

# CHAPTER 1

## PURPOSE OF THE LAND AND RESOURCE MANAGEMENT PLAN

### 1.1. INTRODUCTION

The Land and Resource Management Plan (also referred to as the Plan or Prairie Plan) guides all resource management activities on the Midewin National Tallgrass Prairie, establishes management standards and guidelines, describes different resource management practices, and the availability and suitability of lands for different kinds of resource management. The Plan sets direction for managing the land and resources of the Midewin National Tallgrass Prairie.

This Prairie Plan was prepared in accordance with the National Forest Management Act (NFMA), the National Environmental Policy Act (NEPA), the Endangered Species Act and other laws and regulations, including the Illinois Land Conservation Act (Pub. L. No. 104-106) under which Congress established Midewin National Tallgrass Prairie (Midewin) in 1996.

This Prairie Plan embodies the provisions and implementing regulations of NFMA, and other guiding documents. The land use determinations, goals, objectives, standards and guidelines constitute a statement of management direction for Midewin National Tallgrass Prairie. The projected outputs, services, and rates of implementing these activities will depend on the annual budgeting process, additional public involvement, and subsequent site-specific project environmental analysis.

This Prairie Plan focuses on the decade from 2002 to 2012. The plan will be revised at the end of that decade or whenever conditions have changed significantly.

The Prairie Plan is accompanied by a Final Environmental Impact Statement (FEIS), which describes the analysis used in formulating the Plan. The Prairie Plan and the FEIS should be reviewed concurrently. Together, these two documents will provide strategic direction. The Prairie Plan is based on the Preferred Alternative described in the Final Environmental Impact Statement.

### 1.2. DECISIONS MADE IN THIS PLAN

The primary decisions made in this Prairie Plan are:

- Establishment of multiple-use goals and objectives [36 C.F.R. §219.11 (b)];
- Establishment of management requirements (guidance or standards and guidelines) to fulfill requirements of NFMA applying to future activities

(resource integration requirements of 36 C.F.R. §219.13 to 219.26 and the requirements of 36 C.F.R. §219.27);

- Establishment of management area direction applying to future management activities in that management area [36 C.F.R. §219.11(c)];
- Monitoring and evaluation requirements [36 C.F.R. §219.11(d)].

NOTE: Prairie lands at Midewin are not considered forestland suitable for timber management per 36 C.F.R. §219.3. Likewise, because of the relatively small size and highly altered condition of Prairie lands, no recommendations to Congress are being made for potential wilderness or wild and scenic rivers.

Direction from existing decisions for interim management activities per the Illinois Land Conservation Act is consistent with, and is hereby incorporated into this Prairie Plan.

Specific activities and projects will be planned and implemented to carry out the direction in this Plan. Proposed schedules of some activities and projects are included in Appendix F. This is a dynamic schedule that will be frequently updated. Environmental analyses will be performed on most of these projects and activities and will be tiered to the Final Environmental Impact Statement for this Prairie Plan. All future plans and administrative activities will be based on this Prairie Plan (or the Plan may be amended – See Chapter 5-Implementation).

### **1.3. RELATIONSHIP OF THE PRAIRIE PLAN TO OTHER DOCUMENTS**

The Prairie Plan is the result of extensive analysis documented in the **Final Environmental Impact Statement (FEIS)**. The FEIS describes six alternative management strategies for the Midewin National Tallgrass Prairie, and discloses the physical, biological, social and economic consequences of these alternatives. The FEIS includes a glossary of technical terms and acronyms used in the Prairie Plan, a list of references, and several appendices pertinent to the analysis process.

**1.3.1. The National Forest Management Act (NFMA)** requires that National Forest System lands (including Midewin National Tallgrass Prairie lands) be managed for a variety of uses on a sustained basis to ensure in perpetuity a continued supply of goods and services to the American people. NFMA regulations also establish extensive analytical and procedural requirements for developing, revising, and significantly amending land and resource management plans.

**1.3.2. The National Environmental Policy Act (NEPA)** ensures that environmental information is made available to public officials and citizens before decisions are made and before actions are taken. This disclosure helps public officials make decisions based on an understanding of environmental consequences, and take actions to protect, restore and enhance the environment. Essential to the NEPA process are accurate scientific analyses, expert agency input, and public involvement, all of which have been part of this

planning process.

