Management Practices need to be incorporated by reference.

**Proposed Changes:**

1. Develop desired future conditions, goals, objectives, standards and guidelines for watershed, riparian and aquatic resources.
2. Incorporate by reference State of Michigan Water Quality Management Practices on Forest Land (BMPs).
3. Establish watershed, riparian and aquatic monitoring protocols and standards.

**Proposed Watershed Desired Future Conditions:**

- ◆ Watersheds are maintained or restored in a way that allows for the conservation of native species. Watershed and habitat restoration projects are natural appearing, favoring the use of native materials or naturalized species.
- ◆ Watersheds provide an appropriate quantity, quality, and timing of water flow.
- ◆ Road and trail crossings minimally impact watersheds. The number of road crossings over streams and wetlands is minimized. Crossings are stable with vegetated roadsides and provide unaltered floodplain and wetland function, unimpeded flow, sediment transport and fish passage. Movement of fine-grained sediment into streams is minimized.

**Proposed Riparian Desired Future Conditions:**

- ◆ Riparian areas serve as landscape connectors and display intact structure, function and composition. Riparian areas consist of a diversity of habitats that support native and desired non-native wildlife and plant species appropriate to site soil and hydrologic characteristics.
- ◆ The terrestrial component of riparian areas consists of large, long-lived, tall trees providing shade, detritus, woody debris, shoreline and stream bank stability, and overhead cover. Where suitable to the site, a multi-layered forest canopy is present. Super canopy trees provide nest sites for riparian associated species. Desirable species, particularly adjacent to lakes and wide rivers, include white pine, red pine, hemlock, northern white cedar, and to a lesser extent white spruce, red oak, sugar maple, and red maple.
- ◆ Plants are present at a variety of ages and sizes and at densities adequate to provide bank stability. Openings in riparian area vegetation are minimized as the result of road crossings, trails, campsites, water access, or other recreational uses.
- ◆ Some of the mature and decadent trees from riparian ecosystems have fallen into lakes, streams, and wetlands, providing bank stability and habitat complexity. Other mature and decadent trees are retained in the riparian ecosystem, providing habitat for amphibians and other species and a reservoir of large wood to supply aquatic and wetland systems.
- ◆ The diversity and abundance of wetlands are maintained or restored over time. Natural hydrological regimes are maintained. Wetlands provide beneficial values, such as storm and floodwater storage; storage and transmission of surface or groundwater; filtration of sediments, nutrients or toxic substances; shoreline protection against erosion; and habitat for plants, aquatic organisms, and wildlife.

- ◆ National Forest ownership of shoreline on lakes and streams is maintained or increased over time.
- ◆ Floodplains will have little or no new facility development. Existing facilities will be removed, if necessary. Floodplains are able to store and transmit floodwaters, fulfill their natural role in regulating water quality, and present minimum risk to human safety and property.
- ◆ The physical integrity and hydrologic connectivity of pool depressions in seasonal ponds is maintained to assure seasonal retention of water.

**Proposed Aquatic Ecosystem Desired Future Conditions:**

- ◆ High quality aquatic habitat supports diverse and productive biological communities in streams and lakes. Water quality, stream flow, and channel stability do not limit aquatic biota or recreational uses. Water quality in lakes, streams, and wetlands meets or exceeds State water quality requirements and water temperatures, sediment, nutrients, and dissolved oxygen are within their normal ranges for the stream reach or lake type. Management activities do not reduce existing quality of surface or groundwater, or impair designated uses.
- ◆ Streams are maintained or restored to provide for natural functions and processes such as the transport of water and sediments within the normal ranges for the watershed. Stream channels are relatively stable over time and provide suitable habitat for aquatic biota. Stream flows are sufficient to maintain channel integrity and transport water and sediment without changing channel pattern, dimension, and profile. Sensitive stream types are protected and improved. Management activities protect or promote quality of habitats that occur in the riffle areas of streams, improving stable channel characteristics.
- ◆ Most cold and cool water trout streams are in a free-flowing condition which provides suitable habitat for those communities. In general, fish passage occurs at all road and trail stream crossings and impoundments.
- ◆ Where coarse substrates (gravel, cobble, boulder) occur in streams, they are free of accelerated sedimentation and provide spawning substrates for simple fish and habitat for a wide range of macro invertebrates.
- ◆ Large woody debris (LWD) occurs in lakes and streams in amounts that are within the normal range for the ecological capability of the area. The LWD provides habitat for fish, invertebrates, reptiles and amphibians, and helps to maintain and restore ecological structure and function in aquatic ecosystems.

- ◆ Hydrologic connectivity of aquatic ecosystems and wetlands is maintained or restored to assure passage of water, sediment, nutrients, wood, invertebrates, and fish; and to facilitate freshwater mussel dispersal. The number of impoundments is minimized. Waters affected by dams are managed as much as practical to mimic natural lake levels and seasonal flows. Stream flows and lake levels on waters not affected by dams are suitable to protect habitat and maintain natural hydrologic processes.
- ◆ Water-related recreational, subsistence and commercial uses are within aquatic ecosystem's capability.
- ◆ The diversity and abundance of native and desired non-native aquatic flora and fauna are maintained or restored in most streams and lakes in a manner that is consistent with the ecological capability of the water body. Lake sturgeon is restored to suitable habitat.
- ◆ Exotic species are not spreading or adversely affecting native flora and fauna in lakes and streams.
- ◆ Macro-invertebrates are represented in the approximate proportion expected for high quality waters. Fish habitats are in good to excellent condition and are distributed and connected to allow stable populations of fish, reptiles, and amphibians to exist within their natural ranges. Natural reproduction of fish is not limited by habitat condition.
- ◆ Where ecologically feasible, most streams and lakes produce fishable populations to provide fishing opportunities. Habitat management and access are coordinated with MDNR harvest regulations to maintain healthy fish populations and aquatic communities. The Forest will provide for a variety of recreational fishing opportunities in terms of fish species, harvest, access, and remoteness.

### **Proposed Aquatic Ecosystem Goals:**

**Goal 1:** Protect and improve watersheds to provide sustained water quality and quantity for intended beneficial uses, and conditions necessary to support proper ecological function of streams, lakes, riparian areas and wetlands.

**Goal 2:** Promote and maintain healthy watersheds that:

1. Meet the needs of current and future generations and are resilient to natural and human disturbances.
2. Provide for Federal, State, tribal, and local beneficial uses.
3. Provide for unique plant and animal communities, special habitat features, habitat linkages, and wildlife corridors.

**Proposed Aquatic Ecosystem Objectives:**

**Objective 1:** Discourage the spread undesirable non-native species.

**Objective 2:** Relocate or obliterate unnecessary roads and trails that lie within riparian areas. Where relocation or obliteration is not feasible, reconstruct road and trail segments as needed to minimize erosion, sedimentation and hydrologic impacts.

**Objective 3:** Improve road and trail crossings of streams and wetlands to improve flow, sediment transport, and/or passage of fish. Minimize the numbers of road and trail stream crossings where feasible and practicable and strive to reduce OHV use in wetlands and riparian areas.

**Objective 4:** Maintain water to quality standards identified by the State of Michigan.

**Objective 5:** Restore or enhance riparian and in-channel conditions.

**Objective 6:** Manage habitat to conserve viable populations of native and desired non-native fish species in lakes and streams.

**Objective 7:** Restore or enhance conditions for warm water fish communities.

**Objective 9:** Cooperate with the Michigan Department of Natural Resources and U.S. Fish and Wildlife Service to achieve desired fish populations in lakes and streams, including restoration of lake sturgeon and coaster brook trout within their habitat.

**Objective 10:** Cooperate with the Michigan DNR to manage beaver abundance and distribution in a manner that sustains important wetland ecosystems but minimizes adverse effects on high quality coldwater fish habitat, rare species and road and trail stream crossings.

**B. Soil Resources**

**Current Situation:** The Forest Plan provides soil resource standards for general forest lands as well as costal zones. These standards are based on the land type associations developed in the 1980s. The Plan identified several concerns such as compaction, erosion and productivity.

The Plan established mitigation measures or standards to address these concerns, but did not identify thresholds. Lacking threshold values, monitoring was limited to visual observations with few quantifiable measurements. The Plan also relied heavily on using frozen soil or snow depth to negate impacts to the soils where trafficability was a concern.

Most soils on the Hiawatha have recovered from the 19<sup>th</sup> Century logging and subsequent slash fire era that oxidized much of the soil. Key areas that were assessed are:

- ◆ **Erosion:** Soil erosion and loss of organic matter is substantially less than it was when the land first came into Forest Service ownership. Soil erosion is held in check by applying Forest Plan standards and the State of Michigan Best Management Practices.
- ◆ **Affects on the Land:** Off-highway vehicle (OHV) use is affecting soil through erosion and puddling on wet organic soils. Operating logging equipment on sandy soils, trafficability, rutting and compaction continue to be of concern. Old railroad grades and road fills are impeding shallow groundwater flow at a number of sites.
- ◆ **Monitoring:** Monitoring has occurred on the Forest; however monitoring of soil resource goals is limited due to the lack of measurable numeric limits that define impairments to the soils.

**Representative Comments on Need for Change:** Some of the comments we received have further encouraged our decision to propose this change.

“Incorporate the Region 9 Soil Standards and Guidelines into the revised Forest Plan”

“Incorporate findings of the Long Term Soil Productivity Study into the revised Plan”

**Rationale for Change:**

- ◆ Public comment on projects included all aspects of soil productivity.
- ◆ There is a lack of soil quality monitoring standards to determine if soil productivity and function are being maintained.
- ◆ New regional soil quality standards have been developed since the Forest Plan was written.
- ◆ Changes in logging systems have lead to changes in soil resource impacts. There is a need to understand the extent of the impacts and to possibly develop new standards to protect soils.
- ◆ There is new direction to use ecological unit inventory (EUI) for monitoring and analysis.
- ◆ There is a need to understand if increased OHV use, noxious weeds, and exotic species are affecting the soil resource.
- ◆ The Forest needs to incorporate new ecological information as it relates to soils standards and guidelines.

**Proposed Change:**

1. Develop desired future conditions, goals, objectives and standards and guidelines to insure that soil productivity and function is maintained.
2. Revise existing soil standards that tied to 1986 land type associations.
3. Establish soil monitoring protocol and standards.

**Proposed Desired Future Condition:** Soils that recover from natural disturbance events and absorb the effects of human disturbances. Soils contribute to ecological sustainability. Soil–hydrologic function and productivity is protected, preserving the ability to serve as a filter for good water cycling. Permanent soil exposure is minimized. There is minimal compaction, displacement, and puddling. Severely burned conditions resulting from management-ignited fires occur infrequently.

**Proposed Goals:**

1. Provide physical, chemical and biological soil processes and functions on the Forest to maintain and/or improve soil productivity.

**Proposed Objective 1:** Protect and restore areas where soils are adversely impaired and contributing to an overall decline in watershed condition, soil productivity, soil quality and soil function.

**Proposed Objective 2:** Rehabilitate areas where undesirable soil compaction has occurred.

### 3. Recreation

***Strategic Plan Reference:***

**Goal 2 – Multiple Benefits to People:** *“Provide a variety of uses, values, products and services for present and future generations by managing within the capability of sustainable ecosystems.”*

**Objective 2.a:** *“Improve the capability of the Nation’s forests and grasslands to provide diverse, high-quality outdoor recreation opportunities.”*

#### A. Recreation Access

**Current Situation:** Since development of the Forest Plan, recreation use and Forest access demands have changed. The Forest has seen an increase in the type of recreation use such as off highway vehicles (OHVs), personal watercraft (PWC), mountain bikes and snowmobiles not envisioned when the Plan was written.

