

Environmental Policy Act (NEPA) to conduct an environmental analysis to determine what effect the proposed activities would have on the environment. The level of analysis that is required depends on whether the proposed activities would cause a “significant” impact to the environment.

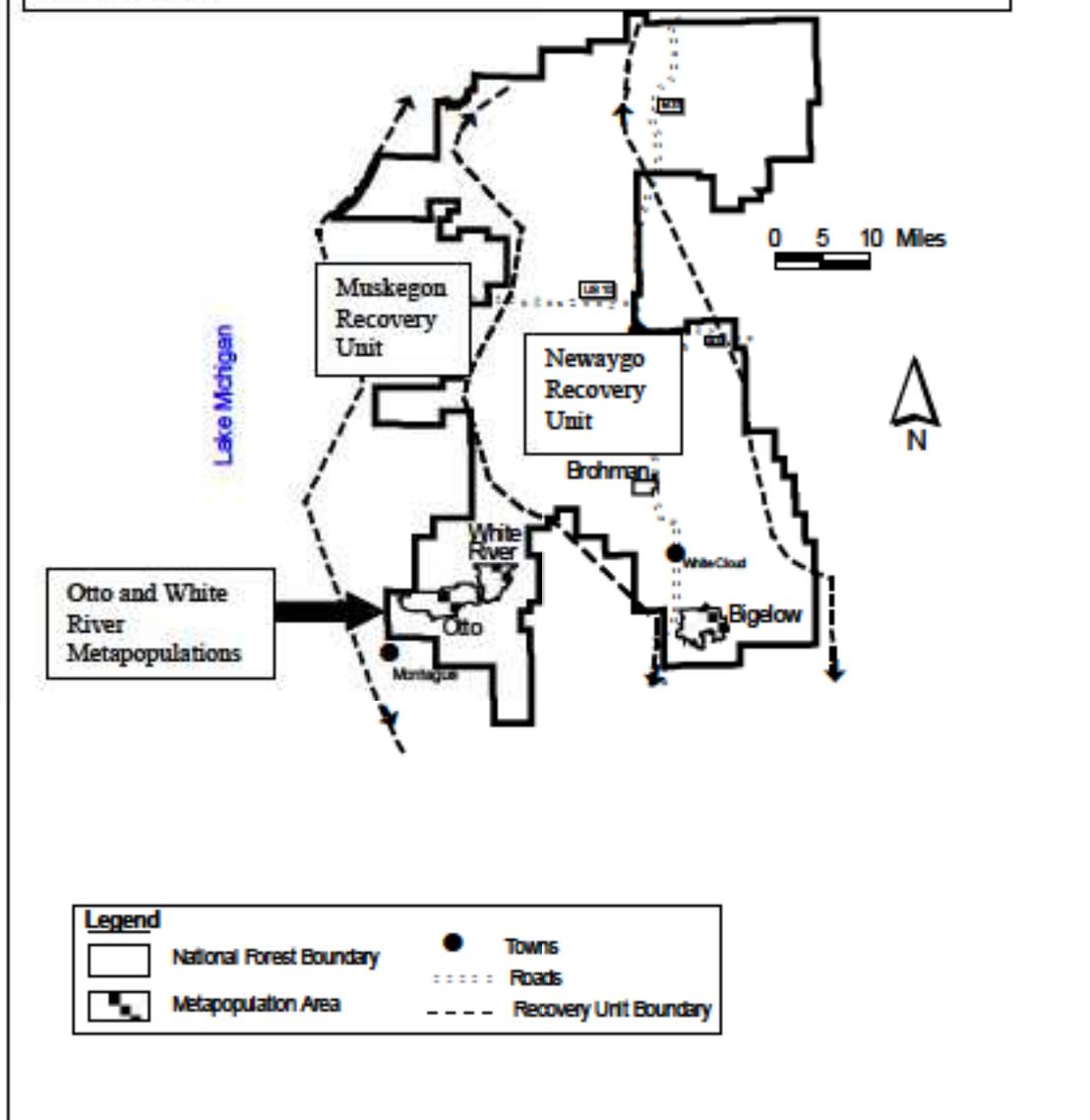
The proposed activities for a project must also be in compliance with other federal laws. One law that is key in the development of the Purpose and Need for the Savanna Ecosystem Restoration (SER) project is the Endangered Species Act of 1973 (ESA). Implementation and enforcement of the ESA is the responsibility of the United States Fish and Wildlife Service (USFWS), an agency within the Department of the Interior. One of their responsibilities under the ESA is the development of a Recovery Plan for each species that is listed as Endangered. A Recovery Plan is a comprehensive plan that describes the actions needed and population goals to be met to reclassify a species from endangered to threatened. The long-range goal of the Recovery Plan is the removal from the Federal list of species.