**1.3.3. The Illinois Land Conservation Act (ILCA)**, is the enabling legislation that established the Midewin National Tallgrass Prairie to be managed as part of the National Forest System and it provides specific and unique direction for managing the Midewin National Tallgrass Prairie.

This law is incorporated in all prescriptions and standards and guidelines. The specific language of the law is not repeated. This Plan takes the specific intent of the law and translates that into management direction or activities.

#### **1.4. RELATIONSHIP TO OTHER NATIONAL AND REGIONAL PLANS**

This Prairie Plan is the result of extensive public involvement and cooperation with other federal, state, and local agencies, and extensive analysis, which is addressed in the accompanying Final Environmental Impact Statement (FEIS). The FEIS discusses the planning process and the analysis procedures used to develop this Plan. It also describes and analyzes alternatives to this Plan, and discusses how the public issues that were an integral part of the planning process, helped shape the alternatives.

Other national, regional or local plans that have helped shape management direction at Midewin include:

- USDA Forest Service Strategic Plan (2000 Revision)
- 1999 Biodiversity Recovery Plan for the Chicago Wilderness
- 1999 Wetland Restoration Plan for Midewin prepared by The Wetlands Initiative
- 1998 Strategic Plan for the Prairie Parklands
- 1997 Streams and Watersheds of the Midewin National Tallgrass Prairie, Openlands Project
- 1997 Midewin Trails Report on their Conceptual Design prepared by Midewin Trails Working Group and Openlands Project
- 1997 Metra Southwest Corridor Study
- 1995 Arsenal Land Use Concept Plan prepared by the Joliet Arsenal Citizens Planning Commission
- USDA Forest Service National Recreation Strategy

The 1997 Interim Record of Decision prepared by the Army for the Joliet Army Ammunition Plant (Joliet Arsenal) also affects lands now administered by the Forest Service at Midewin. The Department of Defense will be preparing additional analysis and a Revised Record of Decision with standards for cleanup level for contaminated soils. Actions implemented under this Plan will tier to the Revised Record of Decision.

### **1.5. RELATIONSHIP TO NEW FOREST SERVICE PLANNING RULES**

This Prairie Plan was developed under the 1982 version of the Forest Service planning rules as stated in C.F.R. §219. The Forest Service is developing a new set of planning rules yet to be adopted. Subsequent revisions or amendments to this Plan will be developed under applicable planning rules.

### **1.6. INTEGRATION WITH FOREST SERVICE DIRECTIVES SYSTEM**

Relevant management direction in the Forest Service Directive System, including the Forest Service Manual (FSM) and the Forest Service Handbook (FSH), is part of management direction for Midewin and is not repeated in this Plan. Management direction also includes applicable laws, regulations and policies, although they may not be restated in this Prairie Plan.

### **1.7. PLAN ORGANIZATION**

This Land and Resource Management Plan is organized into several chapters.

- Chapter 1 briefly describes the Midewin National Tallgrass Prairie, summarizes the current management situation, and explains the basic principles of management at Midewin.
- Chapter 2 outlines the desired conditions and presents management direction through the goals and objectives.
- Chapter 3 describes the management area prescriptions.
- Chapter 4 lists the standards and guidelines.
- Chapter 5 discusses how the Prairie Plan will be implemented.
- Chapter 6 is the monitoring and evaluation plan.
- A set of maps showing management area boundaries and other designations are incorporated as part of this Plan

The appendices include the Proposed and Probable Management Practices to Implement the Prairie Plan, Research and Information Needs, a Description of Desired Habitats and Species, and the Recreation Opportunity Spectrum.

### **1.8. MANAGEMENT AREAS**

The Prairie Plan makes land allocations or zones the Prairie for certain types of uses. The Prairie Plan identifies two Management Areas.

- Management Area 1 applies to those lands managed primarily to restore, maintain, and enhance the Tallgrass Prairie ecosystem and grassland bird habitat.
- Management Area 2 applies to the lands designated for administrative uses (buildings, parking lots, seed production beds) and where recreational sites would be built (campgrounds, picnic areas).