Motorized and non-motorized recreation use and conflicts have substantially increased on the Forest. The Plan has not been updated to reflect this use.

In response to increasing demands, several Upper Peninsula counties have opened up county-maintained roads to OHV use, which has increased access to Hiawatha's lands. Hiawatha's policy is forest trails are closed unless designated open. Level 2 system roads (vertical signs) are open unless designated closed and Level 3,4,5 roads (horizontal) are closed unless designated open. Cross country OHV travel is prohibited.

There continues to be a demand for access to and use of Great Lakes and inland lakes by people with a variety of recreational pursuits. Forest Plan Appendix F addresses changes over the first decade in the number and development level of lake access. Not all of the proposed changes have been implemented. There has also been an increase in user-developed accesses. The Forest Plan proposed changes were developed considering motorized vs. non-motorized use, effects to fish populations and effects to sensitive species that rely on aquatic and riparian habitats.

**Representative Comments on Need for Change:** The comments we received reflected the variety of opinions and confirmed that managing recreation access to provide for a variety of activities was very important.

“Do not attempt to make all areas of the Forest accessible”

“Continue to provide safe access to the Forest for a variety of motorized recreational uses”

“Assess impacts of increased dispersed camping”

“Continue to maintain and construct more remote camping areas”

“Recognize the growing number of horseback riders”

“Consider expanding fishing opportunities”

“Consider managing to meet the needs of hunters and trappers”

“Consider more areas for single-track motorized use”

“Increase snowmobile and OHV trails”

“Reduce or minimize access to the Forest by all motorized vehicles”

“Consider more resources to control ORVs in Wilderness Areas and areas of high biological sensitivity”

“Construct more hiking/biking trails”

**Rationale for Change:** There is a need to develop a common vision for recreation access. There continues to be issues and concerns with the types and amount of access to the Great Lakes and inland lakes on the Forest. Maintenance of boat accesses due to fluctuating lake levels, maintenance backlog, and resource damage from users, are all factors that affect the need for change.

Conflicts between motorized and non-motorized recreation access have increased, especially with the substantial increase in snowmobile, off-highway vehicle, horse, and mountain bike use that the Forest has experienced. Many public comments have expressed the need for more of the forest road system to be available to OHV use and provide loop and connecting routes. Mountain bikes and personal watercraft were not considered when the Plan was developed, so there is limited direction for the management and access needs for these uses. Conflicts between personal watercraft users and recreationists seeking non-motorized settings and facilities have also increased.

Recreation use and expanding access can affect the viability of rare and sensitive plant and animal species.

**Proposed Action:** Develop forest-wide desired future condition statements, goals, objectives, standards and guidelines for recreation access and to add/clarify desired future condition statements, standards and guidelines for management area direction regarding recreation access. This will include Forest Plan direction for:

- ◆ Motorized and non-motorized trail access that provides opportunities for future loops and connected trails;
- ◆ The quantity and development level for inland lake and Great Lakes boat accesses;
- ◆ Providing access to both motorized and non-motorized recreation settings on inland lakes;

**Proposed Forest-wide Desired Future Condition:** Provide a diversity of recreational uses in a variety of recreation opportunities and settings, while minimizing user conflicts.

Hikers, bicyclists, cross country skiers, mushers, horseback riders, and other non-motorized enthusiasts will have a variety of looped trails that are connected with recreation facilities such as campgrounds and day use areas. Trails will be located in a variety of settings – from roaded natural to semi-primitive non-motorized.

There will be a range of motorized and non-motorized inland lake accesses. Some access sites will accommodate large fishing boats and personal watercraft, while others will provide for carry-in access only. Boaters and anglers will also be able to access the Great Lakes at a number of improved back-in boat launches. Non-motorized watercraft will have access to lakes, rivers, and streams that afford a variety of skill and challenge levels, and seasonally fluctuating water levels.

Campers, hunters, anglers, berry pickers, fire wood gatherers, and people driving for pleasure will have access to the Forest via a road system comprised of paved and graveled county and Forest Service roads, and low standard native soil, woods roads. Some roads and trails will be closed to provide non-motorized recreation opportunities.

Off-highway vehicle (OHV) enthusiasts will have access to the Forest for hunting, fishing and driving for pleasure (touring). A combination of designated trails, rights-of-ways and Forest roads will provide this access. Cross-country travel is prohibited.

Snowmobilers will have a choice of groomed and ungroomed trail riding. Cross-country travel by snowmobiles is not permitted.

Trail or route construction and maintenance will be responsive to user demands and designed to minimize user conflicts and damage to natural resources.

**Proposed Goal 1:** Provide a variety of access sites and related recreation opportunities on Forest lakes, rivers and on the Great Lakes within ecosystem capabilities.

**Proposed Objective 1:** Establish desired development levels (launching, parking, non-motorized/motorized access, and camping facilities) that protect the resources on lakes and rivers within resource capabilities.

**Proposed Goal 2:** Provide a safe and cost-effective road and trail system that provides a variety of recreation experiences.

**Proposed Objective 1:** Identify areas where motorized use is compatible with resource objectives and provide information on routes.

**Proposed Objective 2:** Coordinate with adjacent public land/road management agencies to provide complementing OHV policies and routes.

**Proposed Objective 3:** Identify OHV routes that emphasize loop riding opportunities and connecting trails.

**Proposed Objective 4:** Identify opportunities to achieve dispersal of users on high use trails, relieve trail congestion during peak seasons, and promote safety among users.

**Proposed Objective 5:** Provide a trail system that responds to changing social needs, and that creates loops and connections to recreation facilities.

**Proposed Objective 6:** Trail construction and reconstruction will provide for multiple uses and minimize social conflicts and damage to natural resources.

## **B. Recreation Opportunity Spectrum (ROS):**

**Current Situation:** Forest Plan Amendment 5 (which resolved the appeal of the 1986 Forest Plan) allocated the areas of Delia's Run, Boot Lake and Buck Bay Creek to a "semi-primitive non-motorized (SPNM) recreation opportunity spectrum (ROS)." These areas are in Management Areas 2.1 and 2.2, and were allocated to a "roaded natural" ROS prior to the amendment.

These areas do not meet the desired future condition for management of the SPNM setting. There is historic pattern, and significant, continued motorized use (OHVs) throughout the Delia's Run/Boot Lake areas. Additionally, there is a large sand borrow pit within the area.

The North Country National Scenic Trail traverses through the Buck Bay area, although it receives minimal use. Forest Road 2276 (maintenance level 3 road, and designated snowmobile route in the winter) bisects the area creating an exception to the management of the area for SPNM.

**Representative Comments on Need for Change:** The comments we received regarding the allocation and distribution of recreation settings (through the recreation opportunity spectrum) include:

"Continue to provide safe access to the Forest for a variety of motorized recreational uses"

"Assess roads open in Semi-primitive Non-Motorized areas"

"Do not attempt to make all areas of the Forest accessible"

"Review current land use designations and Management Areas to determine if the area is still being managed as intended"

**Rationale for Change:** The Delia's Run, Boot Lake and Buck Bay Creek areas in the Forest Plan do not meet the desired future condition for management as SPNM recreation setting.

The Delia's Run/Boot Lake areas are bounded by a paved State highway on the east (M-94) and a snowmobile/OHV trail on the west. It has the highest number of 2-track and long-term roads and road density of all the SPNM areas on the Forest. Moving these areas toward non-motorized use have not been successful. This area is not consistent with SPNM features and settings.

The Buck Bay Creek area is bisected by Forest Road 2276 (maintenance level 3 road and designated snowmobile trail during the winter). State Highway 94 defines the area's southern boundary, and has snowmobile activity during the winter on the eastern and western portions. This area does not provide features that support the recreation values that will draw people to the area and encourage a high quality SPNM recreation experience. The area is surrounded by recreation settings featuring a roaded natural experience.

**Proposed Action:** The Hiawatha proposes changing the recreation opportunity spectrum classification for these areas from semi-primitive non-motorized to semi-primitive motorized.

### **C. RARE II Areas/Roadless Inventory & Wilderness Evaluation:**

**Current Situation:** The Hiawatha has six wilderness areas (Big Island Lake, Carp River (Mackinac), Delirium, Horseshoe Bay, Rock River Canyon, and Round Island) and two second roadless area review and evaluation (RARE II) areas. The RARE II areas are Fibre (7,834 acres) and Government Island (214 acres).

During the planning effort of the 1980s, these areas were not recommended for wilderness designation. Government Island was allocated as Management Area 6.3 and emphasizes wildlife habitat, semi-primitive non-motorized recreation and no timber harvest. and Fibre was allocated as Management Area 6.4 and emphasizes wetland wildlife habitat, semi-primitive motorized recreation and timber management. Limited timber harvesting occurred in the Fibre area in the late 1980s. Government Island has not had any timber harvesting but receives considerable recreation use.

**Representative Comments on Need for Change:** Some of the comments we received pertaining to wilderness:

“Add more wilderness”

“Consider the “bank” of undiscovered and unexamined species in wilderness areas”

“Stop harvesting timber adjacent to or near wilderness or special areas”

“Consider a small percentage of edge around wilderness areas”

**Rationale for Change:** The Hiawatha conducted an initial roadless inventory and found no areas except Fibre that qualified as roadless.

**Proposed Change:** Based on our initial inventory and assessment, only Fibre will be further evaluated for Wilderness study.

## 4. Wild and Scenic Rivers Management Plans

### *Strategic Plan Reference:*

**Goal 1 – Ecosystem Health:** *“Promote ecosystem health and conservation using a collaborative approach to sustain the Nation’s forests, grasslands, and watersheds.”*

**Objective 1.a:** *“Improve and protect watershed conditions to provide the water quality and quantity and soil productivity necessary to support ecological functions and intended beneficial water uses.”*

**Objective 1.b:** *“Provide ecological conditions to sustain viable populations for native and desired non-native species to achieve objectives for Management Indicator Species (MIS)/focal species.”*

**Goal 2 – Multiple Benefits to People:** *“Provide a variety of uses, values, products and services for present and future generations by managing within the capability of sustainable ecosystems.”*

**Objective 2.b:** *“Improve the capability of wilderness and protected areas to sustain a desired range of benefits and values.”*

**Current Situation:** The Forest Plan identified the Indian, Carp, Whitefish, Sturgeon, and East Branch Tahquamenon Rivers as “study rivers” for evaluation of their potential for inclusion in the National Wild and Scenic Rivers System. The Plan established management practices within management area (MA) 8.4 to protect the “outstandingly remarkable values and free-flowing condition” of the rivers. MA 8.4 direction also prescribed direction that would “not preclude management of the rivers to their maximum potential under the Wild and Scenic River System.”

The Michigan Scenic Rivers Act of 1991 (P.L. 102-249), was passed by Congress in March 1992, designating certain segments of these rivers as National Wild and Scenic Rivers. The Act requires the development of river management plans and final river corridor boundaries for these rivers, and integration of the management plans and boundaries into the Forest Plan. The Hiawatha National Forest has previously developed and incorporated river management plans into the Forest Plan for the Indian and Carp National Wild and Scenic Rivers.

**Representative Comments on Need for Change:** The Forest received comments that requested: “Designate more wild and scenic rivers.”

**Rationale for Change:** To comply with the mandates of the Wild and Scenic Rivers Act (P.L. 90-542, as amended) the Forest will develop river specific management plan direction and final river corridor boundaries for the Whitefish, Sturgeon, and East Branch Tahquamenon Wild and Scenic Rivers. MA 8.4 direction prescribes the standards and guidelines for managing study river segments. Portions of this direction need to be changed to reflect new information and understandings in river protection and management on the Forest.