In 2003, the Karner Blue Butterfly (KBB) Recovery Plan was released by the USFWS. The KBB Recovery Plan identifies actions to restore habitat, population goals, and monitoring requirements to stabilize and recover KBB populations throughout its historic range. It also identifies those areas where these habitat restoration activities need to occur (termed Recovery Units). KBB Recovery Units (RU) are based on known variations in physiography, climate, vegetation, and potential geographic genetic variation in KBB populations. The number of viable populations in a RU is based on the distribution of known populations or the need to improve existing populations. There are 13 RUs identified in the KBB Recovery Plan (United States Department of Interior (USDI) 2003).

The Savanna Ecosystem Restoration (SER) Project Area is within the Muskegon Recovery Unit, one of two Recovery Units on the Manistee National Forest (see Figure 1.1). The recovery goal in the Muskegon RU is the development of two large viable metapopulations of KBB; each containing 6,000 butterflies. The location of these metapopulation areas is based on the overlap of historic savanna habitat and historic KBB populations. On National Forest System lands within the Muskegon RU, the Otto and White River Metapopulation Areas were identified. These two areas are the focus of the proposed Forest Service management activities for KBB in the Savanna Ecosystem Restoration project; a project with the primary objective of establishing and maintaining suitable habitat that will support two large viable metapopulations in the Muskegon Recovery Unit (United States Department of Agriculture (USDA) 2004).

The USFWS KBB Recovery Plan identifies recovery actions and goals across the entire historic range of the butterfly. To guide Forest-level activities needed to meet the objectives of the KBB Recovery Plan, the Huron-Manistee National Forests prepared the DRAFT Huron-Manistee National Forest Karner Blue Butterfly Management Strategy (DRAFT Management Strategy, 2004). The DRAFT Management Strategy (2004) and the USFWS KBB Recovery Plan (2003) were incorporated by reference in the Forest Plan (2006). The Forest Plan contains goals, objectives, and specific guidance on the management of National Forest System lands. Site-specific proposals such as the Savanna Ecosystem Restoration project are developed to implement the Forest Plan. For the SER project, the Forest Plan provides the Purpose and Need of implementation of the KBB Recovery Plan and provides the standards and guidelines that apply to the activities in this project (Forest Plan, pp. II-26).

Figure 1.1: The Otto and White River Metapopulations within the Muskegon Recovery Unit



(1.3) Forest Plan Direction

The 2006 HMNF's Forest Plan (Forest Plan) guides all natural resource management activities for the Forests. It describes desired resource conditions, resource management practices, levels of resource production and management, and the availability of suitable land and resource management. The purpose of the Forest Plan is to provide management direction to ensure that ecosystems are capable of providing a sustainable flow of beneficial goods and services to the public (Forest Plan, pp I-4-5). To achieve this purpose the Forest Plan divides the HMNF into different Management Areas; each having a distinct Purpose, Goals and Objectives, and a Desired Future Condition. Management Areas also have standards and guidelines that provide direction for managing resources in moving from an existing to the desired condition.

The SER Project Area is comprised of three different Management Areas; Management Area 4.4 (Rural), Management Area 6.1 (Semiprimitive Nonmotorized), and Management Area 9.2 (Study Wild and Scenic River). Additionally the Forest Plan provides Forest-wide goals and objectives, standards and guidelines, and a Desired Future Condition. All four Management Areas contribute goals and objectives and standards and guidelines to the SER project design; a project with the limited objective of addressing the Forest Plan Standard of implementing the KBB Recovery Plan in the Muskegon Recovery Unit (Forest Plan, pp. II-26). The following outlines that Management Area direction:

(1.3a) Forest-Wide Management Area Direction

Goals and Objectives: Forest Plan pp. II-4-6

- Maintain or improve the populations of endangered, threatened or sensitive species or communities.
- Restore and maintain savannas, prairies, dry grasslands, mesic grasslands, shrub/scrub and oak-pine barrens in areas where they were known to previously occur, to provide for habitat diversity and to meet species viability needs.
- Wildlife and fisheries habitats and plant communities shall be managed to maintain viable populations of existing native and desired non-native species.
- Meet species viability needs, achieve fire hazard reduction, and accomplish fiber production from regulated (Allowable Sale Quantity) and non-regulated (non-chargeable) forest lands primarily through timber harvest.
- Reduce non-native invasive species infestations and prevent new invasive species from becoming established, when possible.
- Utilize prescribed fire to meet management direction as appropriate for the ecosystems involved.
- Manage designated old growth across all management areas and vegetation classes emphasizing old growth characteristics.
- Reduce the net miles of roads on the Forests by emphasizing closure of roads determined to be non-essential for resource management.