Management Prescriptions for each Management Area are the practices and the intensity of activities selected to meet the goals and objectives. Management

prescriptions give general direction on what may occur within the area allocated. The management prescriptions include standards and guidelines; both those that apply Prairie-wide and those that apply only to a specific Management Area.

## **1.9. MANAGEMENT DIRECTION**

The Prairie Plan provides strategic direction for managing Midewin National Tallgrass Prairie. The primary management direction consists of the following integrated components:

**1.9.1. Desired Conditions, Goals and Objectives (Chapter 2)** – Goals are broad statements that describe desired conditions to be achieved sometime in the future. Objectives are concise, time-specific statements of measurable planned steps taken to accomplish a goal. These objectives are not annual targets that are dependent upon annual budgets.

**1.9.2. Management Area Prescriptions (Chapter 3)** – The two management areas have unique prescriptions. The maps in Figure 2 show what portions of the Prairie are allocated to each management area

**1.9.3. Standards and Guidelines (Chapter 4)** - As mentioned above, some standards and guidelines apply to the entire Midewin National Tallgrass Prairie and some apply only to an individual Management Area. Adherence to standards is mandatory. A project that varies from a relevant standard cannot be authorized unless the Prairie Plan is first amended. Guidelines describe a preferred or advisable course of action. Deviation from guidelines does not require that the Prairie Plan be amended, but the reasons for such deviation must be documented in the project decision.

**1.9.4. Implementation (Chapter 5)** – Implementation is the process of using the management direction in combination with site-specific resource conditions and public input, to move towards the desired goals and objectives.

**1.9.5. Monitoring Plan (Chapter 6)** – Monitoring provides the ability to determine if goals and objectives are being achieved and if progress is being made toward attaining the desired future conditions.

Together, these components of the Prairie Plan provide a framework that governs location, design, and scheduling of all management activities at Midewin. Further project level planning will be completed to achieve implementation of this Plan.

## **1.10. LOCATION**

The Midewin National Tallgrass Prairie is located in northeastern Illinois, about 45 miles southwest of Chicago, and encompasses the largest parcel of protected open space in northeastern Illinois. It lies 15 miles south of Joliet and 3 miles north of Wilmington along Illinois Route 53. It was established on February 10,

1996 under the Illinois Land Conservation Act of 1995 (PL 104-106) from part of the former Joliet Army Ammunition Plant. The law also established an adjoining national veterans cemetery, two industrial parks, and a county landfill from the former Joliet Army Ammunition Plant. On March 10, 1997, the US Army transferred 15,080 acres to the Forest Service establishing Midewin National Tallgrass Prairie. Figure 1 is a vicinity map of Midewin.

### **1.11. DESCRIPTION OF MIDEWIN NATIONAL TALLGRASS PRAIRIE**

The Forest Service administers the lands known as the Midewin National Tallgrass Prairie. Public access is presently restricted due to the Army's ongoing cleanup operations. The Army still owns a number of tracts or inholdings within the Prairie. Much of the perimeter is fenced with a high security fence constructed by the Army and all access points are gated and locked as required to meet continued security needs for Army property and to provide for public health and safety. A portion of Midewin is opened for deer hunting each fall in coordination with the Illinois Department of Natural Resources. Other public access has been limited to escorted tours for the general public, or supervised volunteer and environmental education programs.

Less than three percent of the land transferred to the Forest Service is covered with remnants or patches of native vegetation. Initial restoration activities were begun in 1997 as authorized by the establishing legislation. A native plant seed production area was developed and planted with prairie plants and seeds, along with fields of different prairie grasses as seed sources for the huge restoration job ahead. Several wetland restoration projects also began in 1999.

Over 10,000 acres of the land transferred from the Army was under leases to area farmers for agriculture, including cultivation of corn and soybeans, hay production, and grazing. All Army agricultural leases were converted to Forest Service Special Use permits in 1997. As intended by the legislation, agricultural use will be phased out as restoration activities progress.

Midewin is divided into an "east side" and a "west side," with Illinois Highway 53 dividing the two dominant land types. The west side includes approximately one-third of Midewin, most of which is characterized by a level outwash plain with more shallow soils. Approximately two-thirds of Midewin lies on the east side of Highway 53, where the landscape is predominantly a rolling ground moraine (till plain) where the soils are deeper. The land type division defines some important differences in potential habitat and needs for protection of habitat. For example, the rare dolomite prairie habitat, home for many of the sensitive species, lies entirely within the west side.