**Proposed Change:** The proposed action is to develop: river-specific desired future condition statements, standards and guidelines, and determine river corridor carrying capacities for the Whitefish, Sturgeon and East Branch Tahquamenon Wild and Scenic Rivers; establish final river corridor boundaries and descriptions for these same rivers; and change the standards and guidelines for MA 8.4 to incorporate new information and understandings in river protection and management. The Whitefish River will be designated as MA 8.4.3; the Sturgeon River MA 8.4.4 and the East Branch Tahquamenon River as 8.4.5.

### **Outstandingly Remarkable Values – Whitefish River:**

The Wild and Scenic Rivers Act requires the maintenance of the free-flowing character and protection of the outstandingly remarkable values (ORVs or river values) of the river. Outstandingly remarkable values are directly related to the river and which are rare, unique, and/or exemplary on a regional or national basis.

The Outstandingly Remarkable Values for the Whitefish River are:

- Wildlife
- Heritage
- Scenic
- Fisheries
- Recreation.

This narrative tiers to the “Resource Assessment-Whitefish River” (June 1997), that defines the criteria and findings for the outstandingly remarkable values for the River. A summary of these values follows.

**Wildlife:** Quality wildlife habitat and species diversity are prominent features of the Whitefish River corridor. The corridor provides habitat for several federally and state-listed TES species, including: bald eagle, osprey and timber wolf and has the capability to support regionally unique and important species such as red-shouldered hawk, moose, and pine marten. A winter deer yard occupies a substantial portion of the corridor providing quality habitat for regionally important game species such as deer and black bear, as well as a variety of other game and non-game species.

***Heritage:*** The Whitefish River corridor has sustained inhabitants and use throughout history. The Many prehistoric and historic cultural sites within the river corridor illustrate the intimate and ever changing relationship between humans and the environment in which they live. While the corridor sustains both historic and prehistoric sites, it is the historic features' abundance and unique qualities that qualify as outstandingly remarkable. The abundant resources found within the corridor drew early Native Americans to the area. Post-European settlement brought fur trading and lumbering activity to the region. Remnants of logging camps, cabins, sawmills and dams, built to facilitate the running of logs down the river can be found all along the river corridor. A Civilian Conservation Corps (CCC) work camp, established to reforest the harvested lands can also be found in the corridor. Pioneer farms followed close on the heels of lumbering and helped provision the lumber camps.

***Scenic:*** The Whitefish River offers an outstanding range of diverse vistas. From the narrow, heavily wooded headwaters of the East Branch, to the flat open expanse near the mouth, views include prominent escarpments forested with hardwoods, open, broad expanses of sedge meadows, and marshes. The mixture of coniferous and deciduous forest types are especially noticeable and scenic during the fall season, but can be similarly evident during the spring and summer.

***Fisheries:*** The Whitefish River provides, or has the potential to provide, exceptional, high-quality habitat for a diverse range of fish species. The river supports both resident and anadromous fish populations, supplemented by hatchery reared stock. A coldwater fishery is found in the upper reaches of the river, while the lower mainstem hosts resident warmwater species. The outstandingly remarkable qualities include one of the largest runs of steelhead in the region and a significant run of wild chinook salmon, along with one of the best fisheries for smallmouth bass, northern pike and walleye found on any river in the Hiawatha National Forest. The river has potential for reestablishment of lake sturgeon spawning runs.

***Recreation:*** The Whitefish River corridor offers recreation users a broad variety of opportunities in a natural, undeveloped setting. The most popular activities include fishing, hunting, and boating. Secondary activities consist of camping, hiking, snowmobiling, dog sledding and riding for pleasure.

Recreational canoeing conditions are best in April, May and June as well as in September and October when there is sufficient flow to navigate through the numerous shallow riffles and areas of exposed limestone bedrock. Whitewater boating opportunities can be exceptional during the spring, when flow is augmented with runoff from snowmelt.

Several trails in the corridor offer opportunities for hiking, horseback riding, snowshoeing and dog sledding and snowmobiling.

Specific reaches, individual rapids and pools, and specific high-quality tributaries provide good to excellent fishing.

## Outstandingly Remarkable Values – Sturgeon River:

The Wild and Scenic Rivers Act requires the maintenance of the free-flowing character and protection of the outstandingly remarkable values (river values) of the river. Outstandingly remarkable values are directly related to the river and which are rare, unique, and/or exemplary on a regional or national basis.

The Outstandingly Remarkable Values for the Sturgeon River are:

- Wildlife
- Heritage
- Ecological/Botanical
- Hydrological.

This narrative tiers to the “Sturgeon River National Wild and Scenic River Resource Assessment” (January 1999), which identifies the criteria and findings for the outstandingly remarkable values. A summary of these values follows.

**Wildlife:** Species diversity and quality wildlife habitat are prominent features of the Sturgeon River corridor. The various habitats located within the corridor support or have the potential to support several federal and state listed TES species, and also several Regional Forester Sensitive Species. The Sturgeon River corridor also provides quality habitat for regionally important game species such as deer and black bear, as well as a variety of other game and non-game species.

The Sturgeon River provides a large contiguous corridor of wildlife habitat with limited human disturbance. Although the habitats and their wildlife can mostly be found elsewhere in the UP, their presence in combination with the relatively large area of contiguous habitat and minimal habitat intrusion, combined with breeding populations of federal and state TES species, supports the finding of Outstandingly Remarkable.

**Heritage:** The many prehistoric and historic cultural sites within the river corridor illustrate the intimate and ever changing relationship between humans and the environment in which they live. Prehistoric site locations reflect the changing shorelines as modern day Lake Michigan reached its current level. Abundant resources, such as the yearly spawning run of Sturgeon up the river and suitable stone materials for making tools, drew early Native Americans to this area. The Sturgeon River was used extensively in the past by Native Americans. Vast pine forests attracted early loggers to the region and as technologies changed, hardwood forests were harvested. Remnants of logging camps, sawmills, dams built to facilitate the running of logs down the river and abandoned railroad grades can be found all along the river corridor. Civilian Conservation Corps (CCC) work camps, established to reforest the harvested lands can also be found in the corridor. Railroad and road systems that paralleled the river concentrated heritage sites within the river corridor.

**Ecological/Botanical:** The Sturgeon River corridor supports an excellent example of a Southern Floodplain forest, which contains a suite of plant species not typically found together in the UP, but characteristic of a more southern climate. This forest cover type is typically found in small patches and is present due to the mild microclimate of the river. Along with the northern location of this plant community, it is the combination of plant species at this location that make it unique. A candidate Research Natural Area (cRNA) has been established along the river corridor south of US Highway 2.

**Hydrological Values:** The large number of oxbows south of US Hwy. 2, and the historically rapid rate of channel change and oxbow formation in this area provide an exemplary illustration of bank erosion, sediment deposition, and river channel dynamics. The highly dynamic floodplain supports the southern floodplain community which usually occurs in highly meandered portions of the river valley, and is likely maintained by the frequent disturbance associated with channel changes.

## **Outstandingly Remarkable Values – East Branch Tahquamenon River:**

The Wild and Scenic Rivers Act requires the maintenance of the free-flowing character and protection of the outstandingly remarkable values of the river. Outstandingly remarkable values are directly related to the river and which are rare, unique, and/or exemplary on a regional or national basis.

The Outstandingly Remarkable Values for the East Branch of the Tahquamenon are:

- Hydrology
- Fisheries.

This narrative tiers to the “Resource Assessment-East Branch Tahquamenon River” (Sept. 2002) which defines the criteria and findings for the outstandingly remarkable values for the River. A summary of these values follows.

**Hydrological:** The combination of water temperature, pH, hydrogeologic source and productivity of the stream constitute the outstandingly remarkable hydrologic resource. The Tahquamenon’s stream flow originates from wetlands in the headwaters of the Betchler Marsh area and flows 14.3 miles to the HNF boundary. Strongly gaining streams with cold temperature regimes the size of the East Branch of the Tahquamenon, are rare on the HNF. The river gains stream flow strongly from its headwaters to the HNF boundary. Groundwater inflows constitute the major source of streamflow and significantly influence water temperature. Inflows that occur from limestone or dolomite bedrock within the river and tributaries, result in slightly to moderately alkaline water, resulting in increased productivity of aquatic species.

***Fisheries:*** The East Branch of the Tahquamenon River provides, or has the potential to provide exceptional, high-quality habitat for wild brook trout. The river supports a regionally significant high quality native brook trout fishery, unique to the Hiawatha and the eastern UP. The river is a popular recreational fishery, and attracts anglers from around the region. However, trout distribution and abundance is limited due to beaver activity in some portions of the system.

### **Desired Future Condition – Whitefish River:**

The Desired Future Condition (DFC) statement describes a future vision of the Whitefish River corridor. The DFC was developed using Forest Plan direction, issues identified during the Forest Plan revision public involvement process, the Whitefish River Resource Assessment (January 1999) and by analyzing the river corridor landscape. For ease of review, this section is divided into resource categories; however, many of these resources are interdependent.

Collaboration between the Forest Service and local, state, and federal agencies may be required to achieve some elements found in the DFC.

As required by the Wild and Scenic Rivers Act, all management activities within the Wild and Scenic River corridor will protect, or enhance the outstandingly remarkable values (river values) identified for the river corridor.

***Ecological:*** Natural disturbance patterns (windthrow, insects and disease, erosion, fire), or management which mimic natural disturbance, are based on the landscape context in which the vegetational community is found. Late successional communities with long-lived species are dominant, but include areas of early successional communities, with short-lived species, as an integral part of the corridor landscape. Non-native invasive species are absent or present at very low levels.

Populations of game species are at levels which balance ecological and recreational needs. The river is recognized as an important producer of resident trout in its upper reaches and warm water species downstream. The river also hosts one of the better runs of wild steelhead and chinook salmon on the Forest. Steelhead reproduction is occasionally supplemented by stocking hatchery reared fish. Several rare, threatened or sensitive species such as bald eagle, pine martin, wolf, moose (infrequently) osprey, or wood turtle find quality habitat within the corridor. The river corridor serves as a linkage between areas outside the corridor.

Water quality in the Whitefish River is an important component of the riparian and aquatic ecosystem, and also important for supporting the ORVs. In general, water quality meets or exceeds the standards set by the Michigan Water Resources Commission. Healthy aquatic invertebrate populations, spawning areas and pools and habitat diversity to support all components of the aquatic ecosystem are present. Large woody debris, though not common, provides channel stability, structure and habitat complexity that enhances aquatic and riparian habitats. A

healthy and diverse riparian plant community maintains stable river banks, and provides thermal cover to the riparian system. Biotic and aquatic habitats are suitable for sustaining Lake Whitefish runs.

The Whitefish River is in a state of dynamic equilibrium with minor amounts of natural erosion and deposition occurring at the local scale. Natural changes in the stream channel occur, resulting in eroding streambanks which provide habitat for those species dependant on such disturbance, and keep the energy of the river in balance with its gradient and channel morphology. Bank stabilization and other aquatic habitat management allow natural river processes to continue and are designed to blend with the natural landscape.

***Social:*** The river provides for a social setting where individuals and groups experience the sights and sounds of nature. Traditional use by local residents such as hunting, fishing, trapping boating and canoeing, picking berries and mushrooms, and recreating with family and friends exists in the river corridor.

Opportunities exist in the Whitefish River corridor for the recreationist. Dispersed camping, canoeing, fishing, hunting, hiking and snowmobiling are important activities in the river corridor.