Desired Future Condition:

- Habitat and population objectives follow recommendations of the KBB Recovery Plan (USDI 2003). Three large viable populations (6,000 butterflies) and one viable population (3,000 butterflies) are established and maintained on the Manistee National Forest. To support these populations, 20,300 acres of barrens habitat has been developed and maintained in the four metapopulation areas and the essential KBB barren habitat on the Manistee National Forest. Information detailing locations and specific habitat requirements associated with KBB essential habitat can be found in the BA for the Forest Plan, the KBB Recovery Plan (2003), the KBB Habitat Management Strategy, and the KBB Species Viability Evaluation for the HMNFs (2004). (Forest Plan, pp. II-32)
- Indiana bat, Karner blue butterfly, bald eagle, Kirtland's warbler, piping plover, and Pitcher's thistle are managed according to their recovery plans. (Forest Plan, pp. II-32)
- Prairies, savannas, and oak-pine barrens have been restored and maintained on approximately 10,000 acres within old-growth areas. (Forest Plan, pp. II-6)

Standards (S) and Guideline (G):

- Old growth may be maintained by practices that best meet the potential old-growth conditions. (G) (Forest Plan, pp. II-9)
- Developed recreation sites and areas will avoid essential and critical habitat. (G) (Forest Plan, pp. II-11)
- Do not permit motorized vehicles in essential habitats for endangered, threatened, and sensitive species. (G) (Forest Plan, pp. II-13)
- Restrict snowmobile travel to designated trails or open unplowed roads unless otherwise prohibited in areas with special management objectives, such as threatened, endangered, or sensitive species habitat. (G) (Forest Plan, pp. II-13)
- Federally endangered, threatened, and proposed species and sensitive species management will take precedence over old growth goals. (G) (Forest Plan, pp. II-23)
- Implement the KBB Recovery Plan. (S) (Forest Plan, pp. II-26)
- Resource management activities, such as road and trail construction and vegetation management, will be designed to protect and improve Karner Blue butterfly habitat. (G) (Forest Plan, pp. II-26)
- Roads and trails may be relocated or decommissioned, as deemed necessary, to protect wild lupine. (G) (Forest Plan, pp. II-26)
- In occupied habitat direct camping to areas outside occupied habitat and where posted camping will be prohibited in occupied areas. (G) (Forest Plan, pp. II-27)

(1.3b) Management Area 4.4 (Rural)

There are approximately 6,580 acres of National Forest System lands within this Management Area in the Project Area.

Purpose: Some small blocks will be managed to protect isolated, essential areas for endangered, threatened, or sensitive species (Forest Plan, pp. III-4.4-2).

Goals and Objectives: Maintain or increase wildlife habitat diversity and manage permanent openings and/or grasslands to meet species viability needs (Forest Plan, pp. III-4.4-2 and 4.4-3).

Desired Future Condition: Human activities such as vegetation management, facilities, structures, utility corridors, mineral exploration and development are evident and harmonize with the surrounding environment. Interaction between users is frequent and users are aware of services provided, such as visitor information and law enforcement. The area will provide roads and trails appropriate for motorized and non-motorized use (Forest Plan, pp. III-4.4-3).

Standards (S) and Guidelines (G):

- Implement the KBB Recovery Plan. (S) (Forest Plan, pp. II-26)

(1.3c) Management Area 6.1 (Semiprimitive Nonmotorized)

There are approximately 4,820 acres of National Forest System lands within this Management Area in the Project Area. The entire White River Semiprimitive Nonmotorized Area (SPNMA) is within the Project Area boundaries.

Purpose: Management activities in these areas provide semiprimitive, nonmotorized recreational experiences and will reduce life threatening and property-damaging wildfire potential. Management enhances and improves habitats for species which avoid human activity. Specifically, the objectives within the Forest Plan for the SPNMA include: Provide primitive canoeing, fishing, and camping areas; develop a non-motorized trail system; and use trail corridors to improve potential or connect occupied Karner blue butterfly habitat (Forest Plan, pp. III-6.1-2-6.1-3).