Midewin is the key parcel of the Prairie Parklands, an area of approximately 40,000 acres made up of public, private, and corporate lands in Will and Grundy counties that are significant for habitat conservation. The Illinois Department of Natural Resources administers the Des Plaines Conservation Area, Goose Lake

Prairie State Natural Area, and Heidecke Lake Fish and Wildlife Area; Will County manages a number of Forest Preserves within the Parklands; and corporate owners of Parkland sites include Commonwealth Edison, General Electric, Exxon-Mobil, BP, Stepan, and Dow Chemical. In all, there are 22 nearby sites owned by State, County, and local governments, corporations, and interested private landowners located within 12 miles of Midewin. The map in Figure 1 shows the location of the various parcels in the Prairie Parklands.

### **1.12. SUMMARY OF THE “ANALYSIS OF THE MANAGEMENT SITUATION”**

The planning team made an assessment of the potential supply and demand of various products (e.g., habitat), and services (e.g., recreation opportunities such as trails) that Midewin could provide. Given biological and legal constraints, the team considered the maximum amount of unique habitat and recreational opportunities that could be feasibly and safely provided at Midewin. The team evaluated the unique ability to provide habitat for a number of sensitive plants and animals as the largest protected open space parcel in northeastern Illinois, and to offer new recreation and environmental education opportunities for people. This evaluation was documented in the 1999 “Analysis of the Management Situation” (AMS). The document summarized the maximum suitable acres of habitat restoration for sensitive grassland birds such as the upland sandpiper, and other sensitive species that rely on more native prairie habitats.

#### **1.12.1. Biodiversity of flora and fauna**

Midewin National Tallgrass Prairie provides habitat for a rich assemblage of plants and animals including over twenty species listed by the State of Illinois as watch list, threatened, or endangered species. Over 100 bird species nest and breed at Midewin, and an additional 68 bird species utilize the habitat either during migration or as a winter range. Fifteen reptile and eight amphibian species have been inventoried, with 27 mammal species, both game and non-game, and a total of 53 fish species. The diversity of flora includes at least 600 plant species identified and documented including a number of invasive and/or exotic plant species.

#### **1.12.2. Threatened, Endangered, and Sensitive species**

Lands at Midewin provide habitat for a number of species recognized as sensitive at both the state and regional levels, and for three species listed as threatened or endangered at the federal level. The extent and diversity of habitats within Midewin provide for some of the most significant wildlife habitat in northeastern Illinois. The vast acreage of short grassland habitat at Midewin supports the largest population of upland sandpiper in Illinois. It is also a refuge for other grassland bird species whose numbers are declining in the Midwest due to loss of habitat. The rare dolomite prairie found west of Deer Run Industrial Park and the recently discovered population of the leafy prairie clover which is on the federal list of endangered species, are also of ecological importance.

### **1.12.3. Natural communities**

Many of these sensitive species can be found in the natural communities that have survived as remnants or small parcels ranging in size from less than one-half an acre of wet floodplain forest, up to 119 acres of mesic upland forest. Natural community remnants total only 400 acres out of over 16,000 acres at Midewin. The Nature Conservancy based on an organism's or community's rarity and endangerment both globally and statewide ranks these natural communities. The wet-mesic and mesic dolomite prairie communities are ranked as very rare and endangered globally and in the state of Illinois or as G1/S2. These communities are rarely found elsewhere in the state, in the region or across the country.

### **1.12.4. Recreation trends and expected demand**

The analysis examined trends and potential demand for recreation opportunities and the AMS highlighted those opportunities considered to be compatible with ecosystem restoration. National trends in outdoor recreation show that bird - watching, hiking, backpacking, and primitive area camping are some of the fastest growing activities. Trends and projections for Will County and the greater Chicago metropolitan area indicate that more people will take shorter trips, and demand less strenuous opportunities to appreciate and learn about the natural environment. Currently, residents in Will County are demanding more trails for walking and bicycling. Recent visitor surveys in Will and Lake Counties show respondents preferring more opportunities in the following order of priority: wildlife observation, hiking trails, bike trails, fishing opportunities, picnic areas, and equestrian trails. Based on this preliminary demand information, the potential for new recreation development at Midewin includes trails for walking or hiking, bicycling and, on a more limited basis, horseback riding.