***Economic:*** Activities associated with the Whitefish River (e.g. driving for pleasure, hunting and fishing) provide for minor contributions to the local economy. Visitors to the area help support small family run retail stores and resorts. These retail businesses supply gas, food, fish and hunting licenses, lodging, etc. Local residents benefit through subsistence gathering of incidental forest products such as mushrooms, berries, boughs and firewood. Limited timber harvest, designed to protect or enhance the outstanding river values, provides a minor benefit to the economy.

***Recreation:*** Visitors to the Whitefish River enjoy a variety of recreational experiences in natural appearing settings. Recreation activities, management practices, access, use levels, and development are consistent with the identified Recreation Opportunity Spectrum (ROS) classification.

Subtle on-site visitor management controls and regulations help protect the recreation facilities and sensitive areas from excessive use and degradation and minimize visitor conflicts. Recreational activities are directed away from areas of known sensitive plants and animals to minimize disruptions to their life cycles or habitat. Certain activities such as watercraft use, camping and commercial uses may be limited or controlled.

Facilities in the corridor are limited to those necessary for protecting river values while providing a degree of comfort and convenience for visitors at access points. All facilities appear rustic and are designed to compliment the natural setting. Privately owned facilities and resorts outside of the corridor may provide a much wider range of amenities and a more developed recreation experience.

Dispersed camping opportunities exist within the river corridor. Dispersed sites, with some sites accessible by water or trail, provide visitors with a more primitive, isolated camping experience. Dispersed campsites maintain ground vegetation and site characteristics which do not increase sedimentation, erosion, or negatively affect the outstanding river values.

Fishing within the Whitefish River corridor is a popular recreational activity. Much of the upper reaches of the river offer a good, self-sustaining and hatchery supplemented fishery for trout, with a quality warm water fishery in the lower section. Steelhead and salmon provide good seasonal fisheries throughout the river. Conflicts between anglers and other recreationists are minimal. The Forest Service and Michigan Department of Natural Resources cooperatively manage the fishery resource and habitat of the Whitefish River in accordance with existing policy and agreements.

Canoeing and kayaking are important boating activities on the Whitefish River. Recreational opportunities are significant during the spring months, with flows augmented by runoff. The Whitefish River provides challenges for canoeists of moderate to advanced levels. Motorized boating is primarily confined to the recreational segment of the river. The Whitefish provides opportunities for multi-day canoe/camping trips, dependant on water levels.

Other recreational activities such as hunting and trapping, sightseeing, picnicking, bicycling, hiking, OHV use, and watching wildlife, and socializing are commonly enjoyed by visitors on the Whitefish River. In the winter, visitors enjoy Nordic skiing, and snowshoeing, while snowmobilers pass through the corridor on designated trails, or unplowed Forest roads that are not designated closed.

Commercial outfitting and guiding is regulated through issuance of special use permits. Outfitter/guide activities provide a public service and are such that the desired social setting is maintained or enhanced, as well as protection of the outstandingly remarkable values.

***Access/Transportation System:*** County, state and Forest Service system roads and bridges are maintained to protect river resource values and allow safe passage to river access points, camping areas, and private lands. Travel routes in the corridor not necessary to the above needs or resource management may be closed and restored. The effects of sediment entering the river at bridge and culvert approaches are minimized.

Key access points are located within the corridor and are developed to a level commensurate with the ROS and resource protection. The Bay de Noc-Grand Island Trail is a popular non-motorized trail which passes through the corridor. Existing trails are maintained and new trails are designed to minimize resource impacts, avoid user conflicts, and protect and enhance the outstanding river values.

**Scenic Quality:** The Whitefish River is known for its outstanding and diverse riverine scenery. Visitors may experience evidence of human development; however the natural appearing characteristics of the landscape dominate.

**Heritage Resources:** Heritage and prehistoric sites within the Whitefish River corridor are protected from degradation and impacts caused by recreational or management activities. On site interpretation is minimal, with interpretation being accomplished through river guidebooks, brochures and Forest Recreational Opportunity Guides (ROGs).

Traditional sites used by Native Americana on federal and ceded lands are managed consistent with Forest policy. Treaty rights are protected. The Forest Service and the Tribes work cooperatively to assure that the outstandingly remarkable values of the river are protected.

The Whitefish River retains a high level of cultural significance for local residents. Individuals, groups, and communities maintain traditions and strong ties to the river and its setting.

**Private Property:** Private property rights are maintained. Information is provided to private landowners, upon request, to assist them in management or to better protect the river's values.

Private holdings that adversely affect (or potentially affect) the river values may be acquired on a willing seller, willing buyer basis.

National Forest lands are consolidated as opportunities arise. Zoning by local units of government is supportive and complimentary to river protection and management, while allowing for a range of traditional uses on private lands within the river corridor.

### **Desired Future Condition – Sturgeon River:**

The Desired Future Condition (DFC) statement describes a future vision of the Sturgeon River corridor. The DFC was developed using Forest Plan direction, issues identified during the Forest Plan revision public involvement process, the Sturgeon River Resource Assessment (January 1999) and by analyzing the river corridor landscape. For ease of review, this section is divided into resource categories; however, many of these resources are interdependent.

Collaboration among the Forest Service and local, state, and federal agencies may be required to achieve some elements found in the DFC.

As required by the Wild and Scenic Rivers Act, all management activities within the Wild and Scenic River corridor will protect, or enhance the outstandingly remarkable values (river values) identified for the river corridor.

**Ecological:** Natural disturbance patterns (windthrow, insects and disease, fire, erosion), or management which mimic natural disturbances, are based on the landscape context in which the vegetational community is found. Late successional communities with long-lived species are dominant, but include areas of early successional communities, with short-lived species as an integral part of the corridor landscape. Non-native invasive plants are absent or present at very low levels.

Populations of game species are at levels that balance ecological and recreational needs. The river is recognized as an important producer of resident trout, and also hosts an annual run of steelhead trout and salmon. Several rare, threatened or sensitive species such as bald eagle, pine martin, wolf, osprey, or wood turtle find quality habitat within the corridor. The river supports large runs of lake sturgeon. The river corridor serves as a linkage between areas outside the corridor.

Water quality in the Sturgeon River is an important component of the riparian ecosystem. In general, water quality meets or exceeds the standards set by the Michigan Water Resources Commission. The Sturgeon River provides quality habitat for anadromous salmonids and resident trout populations that are maintained through natural reproduction and stocking. The amount of sand transported by the river is in equilibrium with the ability of the stream to move it. Healthy aquatic invertebrate populations, spawning areas and pools and habitat diversity to support all components of the aquatic ecosystem are present. Large woody debris is common in the river providing channel stability, structure and habitat complexity that enhances aquatic and riparian habitats. A healthy and diverse riparian plant community maintains stable river banks, and provides thermal cover to the riparian system.

The Sturgeon River is in a state of dynamic equilibrium with continuing natural erosional and depositional processes at the local scale. Natural changes in the stream channel occur, resulting in eroding streambanks which provide habitat for those species dependant on such disturbance, and keep the energy of the river in balance with its gradient and channel morphology. Bank stabilization and other aquatic habitat management allow natural river processes to continue and are designed to blend with the natural landscape.

**Social:** Traditional use by local residents such as hunting, fishing, trapping, canoeing, driving for pleasure, and recreating with family and friends exists in the river corridor.

Numerous recreation opportunities exist in the Sturgeon River corridor. Camping, fishing, hunting, canoeing, and snowmobiling are important activities. Dispersed, non-motorized recreation opportunities can be found primarily in the scenic segment, and more developed, motorized recreation activities tend to be concentrated in the “recreation” segment below Fourteenmile Bridge.

**Economic:** Activities associated with the Sturgeon River (e.g. camping, driving for pleasure, fishing, hunting and other recreational opportunities) provide minor contributions to the local economy. Visitors to the area help support small family run retail stores and resorts. These retail businesses supply gas, food, game and fishing licenses, lodging, etc. Local residents benefit through subsistence gathering of incidental forest products such as firewood, mushrooms and berries. Limited timber harvest, designed to protect or enhance the outstanding river values, provides a minor benefit to the economy.

**Recreation:** Visitors to the Sturgeon River enjoy a variety of recreational experiences in natural appearing settings. Recreation activities, management practices, access, use levels, and development are consistent with the identified Recreation Opportunity Spectrum (ROS).

Subtle on-site visitor management controls and regulations help protect the recreation facilities and sensitive areas from excessive use and degradation and minimize visitor conflicts. Recreational activities are directed away from areas of known sensitive plants and animals to minimize disruptions to their life cycles or habitat. Certain activities such as camping and commercial uses may be limited or controlled.

Due to lesser channel obstruction and more river access between the 14 Mile Bridge and Flowing Well, the likelihood of encounters with other users is higher than in other sections of the river.

Facilities in the corridor are limited to those necessary for protecting river values while providing a degree of comfort and convenience for visitors at access points. All facilities appear rustic, and are designed to compliment the natural setting. Privately owned facilities and resorts outside of the corridor may provide a much wider range of amenities and a more developed recreation experience.

The Flowing Well Campground and dispersed sites located elsewhere along the river provide opportunities for overnight camping within the river corridor. The Flowing Well Campground may have amenities (such as running water, toilet buildings, hardened paths, etc.) designed to provide for sanitation and protection of the river resources. Dispersed sites, with some sites accessible only by water or trail, provide visitors with a more primitive, isolated camping experience. Dispersed campsites maintain ground vegetation and site characteristics which do not increase sedimentation, erosion, or negatively affect the river values.

Fishing within the Sturgeon River corridor is a popular recreational activity. Much of the river offers a quality, self-sustaining fishery for anadromous salmonids and resident trout. Conflicts between anglers and other recreationists are minimal. The Forest Service and Michigan Department of Natural Resources cooperatively manage the fishery resource and habitat of the Sturgeon River in accordance with existing policy and agreements.

Canoeing on the Sturgeon River occurs but is infrequent. Canoeing is only practicable during high water conditions, which occur early in the spring and possibly in the fall, following significant rain events. During all times of the year, logjams are present in almost all sections of the river. Numerous logjams require considerable effort to canoe, due to the number of liftovers and portages. The frequent logjams combined with very limited access require that paddlers be highly skilled and self-reliant. In return, they can experience a fairly remote and primitive setting.

Other recreational activities such as hunting, fishing and trapping, sightseeing, picnicking, bicycling, hiking, off-highway vehicle use, watching wildlife and socializing are commonly enjoyed by visitors on the Sturgeon River. In the winter, snowmobilers pass through the corridor on designated trails or unplowed Forest roads. Dog sledders also use the many Forest roads and trails.

Commercial outfitting and guiding is regulated through issuance of special use permits. Outfitter/guide activities are such that the desired social setting is maintained or enhanced, as well as protection of other river resources.

***Access/Transportation System:*** County, State and Forest Service system roads and bridges are maintained to protect river resource values and allow safe passage to river access points, camping areas, and private lands. Travel routes in the corridor that are not necessary to the above needs or resource management may be closed and restored. The effects of sediment entering the river at bridge and culvert approaches are minimized.

Key access points are located throughout the corridor and are developed to a level commensurate with use.

The Nahma Grade and Big Bay de Noc snowmobile trails pass through the corridor. Existing trails are maintained and new trails are designed to minimize resource impacts, avoid user conflicts, and protect and enhance the outstanding river values.

***Scenic Quality:*** Viewsheds along the Sturgeon River are very confined due to the heavy streambank vegetation. Consequently, the natural appearing characteristics of the landscape dominate. Visitors experience minimal evidence of human development in the scenic segment and slightly more human development and modification of the landscape in the “recreation” segment. Visitors continue to see some eroded streambanks as the natural erosion process continues. Stabilized streambanks are revegetated and blend in with the surrounding landscape.