Goals and Objectives: Provide visual variety by providing vegetative diversity; provide for semiprimitive, nonmotorized recreational experiences; provide a variety of fish and wildlife habitats for species which avoid human activity; provides for recreational activities such as hunting, fishing, viewing scenery, and water-based recreational activities; and manage permanent openings and/or grasslands to meet species viability needs (Forest Plan, pp. III-6.1-4).

Desired Future Condition: This management area will be characterized by a predominantly natural or natural-appearing environment. Concentration and interaction between users is low, but there is often evidence of other users. The areas are managed in such a way that on-site controls and restrictions may be present, but are subtle. Non-motorized use is emphasized. Closed roads may be evident and some may be utilized as trails. Users are aware of the services provided, such as visitor information, and restrictions and controls are evident.

Some roads are present but gated to provide access only for administrative or other permitted purposes. Improvements on these roads are infrequent and maintained to minimal standards necessary for health and safety needs. Other public agency roads may be present (Forest Plan, pp. III-6.1-4-6.1-5).

Standards (S) and Guidelines (G):

- Vegetation management to maintain diversity of wildlife habitats. (G) (Forest Plan, pp. III-6.1-5)
- Camping areas and sites will be designated. Sites and areas will avoid KBB habitat. (S) (Forest Plan, pp. III-6.1-6)
- Allow dispersed camping at existing sites along open roads. Evaluate opportunities to phase out of these existing sites and develop sites adjacent to the area. (G) (Forest Plan, pp. III-6.1-6)
- Within a one-quarter mile corridor on each side of the White River, manage using the Wild and Scenic Study River Standards and Guidelines in MA 9.2. (G) (Forest Plan, pp. III-6.1-6)
- Trail locations will avoid concentrated areas of wild lupine and other nectar plants utilized by the KBB and other associated sensitive species. (S) (Forest Plan, pp. III-6.1-6)
- Vegetative management will follow the KBB habitat management strategy. (G) (Forest Plan, pp. III-6.1-9)
- All Forest Service roads will be closed to public motorized vehicle use except those users authorized under easement or permit. (G) (Forest Plan, pp. III-6.1-9 and 6.1-11)
- The Forest roads paralleling the White River and the North Branch of the White River known as the River Road may be opened seasonally for the firearm deer season, November 15 to 30. (G) (Forest Plan, pp. III-6.1-9)

(1.3d) Management Area 9.2 (Study Wild and Scenic Rivers)

There are approximately 3,640 acres of National Forest System lands within this Management Area in the Project Area. A portion of the White Study Wild and Scenic River is within the Project Area boundaries.

Purpose: Lands in holding until studies and environmental documentation for designation are completed. Management activities provide for Wild and Scenic River attributes and values (Forest Plan, pp. III-9.2-1).

Goals and Objectives: Maintain the unique characteristics of each river for which they were identified and complete the evaluation of these rivers (Forest Plan, pp. III-9.2-2). **The proposal for this project does not include the evaluation of the White River for potential inclusion in the National Wild and Scenic River System.** However, the impacts of proposed actions on the unique characteristics, high recreational and cultural resource value, will be considered and described in Chapter 3.

(1.4) Purpose and Need for the Proposal

The comparison of a resource's existing condition with the desired condition described in the Forest Plan, when there are differences, identifies a need for action. These differences, in combination with the goals and objectives and standards and guidelines described above, were used in the development of the Purpose and Need for the SER Project.

(1.4a) Karner Blue Butterfly Habitat – Management Areas 4.4, 6.1, and 9.2

Existing Condition: There are currently 72 known sites occupied by KBB within the Project Area, encompassing approximately 432 acres. An additional 522 acres of openings that are unoccupied by KBB also exist within the Project Area. The existing openings within the Project Area are being encroached upon and in some cases filled-in by fire intolerant woody and shade tolerant herbaceous species that shade-out or out-compete the desired savanna barrens plants (such as wild lupine or bluestem). Forested areas within the Project Area are increasing due to fire suppression and natural succession; increasing habitat for species dependent on mid- to late-successional habitat types. The animal species dependent on savanna/barrens and plant diversity have declined from historic levels, but RPSS are still present. Potential habitat may also exist in this area for the Indiana bat (another Federally endangered species). Non-native invasive plants (NNIS) exist throughout the Project Area.