## **1.13. MANAGEMENT CHALLENGES**

### **1.13.1. Reducing fragmentation**

To provide habitat for a number of bird species, it will be necessary to reduce fragmentation by connecting large open grasslands. This will involve decommissioning unneeded roads, removing hedgerows and fencerows, and clearing open fields of woody vegetation. Then we need to continue managing these large areas from 500 to 3,000 acres in size, to provide prime habitat for a suite of grassland-dependent birds, including the upland sandpiper and bobolink that have lost habitat across the state. These large open grasslands will need to be maintained as relatively short grass (4-12 inches), especially during the nesting, breeding and rearing seasons in the spring and early summer.

**1.13.2. Upland sandpipers need for short grasslands**

Grassland birds are of particular concern because they have exhibited steeper and consistent declines in past 25 years than any other group of North American birds. The upland sandpiper is a species of high priority that breeds and nests at Midewin in expansive pastures of introduced or cool season grasses. Sandpipers are sensitive to the size of available habitat, and prefer large, open grassy areas. Midewin is the only remaining area with extensive upland sandpiper habitat in all of northeastern Illinois. As restoration of native upland prairie proceeds, the challenge will be to restore prairie habitat that the grassland bird species, especially the upland sandpiper, readily adapt to and utilize. Once land managers are assured that the upland sandpiper successfully nests and breeds in restored native prairie, they can begin converting more of the agricultural grasslands now dominated by Kentucky bluegrass, red top and clover, to more native tallgrass prairie vegetation. A mix of vegetation heights is necessary in tallgrass prairies to support a variety of species. Upland sandpipers prefer grass cover of shorter grasses, while others such as bobolinks prefer nesting vegetation of taller heights.

**1.13.3. Providing a balanced mix of habitat types**

Conservation of prairie birds and other wildlife requires a mosaic of habitat conditions across the site. Management for a mosaic of habitats will attempt to mimic the natural variation of tallgrass prairies to provide for the varying needs of sensitive species. A variety of grassland and prairie plant species should be encouraged to maximize biodiversity on the prairie. It will be a challenge to provide a balance and diversity of habitats; grasslands for the sensitive bird species, with a mix of restored and improved natural communities across the prairie, while keeping control of invasive and noxious plants that are not desired. Tools to maintain and sustain the ecosystem will include use of livestock to keep grasses short for bird habitat, mowing and prescribed burning, and the occasional use of herbicides to control noxious and invasive plants.

**1.13.4. Prairie seed production**

The large areas to be restored back to more natural communities will require immense quantities and varieties of seed and plants collected from local sources and grown on site. Hundreds of plant species will need seed collection, cleaning, then propagation, and planting or direct seeding. Two hundred and ten acres have been allocated as seedbeds and it will take several years before these beds are at full production.

**1.13.5. Watershed Management and Aquatic Resources**

Midewin includes lands in the watersheds of Jackson Creek, Grant Creek, Prairie Creek, and Jordan Creek, as well as some marshes. These are perennial water bodies with important aquatic communities. The creeks enter Midewin from upstream areas and connect to larger rivers downstream from Midewin. It will be a challenge to maintain and improve the aquatic conditions on Midewin,

particularly as changes in upstream or downstream conditions may affect the physical, chemical, or biological character of the waters on Midewin.

**1.13.6. Restoring a Disturbed Landscape**

The physical landscape and watershed of Midewin have been greatly modified through the past century and more. The degree of landscape restoration that can be achieved will depend in part upon the availability of material, financial, and human resources. Limitations on the availability of soil materials and financial resources may preclude restoration of the landscape to the fullest degree possible, e.g. restoration of soil profiles or unneeded roads and railway beds. Also, the hydrological patterns of Midewin lands and water bodies cannot be completely restored to natural conditions because of past irreversible changes. The limitations on the availability of resources will require planning and prioritization to determine when and where to invest resources and how to adjust to or correct the landscape to optimize benefits.