***Heritage Resources:*** Heritage and prehistoric sites within the Sturgeon River corridor are protected from degradation and impacts caused by recreational or management activities. On-site interpretation occurs, with additional interpretation being accomplished through river guidebooks, maps and brochures, and Forest Recreational Opportunity Guides (ROGs).

Traditional sites used by Native Americana on federal and ceded lands are managed consistent with Forest policy. Treaty rights are maintained. The Forest Service and the Tribes work cooperatively to assure that the outstandingly remarkable values of the river are protected.

The Sturgeon River retains a high level of cultural significance for local residents. Individuals, groups, and communities maintain traditions and strong ties to the river and its setting.

***Private Property:*** Private property rights are recognized and respected. Information is provided to private landowners, upon request, to assist them in management of their lands to better protect the river's values.

Private holdings that adversely affect (or potentially affect) the river values may be acquired on a willing seller, willing buyer basis.

National Forest lands are consolidated as opportunities arise. Zoning by local units of government is supportive and complimentary to river protection and management, while allowing for a range of traditional uses on private lands within the river corridor.

### **Desired Future Condition – East Branch Tahquamenon River:**

The Desired Future Condition (DFC) statement describes a future vision of the East Branch Tahquamenon River corridor. The DFC was developed using current Forest Plan direction, issues identified during public involvement efforts, and by analyzing the corridor landscape. For ease of review this section is divided into resource categories, however, many of these resources are interdependent.

Collaboration between the Forest Service and local, State, and Federal agencies may be required to achieve some elements found in the DFC.

As required by the Wild and Scenic River Act, all management activities within the Wild and Scenic River corridor will protect, maintain, or enhance the fisheries and hydrologic outstandingly remarkable values (river values) and the free-flowing condition of the river.

***Ecological:*** Natural disturbance patterns (windthrow, insects and disease, erosion, fire), or management which mimic natural disturbances, are based on the landscape context in which the vegetational community is found. Late successional communities with long-lived species such as cedar, mixed swamp conifer, and mixed swamp hardwood are dominant along the river, but include areas of early successional communities, with short-lived species such as tamarack, aspen, and balsam fir as an integral part of the corridor landscape. Beyond the floodplain and outside the banks of the river, communities of hardwoods, softwoods, and mixed swamp conifer species may be found. Non-native invasive plants are absent or present at low levels.

Populations of terrestrial game species are at levels that balance ecological and recreational needs. The river corridor provides habitat for species such as timber wolf, white-tailed deer, bobcat, sandhill cranes, and black bear. The river corridor provides seclusion habitat and serves as a linkage to areas outside the corridor. Beaver activities are to a minimum, in order to maintain water temperatures needed for the outstandingly remarkable fisheries resource.

Water quality meets or exceeds the standards set by the Michigan Water Resources Commission. Water temperature, pH, hydro-geological source, and productivity of the East Branch Tahquamenon River are important components of the aquatic ecosystem. Healthy aquatic invertebrate populations, spawning areas, pools, and habitat diversity to support all components of the aquatic ecosystem are present. Large woody debris is common in the river providing channel stability, structure, and habitat complexity that enhances aquatic and riparian habitats. A healthy and diverse riparian plant community maintains stable river banks and provides thermal cover to the riparian system.

The East Branch Tahquamenon is in a state of dynamic equilibrium with continuing natural erosional and depositional processes at the local scale.

Aquatic habitat management allows natural river processes to continue and is designed to blend with the natural landscape. Riparian management is designed to maintain chemical and physical water characteristics in support of the outstandingly remarkable values.

***Social:*** The river provides for a social setting in which individuals experience relative seclusion on Forest lands. Along the river the sights and sounds of nature dominate; however the sounds from nearby roads and private lands are sometimes audible. Visitors perceive the East Branch Tahquamenon River corridor (outside the private lands) as relatively undeveloped and an area to “get away from it all,” where the sights and sounds of nature dominate.

***Economic:*** Management activities associated with the East Branch Tahquamenon River (e.g. fishing and other recreational opportunities) provide for limited contributions to the local economy. Local residents benefit economically through subsistence gathering and gathering of incidental forest products such as mushrooms, berries, and firewood. Limited timber harvest, designed to protect or enhance the outstanding river values, provides a minor benefit to the economy.

***Recreation:*** Traditional use such as hunting, fishing, and trapping occur in the river corridor and are the primary recreation activities that occur along the river. Snowmobiles in winter months cross through the river corridor and continue on the designated snowmobile route. Visitors to the East Branch Tahquamenon River enjoy a natural appearing setting. Recreation activities, management practices, access, use levels, and development are consistent with the identified classification of the river and the desired Recreation Opportunity Spectrum (ROS) setting.

Subtle on-site visitor management controls and regulations help protect sensitive areas from excessive use and degradation and minimize visitor conflicts.

Facilities in the corridor are limited to those necessary for protecting river values while providing a degree of comfort and convenience for visitors at access points. Facilities appear rustic, and are designed to compliment the natural setting.

Dispersed camp sites may provide visitors with a more primitive, isolated camping experience. Dispersed campsites and angler trails maintain ground vegetation and site characteristics which do not increase sedimentation, erosion, or negatively affect the outstanding river values.

The Forest Service and Michigan Department of Natural Resources cooperatively manage the fishery resource and habitat of the East Branch Tahquamenon River in accordance with existing policy and agreements.

Commercial outfitting and guiding does not occur within the river corridor.

***Access/Transportation System:*** County, State and Forest Service system roads and bridges are maintained to protect river resource values and allow safe passage to river access points and private lands. Travel routes in the corridor that are not necessary to the above needs or resource management, may be closed and restored. The effects of sediment entering the river at bridge and culvert approaches are minimized.

***Scenic Quality:*** Visitors may experience evidence of human development on private lands and within the recreational classified segment, however the natural appearing characteristics of the landscape dominate.

***Heritage Resources:*** Heritage and prehistoric sites within the East Branch Tahquamenon River corridor are protected from degradation and impacts caused by recreational or management activities. On site interpretation of sites is minimal, with interpretation being accomplished through river guidebooks, brochures, and Forest Recreational Opportunity Guides (ROGs).

***Private Property:*** Private property rights are recognized and respected. Information is provided to private landowners, upon request, to assist them in management of their lands to better protect the river's values.

Private holdings that adversely affect (or potentially affect) the river values may be acquired on a willing seller, willing buyer basis.

National Forest lands are consolidated as opportunities arise. Zoning by local units of government is supportive and complimentary to river protection and management, while allowing for a range of traditional uses on private lands within the river corridor.

## **Standards Common to Management Areas 8.4, 8.4.3, 8.4.4 and 8.4.5**

**Purpose:** The purpose of Management Areas 8.4, 8.4.1, 8.4.3 and 8.4.5 is to:

1. Manage the wild and scenic river corridors and study segments in accordance with the provisions of the Wild and Scenic River Act.
2. Maintain the free-flowing condition of designated rivers in accordance with the provisions of the Wild and Scenic River Act, and study corridors so as not to preclude future designation.
3. Protect or enhance the outstandingly remarkable values of the river corridors.
4. Restore components of the aquatic and terrestrial ecosystem degraded by past human activities.
5. Manage aquatic and terrestrial resources based on ecological and landscape characteristics.
6. Provide opportunities for recreation within the corridors.
7. Protect and enhance water quality.
8. Maintain a social setting where the sights and sounds of nature are dominant.
9. Manage vegetation to protect or enhance the outstandingly remarkable river values, and for late successional species.

### **1600 Information Services**

1. Emphasize an education and information program with the objectives of: improving awareness and understanding of low impact behaviors and recreation activities, “Leave no Trace” practices, and outdoor ethics; improving understanding of and visitor’s expectations about recreation experiences, activities and opportunities they are likely to encounter in the river corridor and improving and understanding of and appreciation for natural bio-physical river processes.
2. Provide information to discourage collection or disturbance of sensitive plant and animal species and archaeological resources.
3. Allow interpretation of river values, the natural environment, heritage resources and management activities at developed river accesses and in recreational information guides.

### **1900 Planning**

1. All management activities will be designed to protect and/or enhance the river’s outstandingly remarkable values and free-flowing condition.
2. On private lands, State, County, and local regulations apply. Continue to work with counties to enact or apply comprehensive zoning regulations, that are compatible with river management objectives.
3. Monitor resources according to the Monitoring and Evaluation Plan.

## **2200 Grazing Management**

1. Grazing shall not be permitted on National Forest System lands within the corridor.

## **2300 Recreation Management**

### **General**

1. Manage recreation developments with priority given to:
  - ◆ Correcting health and safety problems
  - ◆ Protecting rare plant and wildlife communities and archaeological resources
  - ◆ Protecting the environment
  - ◆ Complementing prescribed recreation opportunities
  - ◆ Expediting maintenance, site durability, etc.
  - ◆ Protecting streambank integrity
  - ◆ Protecting water quality
2. Hunting, fishing, and trapping will be managed in cooperation with the Michigan Department of Natural Resources (MDNR) and consistent with section 13(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287).
3. The Recreational Opportunity Spectrum (ROS) and Forest Service policy and design guides will guide opportunities for accessibility.
4. Manage river recreational use levels to maintain the prescribed ROS and within carrying capacity allocations.

### **Recreational Opportunity Spectrum**

1. Maintain a Roaded Natural (RN) ROS in recreational segments.
2. Maintain a Semi-primitive motorized (SPM) Recreation Opportunity Spectrum in Scenic segments.
3. Maintain a Semi-primitive Non-motorized (SPNM) ROS in wild segments.

### **Developed Camping**

1. Construct no new developed recreation sites (e.g. campgrounds) in the river corridor.

### **Dispersed Camping**

1. Allow dispersed camping throughout the corridor in accordance with Forest policy.
2. Minimal amenities such as fire rings and primitive toilets may be constructed where compatible with ROS and needed resource protection.
3. Restrict camping where needed to prevent resource damage and to encourage use of designated campsites within the corridor.
4. Obliterate or rehabilitate sites where resource damage is occurring.

**Canoe Trail**

1. Do not maintain a canoe trail. Cutting of debris and canoe slots in large woody debris is permitted to meet Forest management objectives.

**River Access**

1. Rehabilitate or close user developed access sites where resource damage is occurring.
2. Place priority on rehabilitating and correcting areas where resource damage may be occurring over construction of new access sites.

**Recreation Facilities: *Recreational, Study and Scenic Segments***

1. Permit simple recreation facilities to protect the values of the river area and prevent site deterioration from use.
2. Facility location, design, and construction will be compatible with the designated ROS.
3. Construct facilities using designs, materials, and tones that blend with the natural setting (e.g. simple forms, low silhouette, muted earth tone colors, and dark roof areas).
4. Screen facilities with native vegetation to make them less evident when viewed from the river or road.

**Trails: *Recreational, Study and Scenic Segments***

1. Reconstruct, obliterate, and/or realign user developed trails as necessary to prevent resource damage or for safety considerations.

**Motorized Use****Motorized Watercraft**

1. Prohibit launching or retrieving personal watercraft (jet skis), jet boats, or air boats from Federal lands within the corridor. Pursue State or local regulations that would restrict use of this type of watercraft throughout the corridor.

**Off-Highway Vehicles (OHV)**

1. Permit OHVs on designated routes and on Forest Roads in accordance with Forest guidelines.
2. Prohibit OHV travel and use on trails and Forest Roads that are posted, gated, or bermed closed.
3. Prohibit off-road or cross country travel.
4. Post and/or close roads and trails to OHV use within the corridor where negative effects to the river values occur.