Desired Future Condition: The amount of habitat suitable for occupation is increased to 640 acres at any given time within each metapopulation area (Otto and White River). Connectivity exists between occupied areas so the average nearest-neighbor distance is 1 km. Areas adjacent to occupied KBB habitat are suitable for occupation. The amount of encroachment by plant species considered undesirable for savannas/barrens habitats in the existing openings is reduced. Habitat for mid- to late-successional species is reduced. There is an increase in the diversity of plant and animal species that are dependent on savannas/barrens habitats. Populations of RPSS are maintained or increased. Management within potential habitat for Indiana bat follows the Standards and Guidelines outlined in the Forest Plan. The level of NNIS infestation is reduced.

Need: Manage permanent openings and/or grasslands to meet species viability needs (Forest Plan). Maintain existing habitat and restore suitable habitats by converting forested stands into savanna for the KBB in the Muskegon Recovery Unit. Maintain sufficient habitat to meet the recovery goals for viable KBB populations within the Otto and White River Metapopulation Areas. Continue savanna/barrens restoration projects within the Muskegon Recovery Unit with emphasis on connectivity between KBB subpopulations, expansion of existing sites, and enhancing attributes within sites (USDI 2003).

Measure: Acres of suitable KBB habitat created.

(1.4b) Recreation

Management Area 6.1 - Semiprimitive Nonmotorized

Existing Condition: Recreational use (such as dispersed camping, hunting, and horseback riding) is high throughout the area and impacts to occupied KBB habitat from these activities are occurring. The majority of roads under the jurisdiction of the Forest Service in the White River Semiprimitive Nonmotorized Area (WRSNA) are currently or seasonally closed. County roads are present and open throughout the WRSNA. Private in-holdings exist and are scattered throughout the WRSNA; access to the in-holdings is maintained via a permit issued by the Forest Service. Illegal ORV riding and wood cutting occurs, though minimal.

Desired Future Condition: The WRSNA remains a popular area for recreation, though the impacts from recreation on KBB habitat are reduced. Motorized access is limited, as all of the roads under the jurisdiction of the Forest Service are closed. Private in-holdings are present and access is maintained by permit. Evidence of management activities is visible and occurs in support of the recovery of the KBB. Users are aware of the services provided, such as visitor information, and restrictions and controls are evident. Illegal ORV use and wood cutting are eliminated.

Need: Protection of KBB habitat while providing a semiprimitive, nonmotorized recreational experience.

Measure: Miles of nonmotorized trail not in occupied or suitable KBB habitat.
Number of designated campsites not in occupied or suitable KBB habitat.
Number of designated parking areas not in occupied or suitable KBB habitat.
Total miles of road left open to provide for recreational access.

Management Area 4.4 - Rural

Existing Condition: Dispersed recreation use (such as camping, hunting, and fishing) occurs throughout this area. In the east and south, there is concentrated use associated with the North and Main branches of the White River. This use has led to several sites being severely impacted by eroded and/or compacted soils. Away from the river, recreation use is less concentrated. In some areas, roads and concentrated use are occurring in potential or occupied KBB habitat.

Desired Future Condition: Dispersed recreation still occurs throughout the area, consistent with the Standards and Guidelines established in the Forest Plan (2006). Roads and recreation use do not negatively affect existing KBB populations or the potential to restore habitat for the KBB.

Need: Provide for dispersed recreational opportunities consistent with KBB habitat creation and maintenance.

Measure: Total miles of road left open to provide for recreational access.

(1.4c) Forest and Ecosystem Health – Management Areas 4.4, 6.1, and 9.2

Existing Condition: The productivity of some forested stands is limited. A variety of forest types exist within the Project Area. Within the red pine stands, competition exists for sunlight, water, and nutrients; reducing the growth potential of individual trees. Understory vegetation in many of these stands is limited or non-existent. There is a lack of aspen age-class diversity within the Project Area. In the over-mature aspen stands, individual trees are dying and the stands are slowly converting to mixed hardwoods. Stands within the White's Wild and Scenic River Study Area are consistent with old growth. Hazardous fuels (Condition Class 3) are located in areas where private property and National Forest System lands are intermixed. NNIS are present in areas that are proposed for management activities.

Desired Future Condition: Increased productivity and diversity is present in the remaining forested stands. A variety of forest types exist within the Project Area. Competition for sunlight,

nutrients, and water is reduced within red pine plantations, promoting an increased rate of growth in the remaining trees. Understory vegetation, such as forbs and shrubs, become established. The remaining areas of aspen are maintained and age-class 0-10 yr is increased throughout the Project Area. The characteristics of stands within the National Wild and Scenic Study River Area are consistent with old growth. Hazardous fuels are reduced in the areas where private lands and National Forest System lands are intermixed. The persistence and spread of NNIS does not occur as a result of other management activities.