**1.13.7. Providing for human health and safety**

Providing a safe and clean prairie environment for workers, volunteers, students and visitors will be a major challenge. A significant portion of the lands transferred from the Army to the Forest Service will need extensive demolition, and cleanup or rehabilitation work before the general public can be permitted in without an escort or special permission. The work to provide a safe and healthy environment for prairie workers, visitors, volunteers and other users includes dismantling and removing many structures in various states of disrepair including rows of warehouses, bunkers, railroad trestles, bridges, water towers, and related infrastructure; site cleanup following demolition; improvement or decommissioning of an extensive network of deteriorating roads (118 miles), and of railbeds (116 miles); and reconstructing more natural stream channels and hydrologic patterns by removing drain tiles and filling ditches where feasible. Facilities and structures will first be evaluated as to whether they can be utilized and restored for future use consistent with purposes of this Prairie Plan.

The Forest Service will need to balance the risk of potential for harm to human health and safety with demand for access and use of the land. The Army's efforts to decontaminate a number of sites still owned by Army will continue for at least ten years. The Forest Service has a responsibility to maintain security in cooperation with the Army while these sites are cleaned up and public access is restricted for health and safety reasons.

In May of 1998, the Forest Service declared a moratorium on any ground disturbing activity at Midewin, until specific sites are cleared of any potential contaminant risks or hazards and/or the risks are mitigated, and the activity does not pose undue risk to prairie workers or the general public. To resolve this lingering soil contamination issue the Forest Service will continue working with the Army and other agencies to remediate soil contaminants to agree upon standards. Continued sampling, cleanup, and monitoring of the known highly

contaminated sites will be necessary as will limiting public access until these sites are remediated and the risk is reduced to safe levels.

Roads, trails and sites will need signs to make it easier for workers, volunteers, and visitors to find their way around the prairie. Forest Service law enforcement will continue to deal with illegal trespass, littering, and property damage, and will have additional duties and responsibilities for public safety as the site gradually becomes opened for more public use.

#### **1.13.8. Water Quality**

The activities and management practices conducted at Midewin may affect water quality in area streams and ponds and must ensure that these activities do not violate Water Quality standards of the Illinois Environmental Protection Agency.

#### **1.13.9. Adaptive management**

The entire process of prairie ecosystem restoration and habitat management should be conducted within the adaptive management framework, to be able to respond to new data or changes in species abundance levels. This flexibility allows for monitoring the progress of managing habitat and making needed modifications over time.

### **1.14. MANAGEMENT OPPORTUNITIES**

#### **1.14.1. Habitat maintenance through agriculture**

Through provisions in the ILCA, the enabling legislation, Midewin has the opportunity to continue agriculture land uses. Cultivated fields serve as a means of keeping large areas relatively weed free. Revenues for agricultural special use permits are deposited in a special restoration fund for Midewin. If left alone, the sites would quickly be overgrown with invasive and noxious weeds, making it more expensive and difficult to restore later. In the long run agricultural uses such as cultivation for row crops will be gradually reduced as the land is restored to more natural prairie communities. Grazing provides the best opportunity to maintain important grassland bird habitat, while providing local farmers pastures to raise livestock. The ILCA states that any agriculture use continued after 2016 must serve primary resource purposes.

#### **1.14.2. Wetland Restoration**

Wetlands are part of the mosaic that makes up the tallgrass prairie ecosystem. A network of drainage tiles from past agricultural use underlies much of Midewin. This tile system and other work done by the Army to straighten or channelize streams resulted in major changes to the original drainage patterns for the area, and subsequently affected the wetlands. To restore wetlands at Midewin will require much work to dismantle the drainage tiles and restore the drainage patterns in area streams.

**1.14.3. Public and private partnerships for conservation**

The Prairie Parklands provides a special opportunity for public and private partners to cooperatively protect, restore, and manage the largest prairie ecosystem east of the Mississippi River. Midewin is the largest, contiguous unit of land within the Prairie Parklands. Given its relatively large size compared to the other protected lands in northeast Illinois, Midewin can provide habitat opportunities unique to the Prairie Parklands that the smaller units may not be able to provide. In addition, the proximity of the other Prairie Parklands units provide opportunities for integrated planning such as the creation of trail linkages between the different units. Since many management issues span administrative boundaries and need to be addressed at a landscape scale, cooperation among the land managers within the Prairie Parklands is essential to successfully managing Midewin.