**Snowmobiles: *Recreational, Study, and Scenic Segments***

1. Permit snowmobile travel on designated snowmobile trails crossing through the river corridor.
2. Prohibit cross-country travel.
3. Post and/or close snowmobile trails within the corridor where negative effects to the river values may occur.

**Scenic Quality**

1. *Recreational and Study Segments:* Maintain Partial Retention VQO.
2. *Scenic and Wild Segment:* Maintain Retention VQO.

**2400 Vegetation Management****General: *Recreational, Study, and Scenic Segments***

1. The ecological characteristics of the landscape will guide the location, scale, frequency, and intensity of vegetation management.
2. Vegetation management will protect and/or enhance the outstandingly remarkable values.
3. Design vegetation management activities to minimize disruptions to recreation uses.
4. Design vegetative management activities within the river corridor to discourage beaver activity.
5. Carry out compartment inventory as needed in order to gather information supporting ecosystem management activities, such as the enhancement of public recreation, scenic quality, game and non-game wildlife, fisheries, and the protection and enhancement of biodiversity and TES species.
6. Plant and seed species indigenous, native or desirable non-native to the northern Great Lakes region for site revegetation.
7. Manage old growth stands in accordance with Forest policy.
8. Eliminate or control nonnative invasive plants within the river corridor.

**Timber Management: *Recreational and Scenic Segments***

1. Design activities to move stands toward larger, long-lived species and enhance the visual quality of the corridor. Individual trees may be cut to enhance public safety or for incorporating large woody debris (LWD) into the river.

**Open Lands**

1. Do not maintain existing openings except for maintenance of existing openings associated with recreation sites for user safety and resource protection. Allow existing openings to naturally succeed.
2. Do not create new permanent openings.

**Reforestation: *Recreational and Scenic Segments***

1. Plant native species in conjunction with streambank stabilization, and habitat improvement projects, to enhance visual quality, and/or to restore components of the ecosystem, which are in decline or absent.
2. Emphasize reforestation of harvested areas through natural regeneration or seeding. Underplant to restore components of the ecosystem, which are in decline or absent.

**Forest Health: *Recreational and Scenic Segments***

1. Manage pests by integrated methods to minimize the effects or prevent the spread of insect or disease infestations throughout the corridor.
2. Recognize and tolerate native insects and diseases as part of the natural cycle unless outstandingly remarkable values or lands outside the corridor are threatened.
3. Use integrated pest management more aggressively when non-native insects and diseases are encountered.
4. Promote spatial diversity of vegetation and age classes guided by the ecological characteristics of the landscape in order to reduce the risk of insect and disease damage.

**2500 Watershed Management**

1. Protect seeps, springs, wetlands, and other water influence zones important to fish, rare plant communities, and management of the wild and scenic river.
2. Maintain and protect the water quality of the river in cooperation with the State of Michigan.
3. Maintain and enhance the free-flowing characteristics of the river.
4. Complete analyses required under Section 7 of the Wild and Scenic Rivers Act for all proposed “water resource” projects, to ensure protection and enhancement of the free-flowing character of the river and its outstandingly remarkable values.
5. Obtain federal, state and local permits as required.

**2600 Wildlife, Fish, and Sensitive Plant Habitat Management****General: *Recreational and Scenic Segments***

1. Allow habitat improvement projects, which are necessary for protection, rehabilitation, or enhancement of river area resources.
2. Aquatic and riparian habitat projects will consider river morphology and free flowing characteristics.
3. Projects will be located and designed to complement natural river characteristics and function.

4. Allow habitat improvement projects at a location, scale, intensity, and frequency guided by the ecological characteristics of the landscape.
5. Maintain important habitat for riparian dependent wildlife species throughout the corridor. When planning habitat improvement projects, consideration shall be given to the habitat needs of riparian dependent species. Certain eroded streambanks which provide quality-nesting habitat will be left untreated or treated less intensively.
6. Beaver dam removal may occur to protect or enhance the outstandingly remarkable values of the river.
7. Habitat improvement structures shall not substantially interfere with existing, or reasonably anticipated, recreational use of the river.
8. Habitat improvement structures will be designed to maintain the free flowing character of the river.
9. Monitor the characteristics and condition of Federal threatened, endangered and sensitive.

#### **Aquatic Ecosystem Management**

1. Coordinate with the MDNR to set levels of fish stocking and to develop a self-sustaining cold water fishery.

#### **Large Woody Debris (LWD)**

1. Allow placement of LWD throughout the river where sparse. If adequate vegetation is not available for incorporation immediately adjacent to the site, use of species from off-site or nearby locations is permitted. Where feasible, avoid use of artificial materials to anchor debris.
2. Allow the use of tree drops, and other methods of recruitment of LWD.

#### **Sediment Basins**

1. Construction of new sediment basins is not allowed within the river corridor.

#### **Placement of Spawning Gravel and Boulder Groups**

1. Allow placement of spawning gravel and boulder groups in the mainstem and tributaries throughout the corridor where channel gradient, substrate, VQO and morphology supports this activity.
2. Construct structures of native materials, but may be anchored using non-native materials.

### **2700 Special Uses Management**

#### **Utility Corridors: *Recreational, Wild and Scenic Segments***

1. Approve applications for public utility distribution systems crossing National Forest System lands on an individual case basis, consistent with management area objectives.

2. Allow new or expanded existing utility corridors only if there are no other feasible alternatives available and effects of the cleared area on management area objectives can be mitigated to protect the outstandingly remarkable values.
3. Require permittees to use underground construction methods for all new communication lines and power lines up to and including 34.5 kilovolts except where burying is proven to be infeasible because of bedrock.
4. Maximum use shall be made of existing rights-of-way along roads, bridges, railroads, utility lines, etc.
5. Special use permittees shall submit a vegetation management plan for existing and future projects. Manage vegetation for wildlife habitat, visual quality, and other resources where compatible with the objectives of the management area.
6. Open cut construction across the river channel will generally not be allowed. Directional boring will be the preferred method for executing river-crossing construction. Exceptions will be evaluated in project specific analysis.
7. Upgrades and replacement of existing distribution systems will be considered new construction and be required to be constructed underground, except where infeasible because of bedrock.
8. Remove existing towers and poles when elimination of existing above ground facilities occurs.

#### **Other Special Uses**

1. Permit facilities that are required to serve public recreation or administrative needs. Exceptions will be considered on a case-by-case basis.
2. Issue road easements or road permits to private inholdings on a case-by-case basis where there is no deeded access; access to the property via public roads does not exist; and/or other access is not feasible.
3. When issuing special-use road permits to property owners, require maintenance of the road surface commensurate with the permittee's use to Forest Service standards.
4. Do not issue special use permits for satellite dishes, outbuildings, fences, landfills, and/or other similar uses that do not enhance the values of the river.
5. Follow Forest policy for "special products" (e.g. firewood, mushrooms, etc.) gathering within the river corridor.
6. Consider needs for reciprocal rights-of-ways for landowners and public access to National Forest System lands, including the river, where feasible.
7. All other special-use requests will be considered only if no other feasible alternative exists on private lands or on public lands outside the river corridor.

### **2800 Minerals and Geology**

1. Reserved and outstanding mineral rights should be obtained when opportunities arise.
2. Permit surface-disturbing exploration (including core drilling) in areas where reserved and outstanding mineral rights exist. Exploration on federally administered mineral rights may be permitted on a case-by-case basis and where rights have been previously granted.
3. Manage surface mineral extraction activities to minimize and/or prevent negative effects to the river values.
4. Do not develop new common variety mineral pits within the river corridor.
5. Close and rehabilitate common variety mineral pits within the corridor where conflicts with the river values and effects cannot be mitigated and/or the pits are not needed to meet resource management objectives.

### **5100 Fire Management**

1. Prescribed fire may be used as an opportunity to introduce a simulated natural disturbance process into the landscape. Restoration or maintenance of vegetation in the recreational segment may be accomplished with fire after the ecological characteristics and fire effects on the outstandingly remarkable river values have been evaluated.
2. Suppression strategies, practices and activities shall be limited to those with minimal effects on the outstandingly remarkable river values. Protection of highly visible areas associated with roads, trails, recreational developments, outstandingly remarkable river values, riparian vegetation diversity, and sensitive, threatened and endangered species shall be considered during all suppression activities, including an escaped fire situation analysis.
3. Roads and natural features such as wet areas, ridges, and changes in vegetation type should be used as fire breaks in a confinement strategy.
4. Light-handed tactics of fire suppression will be used whenever possible. Fire retardant will be directed in a manner that prevents entry of chemicals into the river and associated wetlands.
5. Any land alterations created in association with fire suppression such as firelines, safety zones, staging areas, helispots, etc. will be discouraged within the river corridor. However, if no other alternatives are available they will be rehabilitated to blend closely with the surrounding landscape.
6. Activity fuels will be treated to a level commensurate with the allowable fire intensity, rate of spread, and fire effects that meet management area objectives.

### **5400 Land Ownership**

1. Highest priority acquisitions are for those tracts that:
  - ◆ Are in conflict with river values.
  - ◆ Would enhance river values.
  - ◆ Are needed for, or enhance, the recreational use and enjoyment of the river.
  - ◆ Would jeopardize the free-flowing condition of the river.
  - ◆ Are inconsistent with the goals and objectives of the recreational and wild river segments.
2. Land ownership adjustments cannot result in a decrease in National Forest System land ownership within the corridor.
3. Land acquisition will not exceed an average of 100 acres per river mile acquisition in fee title to lands within the river corridor.
4. Acquire through exchange subsurface mineral rights with the State where feasible. Establish federal claims based on the State Dormant Minerals Act where the law can be applied to free leasable minerals. Acquire subsurface mineral rights in other cases.
5. Purchase or acquire scenic easements on private lands within the corridor when/if development or activities would substantially benefit or detriment the maintenance and protection of the river values, water quality or free-flowing condition. First priority for acquisition is on willing seller, willing buyer basis.

### **5500 Land Ownership Title Management**

1. Resolve land ownership issues for lands within the corridor where land in fee title questions exist.
2. Resolve encroachments through permit, removal or exchange for other lands within the river corridor where there will be no net loss of total acres in National Forest land ownership within the wild and scenic river corridor. Exchange only the minimum land (with zoning setbacks) possible in the corridor.
3. Small Tracts Act authorities will not be used to resolve innocent encroachment(s) within the wild and scenic river corridor for new encroachment discoveries or unconsummated case files (Ref. CFR 254.35).

### **7100 Engineering Operations**

1. When conducting landline surveys, give priority to visual quality when cutting and marking landlines, by limiting clearing for site distance and removing flagging within view of the river.
2. Where possible, offset survey lines in the riparian zone to mitigate the linear viewshed along the survey line.

### **7400 Public Health and Pollution Control Facilities**

1. Lands within the river corridor will not be considered for landfills or waste disposal sites.
2. Consider placing restroom, vault toilet, wilderness toilet and/or trash collection facilities at high use areas within the corridor such as trailheads, access sites and high use campsites.
3. Work with local health authorities to ensure all septic systems meet permit and local code regulations within the river corridor.
4. Locate all toilets a minimum of 100 feet from the high water mark of any waterbody within the corridor.