Need: Identify quality sites and opportunities for intensive timber management practices commensurate with the site's ecological capabilities. Sustain forest health and individual tree growth rates and increase vegetative diversity in red pine stands. Regenerate aspen in order to maintain the aspen component in commercial forest stands and provide younger aspen age classes. Emphasize hazardous fuels treatment in wildland urban interface and areas where private property and National Forest System lands are intermixed. Identify and appropriately treat areas of NNIS infestation prior to conducting other management activities.

Measure: Acres of red pine thinning and aspen clearcutting.

Acres of hazardous fuel reduction.

Acres of NNIS treatment.

(1.5) Proposed Actions that Address the Need for Proposal

Based on the Purpose and Need for the SER project, the Interdisciplinary Team (IDT) proposed the following activities to move the Project Area from the Existing Condition to the Desired Future Condition. These activities were identified as the Proposed Action for the Savanna Ecosystem Restoration project in the Public Scoping Letter (December 10, 2009).

(1.5a) Karner Blue Butterfly Habitat – Management Areas 4.4, 6.1, and 9.2

Savanna creation would occur on approximately 2,950 acres over the next ten years using a combination of mechanical equipment, hand tools, prescribed burning, and/or spot application of basal or foliar spray herbicide using ground-based application tools. The objective is to reduce tree/shrub density to an average 10-25% canopy cover (open) within 70-80% of treated areas and to an average of 25-60% cover (woodland) within 20-30% of treated areas. These treatments would also be used to reduce the cover of undesired vegetation less than 2 meters in height to an average of <25% cover within a treated area.

Of the 2,950 acres, approximately 2,315 acres are currently considered forested. These include approximately 1,491 acres of black oak, 320 acres of oak/aspen mix, 249 acres of red pine/oak mix, 106 acres of aspen, 71 acres of red pine, 26 acres of white oak, 24 acres of mixed oak, 19 acres of Scots pine, and 9 acres of jack pine. Reducing overstory and understory cover would promote the growth of wild lupine, other nectar plants (such as black-eyed Susan and horsemint), and native grasses (such as big bluestem, little bluestem, and Indian grass). However, additional treatments might be required to achieve the desired coverages of native grasses and flowering plants:

- If wild lupine cover is less than or equal to 5% and/or cover of other nectar plants is less than or equal to 5%, seeding/planting activities would be conducted to establish 5-15% cover of wild lupine and other nectar plants.
- If desired savanna plant species presence is less than or equal to 60% and or non-native invasive plant species is greater to or equal than 5%, seeding/planting activities would be conducted to establish greater than 60% presence of desired savanna plant species and less than 5% presence of non-native invasive species.

The site preparation for the seeding/planting activities would include a combination of soil scarification, mechanical vegetation removal, and or strip/patch spot application of basal or foliar spray herbicide using ground-based application tools. Seeding/planting would occur in a series of seed patches on no more than 10% of the total acreage of treated area. Seed patches would be created to serve as inoculum seed sources for the remainder of the treated area. Herbicide application would be used during site preparation to remove or suppress non-native invasive species. If possible, seeding/planting would occur immediately following site-preparation activities.

Not all sites would receive the same treatments. For example, relatively open forests with remnant native grass and/or nectar plant populations would require fewer treatments to achieve the desired future condition as compared to dense forests. An adaptive management approach would be used to determine the total acreage receiving each treatment and the order in which treatments would be applied. The amount and intensity of actual restoration activities would be based on the results of monitoring.

(1.5b) Recreation

Semiprimitive Nonmotorized - Management Area 6.1

Camping within the WRSNA would be limited to approximately 11 designated sites along the open County-maintained roads. A designated trail of approximately 16 miles would provide access to the WRSNA for horseback riding and other non-motorized recreational activities. Approximately 10 miles of Forest System roads in the semiprimitive area would be closed. Special-use permits for motorized access would be provided to private landowners with property within the WRSNA.

Rural - Management Area 4.4

The roads throughout this area would be managed according to the Motor-Vehicle Use Map (MVUM, 2009), with the exception of the closing of one Forest Road and one spur road (a combined total of 1.4 miles) that would occur to protect occupied or potential KBB habitat. Roadside barriers would occur in other locations throughout the area to discourage motorized cross-country travel.