Midewin is a key partner in the Chicago Wilderness, a group of over 100 agencies and organizations interested in the recovery of the biodiversity found in the greater Chicago metropolitan area. With over 90 percent of the Chicago-area wetlands already destroyed by development, and only one-tenth of one percent of Illinois' original tallgrass prairie remaining in scattered small fragments, Midewin stands to be the only opportunity to make substantial contributions to restoration and recovery of these threatened resources. Thousands of citizens at the grassroots level and dozens of organizations are excited and hopeful that the prairie ecosystem at Midewin will be restored to its full habitat potential, and are eager to participate in prairie restoration.

**1.14.4. Research and education**

Midewin offers opportunities for researching prairie ecosystems, and new and improved methods of restoration. Midewin offers an opportunity for thousands of students and citizens from nearby rural, suburban, and urban communities across the Chicago metropolitan area to learn about the prairie environment and to take part in hands-on stewardship activities, thereby increasing their feeling of ownership and responsibility for conservation of public lands.

**1.14.5. Recreational development**

A restored prairie ecosystem may generate a large demand for recreational opportunities. To a large extent, the demand for recreation on Midewin is due to its proximity to Chicago and surrounding suburbs. Will County, in which Midewin lies, has a large population that is expected to almost double in the next 20 years. Demand for deer hunting opportunities at Midewin is increasing. Many people are curious to explore lands that have been closed to public use during the 50 years of the Joliet Arsenal's operation.

Midewin must plan for recreation development, provide a safe environment, and begin to open the site as recreation facilities are developed for a unique set of recreational opportunities that are compatible with the primary ecosystem goals.

Potential opportunities that are deemed suitable include a visitor center and environmental education center providing interpretive and education programs; camping at developed or less developed (dispersed) sites; picnic areas; a network of trails providing uses for hiking, bicycling, and equestrians; short interpretive loops for motorized access; and hunting/trapping and fishing opportunities.

**1.15. SUMMARY OF POTENTIAL OPPORTUNITIES FOR KEY RESOURCES**

The AMS listed the maximum and minimum suitable levels for several key resources. These were individually determined for each resource. The maximums for all resources could not realistically be achieved simultaneously. These figures are intended to be a range within which alternatives could be reasonably developed. The companion Final Environmental Impact Statement describes and analyzes six alternatives crafted from these maximum and minimum levels. Following is a brief summary from the AMS:

**Table 1.1: Summary of the Analysis of the Management Situation, July 1999**

<b>Resource or Opportunity</b>	<b>Minimum Level</b>	<b>Maximum Suitable</b>
Wetland Restoration	1,077 acres	6,968 acres
Grassland Habitat (unfragmented)	2,000 acres	16,000 acres
Trails	12 miles	150 miles
Campsites (Individual or group)	0 campsites (none currently)	46 campsites
Public access points	1 gate	27 gates
Short auto loop	0 miles	26 miles
Internal transportation system	0 miles	150 miles (currently)
Rail access	0 miles	6 miles

**1.16. BASIC PRINCIPLES OF MANAGEMENT AT MIDEWIN**

A set of fundamental principles guides management at Midewin National Tallgrass Prairie. Direction in the Prairie Plan adds to and qualifies these basic principles.

**1.16.1. Principle #1**

The Forest Service will follow laws and regulations and the policies in Forest Service Manuals and Handbooks that relate to managing National Forest System lands (Prairie lands) as well as direction in the Illinois Land Conservation Act.

**1.16.2. Principle #2**

The Forest Service will coordinate proposed management activities with the appropriate local, state, or tribal governments, and other federal agencies.

**1.16.3. Principle #3**

The Forest Service will actively collaborate with interested organizations, groups, or individuals.

**1.16.4. Principle #4**

The Forest Service will manage Midewin National Tallgrass Prairie for multiple-use as directed in the Illinois Land Conservation Act. The Midewin National Tallgrass Prairie is open for any legally allowed public activity or management actions, unless specifically restricted in law, policy, or the Land and Resource Management Plan. While allowed, such activities and actions may require administrative review and authorization before they are implemented.