### **7700 Transportation System**

#### **General**

1. Within the recreational segment, roads open to public travel (passenger cars) will generally be maintained to maintenance levels 3, 4, or 5 dependent on existing or planned traffic volume, vehicle mix, and road surface.
2. Within the scenic segment, most roads will be maintained to maintenance level 2, to permit passage of high clearance vehicles. Higher levels of maintenance may occur when consistent with existing traffic.
3. Within the river corridor, maintenance level 2 roads should be managed with an encourage strategy through signing and inclusion on Forest visitor maps where adequate resource protection has been provided for.
4. Maintain emphasis on erosion and sediment control in the vicinity of the river on all open and closed roads.
5. Close roads or obliterate and revegetate roads where resource damage is occurring or the road is not necessary for resource management or river access. Remove all structures such as culverts and fill material at the time of obliteration.
6. Eliminate traffic on closed roads through use of appropriate barriers (See Forest-wide standards and guidelines 2300 Visual Resources).
7. Extended closures will include revegetating the roadbed.
8. Traffic restrictions may be applied and seasonal and extended closure may occur for sediment and erosion control, protection of special areas, protection of the roadbed, and to reduce user conflicts during the recreation season.
9. Coordinate and cooperate with the Counties, State and private landowners to eliminate resource damage (such as sedimentation into the river or tributaries) to assure long-term protection and enhancement of river values.

**River Crossings**

1. When replacement is necessary, bridges shall be designed as single span structures and span bankful width where feasible.
2. Wooden structure (such as glue laminated members) will be used where feasible to enhance the visual quality of the river corridor. Concrete bridge abutments are permitted.
3. All bridges should be evaluated as to their necessity as part of the overall area transportation system prior to replacement or reconstruction.
4. When replacing existing culverts the design shall provide for a natural streambed under the culvert. The diameter will approximate bankful width.
5. Bridges or open bottom structures are preferable; however, pipes may be used provided they are set below the streambed elevation to allow accumulation of native material in the bottom of the pipe.

**Road Construction: *Recreational, Study, and Scenic Segments***

1. Locate roads in well screened and as inconspicuous areas as possible, as seen from the river.
2. Close and obliterate temporary roads following resource management activities. Reconstruct the road to original contours where feasible.

**Road Reconstruction**

1. Road reconstruction may occur with emphasis placed on controlling erosion, and stream sedimentation, enhancing free-flow characteristics and/or to support resource management activities.

**Signing**

1. Minimize the number of signs throughout the corridor commensurate with the specified ROS class. Signs may provide information for resource protection, travel management, and information dissemination (e.g. identifies designated campsites, portages, access sites, etc.).
2. All signs will have a consistent style and color.
3. Additional signing may be provided to interpret key heritage resource sites and opportunities.
4. Integrate signing associated with wild and scenic rivers with the Forest travel management program.
5. Place Wild and Scenic River designator signs at the boundaries of the corridor where they intersect with major access roads.

## **Standards Specific to Management Area 8.4.3 - Whitefish River**

### **1600 Information Services**

1. Develop a comprehensive public information signing, interpretation and education plan for the Whitefish River corridor.

### **1900 Planning**

1. Monitor resources according to the Monitoring and Evaluation Plan.

### **2300 Recreation Management**

#### **General**

1. Use the Recreational Opportunity Spectrum (ROS) system as a guide to make recreational opportunities accessible for all people. This will be based on public expectations, the site's existing structural modifications and the presence of significant natural features.
2. Construct no new developed recreation areas in the river corridor.

#### **Canoe Trail**

1. Do not clear or cut the channel except for limited clearing in order to allow canoe passage on the river and where resource damage is occurring (e.g. erosion from portaging or liftovers).

#### **River Access Sites**

1. Provide river access sites on the East Branch at CR 00-3 at Trout Lake, 2 sites at FR 2236 (one for each the east and west branch), at US Highway 2 or at the end of CR I-15. Construct access site at or near the vicinity of the Haymeadow Gravel Pit.
2. Minimal amenities such as fire rings and primitive toilets may be constructed where compatible with ROS and needed for resource protection.

#### **Recreation Facilities**

1. Locate all vault toilets a minimum of 100 feet from the high water mark of any waterbody within the corridor. Primitive toilets with no vaults must be a minimum of 200 feet from the high water mark.

#### **Trails**

1. Provide resource protection at trailhead facilities and key areas along trails.
2. Monitor all trails for user conflicts and resource damage.

#### ***Scenic Segment***

1. Do not construct any new motorized trails within the corridor.

***Recreational Segment:***

1. A new snowmobile trail crossing over the river (near US-2) may be constructed within the corridor, commensurate with the requirements of protecting and/or enhancing the river values.

**2400 Vegetation Management****General**

1. Vegetation management will protect and/or enhance the outstandingly remarkable river values.

**Timber Management**

1. Permit vegetation management activities in the corridor (including salvage) to protect and/or enhance the wild and scenic river values.
2. Manage primarily for late successional communities such as hemlock, white pine, red pine, northern hardwoods, cedar and white spruce. Manage early successional communities with short lived species such as jack pine, aspen, white birch and balsam fir guided by the ecological characteristics of the corridor landscape. Manage for white birch, where appropriate, to enhance visual quality.
3. Use salvage treatments to reduce fire hazard and to manage insect and disease infestations so that the river values are maintained or enhanced.

**Aquatic Ecosystem Management*****Streambank Stabilization***

1. Streambank stabilization will be accomplished using wood structures and bioengineering techniques whenever possible.
2. Streambank stabilization structures shall be periodically maintained to prevent them from becoming visually obtrusive or safety hazards. Existing structures which have fallen into a state of disrepair may be rehabilitated. Repair shall be done in a manner which maintains the scenic character of the river and does not contribute to future streambank erosion.

***Scenic Segment***

1. Allow bank stabilization for the protection of ORVs. Consideration will be given to sediment transport.
2. Streambank projects will be designed to enhance or preserve stable river morphology.

***Sediment Basins***

1. Existing sediment basins may be maintained on tributaries within the corridor. Analysis for sediment basin maintenance will document sediment sources and review less impacting means of reducing or more efficiently transporting sediment.
2. Dispose of and revegetate the spoils in a manner that meets the visual quality standards (VQO) and permit requirements.

**2700 Special Uses Management****Outfitting and Guiding**

1. Permit outfitting and guiding services to meet a demonstrated public need for services within established carrying capacities and in accordance with Forest Service policy and regulations. Outfitting and guiding will be permitted to the lowest level of service day capacity.
2. Use special-use permits to authorize occupancy and use of National Forest lands consistent with management area objectives.
3. Administer special-use permits authorizing commercial livery and outfitter and guide operation following Forest Service Handbook (2709.11) and Manual (2700).

**2800 Minerals and Geology**

1. Complete and submit mineral “withdrawal from entry and exploration” requests for developed recreation sites within the river corridor where mineral rights ownership is within the public domain and subject to claim or prospect.

**7700 Transportation System****River Crossings**

1. A new snowmobile bridge crossing over the river (near US-2) may be constructed within the corridor, in accordance with the requirements of protecting and/or enhancing the river values.

**Road Construction**

1. No new permanent road construction may occur in the scenic segment.
2. Permanent road construction may occur within the recreational segment, commensurate with the river resource management goals and objectives.
3. Temporary road construction in association with resource management may occur throughout the corridor. Temporary roads shall be closed and obliterated following resource management activities.

## **Standards Specific to Management Area 8.4.4 - Sturgeon River**

### **1600 Information Services**

1. Develop a public information signing, interpretation and education plan for the Sturgeon River corridor.
2. Develop a river guide brochure/river map providing information on access, low impact use, recreation opportunities and interpretive information about the Sturgeon River.

### **1900 Planning**

1. Monitor resources according to the Monitoring and Evaluation Plan.

### **2300 Recreation Management**

#### **Developed Camping**

##### *Flowing Well Campground*

- ◆ Future site improvements will focus on accessibility (50 percent of sites will be accessible), remedying health and safety concerns, and resource protection.
- ◆ Retain the day use area for picnickers and canoe/angler access to and from the river.
- ◆ Reduce the number of campsites from ten to seven.
- ◆ Manage for Roaded Natural ROS.
- ◆ Manage the campground at the lower end of development level 3.
- ◆ All campground facilities will be rustic appearing.
- ◆ Evaluate and stabilize user developed river access from individual campsites. Steps may be constructed to provide access and protect the streambanks, as well as bank stabilization structures to reduce erosion into the river.
- ◆ Encourage longer-lived tree species. Open up the canopy to provide more sunlight into the campground while retaining adequate vegetation to screen the campsites and other recreation facilities from the river.
- ◆ Discourage user damage to riparian vegetation.

#### **Canoe Trail**

1. Do not clear or cut channel except for minor clearing in order to allow canoe passage on the river and where resource damage is occurring (e.g. erosion from portaging or liftovers).

**River Access Sites**

1. Provide river access sites at the CR 442 bridge, FR 2229 (Hayes Dam) and/or Fourteenmile Bridge, the Tenmile Rapids pull-off, the Flowing Well Campground, U.S. Highway 2 (south of the highway), and at the CR 499 bridge (west of the river).
2. Minimal amenities such as fire rings and primitive toilets may be constructed where compatible with ROS and needed for resource protection.

**Recreation Facilities**

1. Provide rustic facilities for user comfort and convenience at developed campgrounds. Rustic facilities may be provided at dispersed campsites and access points to protect the values of the river and to prevent site deterioration.
2. Locate all vault toilets a minimum of 100 feet from the high water mark of any waterbody within the corridor. Primitive toilets with no vaults must be a minimum of 200 feet from the high water mark.

**Trails*****Recreational and Scenic Segments:***

1. Allow construction of new, non-motorized trails.
2. Provide for resource protection at trailhead facilities and key areas along trails.
3. Monitor all trails for user conflicts and resource damage.

***Scenic Segment:***

1. Do not construct any new motorized trails within the corridor.

***Recreational Segment:***

1. New motorized trails may be constructed within the corridor commensurate with the protection and/or enhancement of the ORVs.

**2400 Vegetation Management****Timber Management**

1. Permit vegetation management activities (including salvage) in the corridor to protect and/or enhance the wild and scenic river values.
2. Manage primarily for late successional communities such as hemlock, white pine, red pine, northern hardwoods, cedar and white spruce. Manage early successional communities with short lived species such as jack pine, aspen, white birch and balsam fir guided by the ecological characteristics of the corridor landscape. Manage for white birch, where appropriate, to enhance visual quality.
3. Use salvage treatments to reduce fire hazard and to manage insect and disease infestations so that the river values are maintained or enhanced.

4. Manage pine plantations throughout the corridor to achieve a more naturally appearing condition.

## **2600 Wildlife, Fish, and Sensitive Plant Habitat Management**

### **General**

1. Streambank stabilization structures shall be periodically maintained to prevent them from becoming visually obtrusive or safety hazards. Existing structures that have fallen into a state of disrepair may be rehabilitated. Repair shall be done in a manner that maintains the scenic character of the river and does not contribute to future streambank erosion.

### **Aquatic Ecosystem Management**

#### ***Streambank Stabilization***

1. Streambank stabilization will be accomplished using wood structures, bioengineering, and vegetation whenever possible.
2. Streambank stabilization structures shall be periodically maintained to prevent them from becoming visually obtrusive or safety hazards. Existing structures which have fallen into a state of disrepair may be rehabilitated. Repair shall be done in a manner which maintains the scenic character of the river and does not contribute to future streambank erosion.

#### ***Scenic Segment:***

1. Allow bank stabilization for the protection of ORVs. Consideration will be given to sediment transport relative to oxbow formation.
2. Streambank projects will be designed to enhance or preserve stable river morphology.

### **Sediment Basins**

1. Existing sediment basins may be maintained on tributaries within the corridor. Analysis for sediment basin maintenance will document sediment sources and review less impacting means of reducing or more efficiently transporting sediment.
2. Dispose of and revegetate the spoils in a manner that meets the visual quality standards (VQO) and permit requirements.