(1.5c) Forest and Ecosystem Health – Management Areas 4.4, 6.1, and 9.2

There would be approximately 735 acres of red pine thinning and 49 acres of oak/aspens regeneration to increase productivity and maintain vegetative diversity throughout the Project

Area. With the exception of currently occupied KBB sites, no timber harvesting would occur within the National Wild and Scenic River Study Area. While prescribed fire would serve as a tool to maintain all of the areas proposed for savanna creation and restoration, there would be an additional 1,050 acres adjacent to these areas that would be incorporated to mimic historic landscape burns.

(1.6) Scoping and Public Involvement

Scoping is a process that is used to gather comments about a site-specific proposed federal action to determine the scope of issues to be addressed and for identifying unresolved issues related to the proposed action (40 CFR 1501.7). The Forest Service uses public involvement and an IDT of resource specialists to determine the issues of concern and develop possible solutions. Opportunities for comments enable concerned citizens, resource specialists from other agencies, and local governments to express their ideas and viewpoints.

A scoping letter dated December 10, 2009 was mailed to approximately 1,011 interested parties, including county and township officials, businesses, members of the general public, industry, property owners within the Project Area, environmental groups, and tribal representatives. The scoping letter described the existing condition of the resources within the Project Area and outlined the Savanna Ecosystem Restoration Proposed Action. Public involvement for the project also included listing of the project in the HMNFs' Schedule of Proposed Actions as well as posting the scoping documents on the Forest's website. The scoping letter asked for any issues relevant to the site-specific proposal. During the scoping period, approximately 114 responses were received. On January 19, 2010, the ID Team met to discuss the comments received, identify issues in those comments, and discuss the analysis process for the project. A summary of the responses received in response to scoping and how they were addressed can be found in Appendix B.

(1.7) Issues

Issues result from discussion, debate, or disagreement regarding the effects of the proposed activities. Relevant issues for particular projects are identified from the comments received during the scoping process. In project development, relevant issues may also represent compromises between resource areas. In order to provide concise analysis, the agency distinguishes between issues and divides them into two groups.

Group 1 are issues that are not-relevant to implementing the Proposed Action. These may include: 1) Issues outside the scope of the Proposed Action; 2) Resolved by Forest Plan direction, laws, regulations, or higher level decisions; 3) Issues that do not apply to the decision being made; or 4) Are opinions unsupported by scientific fact or factual evidence. **Group 2** are issues that are relevant to implementing the Proposed Action. These include issues that require the development of an alternative to the Proposed Action, some mitigation or conservation measure be applied, consideration of location in alternative design, or that the issue be addressed in the effects analysis.

Using comments received during scoping, the ID Team developed a list of issues to address in analysis, mitigation measures, or alternative design and/or development. The issues addressed by alternative development are:

- Horse use within the White River Semiprimitive Nonmotorized Area.
Measure: Miles of trail within the semiprimitive area.
- Motorized access throughout the Project Area.
Measure: Miles of Forest System roads open.

(1.8) Resource Areas of Analysis

Giving consideration to the relevant issues, in conjunction with the proposed actions, the IDT developed the following list of resource areas for analysis in this project.

Biological Resources

- Woody Vegetation
- Herbaceous Vegetation
- Wildlife
- Fisheries and Watershed

Physical Resources

- Air Quality
- Fuels
- Soils

Social Resources

- Recreation
- Scenery Management
- Transportation
- Economics
- Heritage Resources
- Environmental Justice
- Irreversible and Irretrievable Commitment of Resources

(1.9) Decision to be Made

Based on the analysis of the environmental effects in this EA, the Responsible Official (the District Ranger), must decide whether or not to implement an action alternative, a modified action alternative, or the current management alternative. If an action alternative is selected, it would include a decision on the amount, type, and location of these activities. To aid in this process, a range of alternatives for this project have been developed by the ID Team. These alternatives are discussed in detail in Chapter 2. The alternative that is selected would be implemented within approximately ten years of the Responsible Official signing the Decision Notice for this project.

(1.10) **Availability of the Planning Record**

An important consideration in preparation of this EA has been the reduction of paperwork as specified in 40 CFR 1500.4. The objective is to furnish enough site-specific information to demonstrate a reasonable consideration on the environmental impacts of the alternatives and how any impacts might be mitigated. The Planning Record contains detailed information used in the analysis and is available at the Baldwin-White Cloud Ranger Station.

This page left intentionally blank.

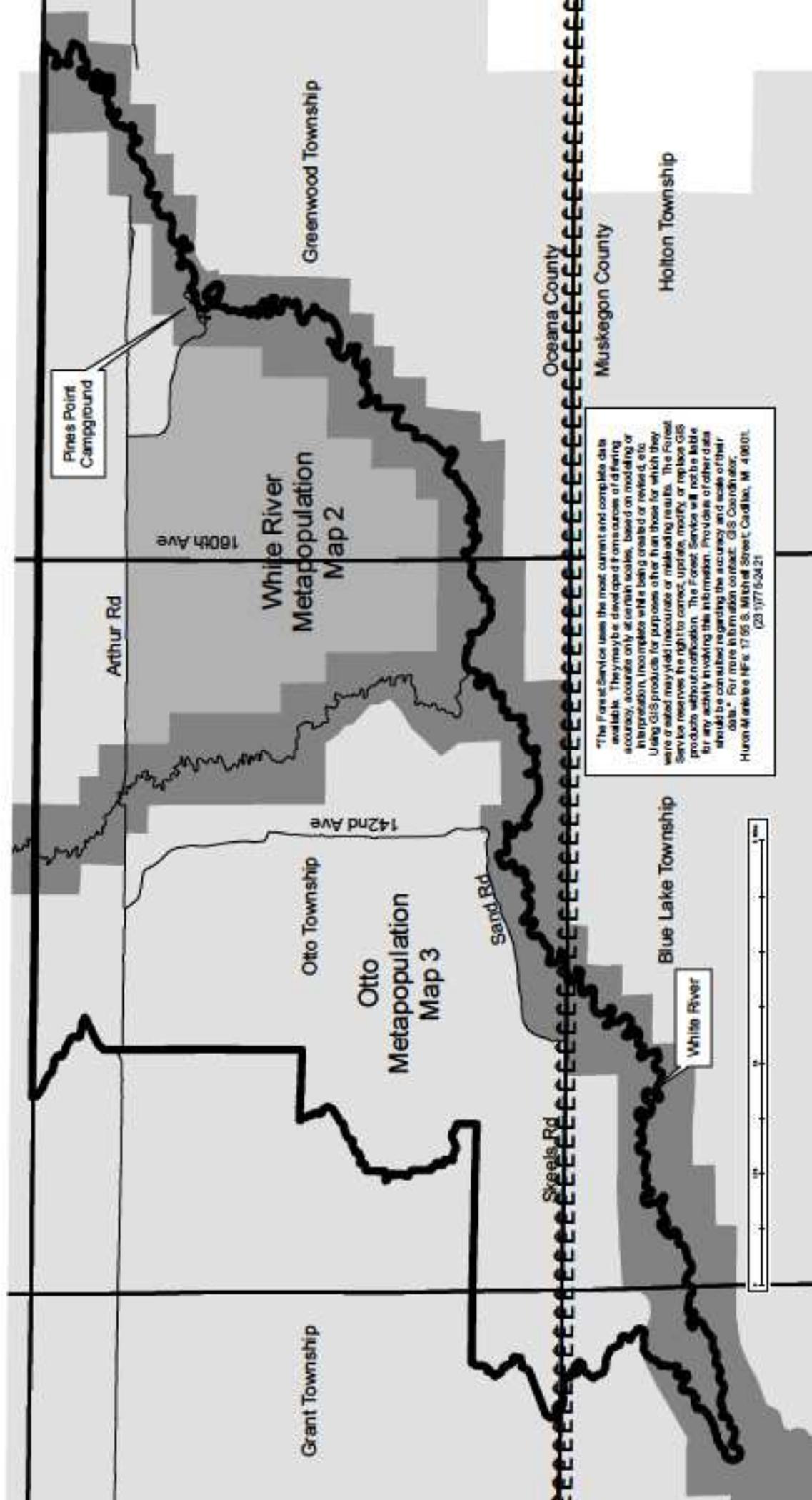
Savanna Ecosystem Restoration Project Project Vicinity

Map 1

Management Activities would occur only on National Forest System lands.

Legend

- Project Area Boundary
- Management Areas
 - 4.4, Rural
 - 6.1, Semi-primitive Non-motorized Areas
 - 9.2, Wild and Scenic Study Rivers
- County Line
- Townships
- Reference Roads



"The Forest Service uses the most current and complete data available. They may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. The Forest Service will not be liable for any activity involving this information. Providers of other data should be consulted regarding the accuracy and scale of their data." For more information contact: GIS Coordinator, Huron Airline Inc. 1755 S. Mitchell Street, Cadillac, MI 49601. (231) 775-3421