## **2700 Special Uses Management**

### **General**

1. No new structures will be allowed in recreation residence (summer home) special use permit areas. Allow only for the expansion, external remodeling or reconstruction of existing structures consistent with maintaining the rustic, natural and historic character of the corridor.

### **Outfitting and Guiding**

1. Permit outfitting and guiding services to meet a demonstrated public need for services within established carrying capacities and in accordance with Forest Service policy and regulations. Outfitting and guiding will be permitted to the lowest level of service day capacity.
2. Use special-use permits to authorize occupancy and use of National Forest lands consistent with management area objectives.
3. Administer special-use permits authorizing commercial livery and outfitter and guide operation following Forest Service Handbook (2709.11) and Manual (2700).

## **2800 Minerals and Geology**

1. Complete and submit mineral “withdrawal from entry and exploration” requests for developed recreation sites within the river corridor where mineral rights ownership is within the public domain and subject to claim or prospect.

## **7700 Transportation System**

### **River Crossings**

1. Additional permanent river crossings will not occur within the corridor.

### **Road Construction**

1. No new permanent road construction may occur in the scenic segment.
2. Permanent road construction may occur within the recreational segment, commensurate with the resource management goals and objectives for the river.
3. Temporary road construction in association with resource management may occur throughout the corridor.
4. Temporary roads shall be closed and obliterated following resource management activities. Reconstruction to original contours should be considered.

## **Standards Specific to Management Area 8.4.5 - East Branch Tahquamenon River**

### **2300 Recreation Management**

#### **Dispersed Camping**

##### ***Recreational Segment***

1. Accomplish resource protection, by developing dispersed campsites (as demand for sites dictates) away from private lands. Locate designated campsites in key/popular areas within view of the river, yet setback from the shoreline. Allow minimal amenities such as fire rings, tables, toilets, etc. where compatible with ROS and as needed for resource protection.
2. Permit two tents maximum at designated sites, with total of eight persons at each site.

#### **River Access**

##### ***Recreational Segment:***

1. Pursue acquisition of easements from private landowners for river access at M-123 (Eckerman Road) and H83. Consider the need for parking, signing, and improvement of access to the river, consistent with the ROS setting in the recreational segment.
2. Place priority on rehabilitating and correcting areas where resource damage may be occurring over construction of new access sites.

##### ***Wild Segment:***

1. No new recreation access will be developed.

#### **Recreation Facilities**

##### ***Recreational Segment:***

1. Permit simple recreation facilities to protect the values of the river area and prevent site deterioration from use. Facility location, design, and construction will be compatible with the designated ROS.

##### ***Wild Segment:***

1. No recreation facilities will be developed.

#### **Trails**

##### ***Recreational Segment:***

1. Do not construct motorized trails within the corridor.
2. Maintain non-motorized trail access and monitor for user conflicts or resource damage.

***Wild Segment:***

1. Do not construct new trail access. Obliterate and/or realign user developed trails as necessary to prevent resource damage or for safety considerations.

**Motorized Use****Off-Highway Vehicles (OHV)**

***Wild Segment:*** OHV use is prohibited within the river corridor.

**Snowmobiles**

***Wild Segment:*** Prohibit snowmobile use within the river corridor.

**2400 Vegetation Management****Timber Management**

***Recreational Segment:*** Design activities to maintain the water temperatures of the river so they do not fall below the critical temperatures for brook trout production.

***Wild Segment:*** Timber harvest will not occur.

**Forest Health**

***Wild Segment:*** Control insects and disease only when preventing unacceptable damage to resources and lands outside the boundary, or an unnatural loss due to exotic pests.

**2500 Watershed Management**

1. Feature long-lived tree species within 500 feet of the river's major cold-water tributary and its branches, Number 8 Creek within the river corridor.

**2600 Wildlife, Fish, and Sensitive Plant Habitat Management****General**

***Wild Segment:*** Keep shoreline development essentially primitive with little or no evidence of human activity.

**7700 Transportation System****River Crossings**

***Recreational and Wild Segments:*** Additional permanent river crossings will not occur within the corridor.

### **Road Construction**

**Recreational Segment:** Construct permanent and temporary roads within the recreational segment, commensurate with the resource management goals and objectives for the river.

**Wild Segment:** Do not construct new permanent or temporary roads in the wild segment.

### **Proposed Wild and Scenic River Final Corridor Boundaries:**

The Wild and Scenic River boundary delineations were established to protect the free-flowing condition and the outstandingly remarkable values of the rivers. An interdisciplinary team established the river boundaries using physical features (such as roads, and old railroad grades), legal descriptions (where other features were not available and across private lands for ease of location of the river corridor), and using identifiable natural features (such as drainages, bluffs, ecological land-type boundaries, and stand boundaries). Where the river corridor crossed through private lands, care and consideration was given to provide an identifiable corridor boundary that protected the river and minimized the amount of private land that was included in the river corridor.

**Whitefish River:** The total acreage within the river boundary was calculated to be 11,202 acres. The maximum allowable acreage (320 acres per river mile) for the 35.7 mile river corridor was calculated to be 11,424 acres.

**Sturgeon River:** The total acreage within the river boundary was calculated to be 8,485 acres. The maximum allowable acreage (320 acres per river mile) for the 41.2 mile river corridor was calculated to be 13,184 acres.

**East Branch Tahquamenon River:** The total acreage within the river boundary was calculated to be 3,007 acres. The maximum allowable acreage (320 acres per river mile) for the 14.8 mile river corridor was calculated to be 4,736 acres.

A map of all three final river corridor boundaries are available by request or can be viewed on the Hiawatha National Forest Planning Web site at: [www.fs.fed.us/r9/hiawatha/revision/rev\\_welcome.html](http://www.fs.fed.us/r9/hiawatha/revision/rev_welcome.html).

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## **VII. Issues Not Addressed in this Forest Plan Revision Process**

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Forest Plan decisions only apply to National Forest System lands. We have no legal authority to make decisions regarding management or use of privately owned lands, nor can we make decisions on topics that are outside the Forest Service mission. They have been categorized as:

- ◆ Items that do not deal with the six decisions required by the planning regulations (36 CFR 219)
- ◆ Site specific decisions related to Forest Plan implementation
- ◆ Decisions outside the Forest Service jurisdiction
- ◆ Decisions on the Forest budget or allocations of personnel
- ◆ Actions requiring changes in laws or regulations

We have received comments from citizens on many topics that will not be analyzed in the Forest Plan revision. The comments have been categorized into five areas:

### **1. Editorial Changes**

Minor editorial changes that will have no significant effect on the content or implementation of the Forest Plan will be made during the revision process. Some of the comments received concerned:

- ◆ Making the revised Plan easier to read, understand and use
- ◆ Revising out-of-date appendices and tables

### **2. Implementation Issues**

Many comments we received are implementation issues. Most of the comments or concerns are already addressed in the Forest Plan. Samples of comments include:

- ◆ Developing areas for single-track motorized use
- ◆ Constructing hiking/biking trails
- ◆ Reconstructing outbuildings at the Pt. Iroquois lighthouse
- ◆ Mapping all snowmobile and ATV trail systems
- ◆ Providing continued safe access to the Forest for a variety of motorized recreational uses
- ◆ Maintaining and constructing remote camping areas
- ◆ Developing quicker response to salvage operations following catastrophic disturbances

### 3. Issues adequately addressed in Forest Plan

The Forest Plan provides for a wide variety of public resource uses, recreational opportunities and services, while ensuring protection of Forest resources. After completing resource assessments and evaluations, we have determined that Forest management objectives for air quality, non-native invasive species, fire management, human resources, lands, minerals, and special uses are addressed adequately in the Forest Plan.

Although the Plan does provide guidance regarding forest health, integrated pest management, and fire management, updates will be made to the revised plan to address current policy related to non-native invasive species, the National Fire Plan and forest health.

Citizens offered many comments on additional topics that we feel are adequately addressed in the Forest Plan. Some of the comments include:

- ◆ Developing special management plans for areas of special conservation value
- ◆ Limiting the amount of new roads
- ◆ Developing guidelines for managing non-native invasive species
- ◆ Including a range of recreational experiences from developed to remote
- ◆ Expanding wildlife management to include non-game species
- ◆ Continuing land acquisitions to the forest

We also received a number of comments requesting that more wilderness areas and wild and scenic rivers be added to the Hiawatha.

**Evaluation for Wild & Scenic River Eligibility:** An interdisciplinary team re-evaluated 180 streams and watercourses on the Hiawatha to determine if they are in a free-flowing condition and whether they contain outstandingly remarkable values on a regional or national basis.

No additional rivers were determined eligible for wild and scenic river study. None contained outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values on a regional or national scale, based on the established criteria.

#### **4. Issues Outside the Forest Service Jurisdiction**

Many comments were received that are beyond the scope of the Forest Plan because they conflict with laws or policies that direct activities on national forests. We've included some examples of these comments with explanations why they are outside the Forest Service jurisdiction):

- ◆ Discontinue all timber harvests. (Several laws direct national forests to provide continuous supply of timber for use and necessity of citizens)
- ◆ Ban Hunting. (The State of Michigan has legal authority to regulate hunting)
- ◆ Purchase Au Train Island and other islands around Grand Island (These islands are outside the defined boundaries of the Hiawatha National Forest and would require an Act of Congress to change the boundaries of the Hiawatha National Forest).

#### **5. Ongoing and Future Amendments**

The Hiawatha has no significant ongoing amendments planned prior to the completion of the Forest Plan Revision. Since the Forest Plan will be an evolving guide for managing the Hiawatha, we anticipate there will be amendments in the future to accommodate the Hiawatha's changing needs.

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### **VIII. Next Steps in the Revision Process**

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#### **1. Notice of Intent (NOI):**

The Notice of Intent will inform the tribes, public, and governments that the Michigan National Forests are proposing to revise their Forest Plans. It also serves to invite the public to participate in the process by commenting on the proposed revision items.

#### **2. Content Analysis (2003):**

The Hiawatha will conduct a content analysis on all comments received during the Notice of Intent 60-day comment period. Comments will be assessed for issues and suggested alternatives, then grouped by categories.

#### **3. Developing Alternatives (2004):**

During this stage, the Forests will work with the tribes, governments, and public to develop a range of alternatives to address issues within the scope of the proposed revision changes. Alternatives will be developed according to themes derived from the issues and suggestions from the content analysis.

#### **4. Draft Environmental Impact Statement and Proposed Revised Forest Plan (2005):**

A draft environmental impact statement (DEIS) will be prepared that displays and compares alternative ways of managing the Hiawatha National Forest. The draft environmental impact statement will describe the anticipated physical, biological, social, and economic effects at the broad landscape-level for each alternative. The Hiawatha will identify a preferred alternative and a proposed revised Forest Plan. The comment period on the draft environmental impact statement and proposed revised Forest Plan will be 90 days from the date it is published in the *Federal Register*.

#### **5. Revised Forest Plan (2006):**

The Regional Forester will consider the comments, responses, and environmental consequences discussed in the FEIS, together with applicable laws, regulations, and policies, in making a decision and adopting the final revised Forest Plan. The Regional Forester will document the decision and reasons for the decision in the Record of Decision. That decision would be subject to appeal in accordance with federal regulations (36 CFR 217).

The revised Forest Plan will set the management direction for the Hiawatha National Forest for the next 10-15 years.

Under current direction, the responsible official is:  
Randy Moore, Regional Forester, Eastern Region  
626 E. Wisconsin Ave, Milwaukee, Wisconsin 53202.