



**File Code:** 1920-2-1

**Date:** September 12, 2007

Friends and Partners of Midewin,

I am pleased to announce the availability of the Environmental Assessment for the first amendment to the Midewin Land and Resource Management Plan (Prairie Plan). A scoping letter regarding this proposal was sent out in July 2006, asking for comments and initiating the formal comment period, per the National Environmental Policy Act (NEPA). The formal comment period concluded in August 2006, during which time we received three comment letters.

A second formal comment period is not a NEPA requirement, however I believe it would be constructive to allow additional review prior to making a decision. Although this is not an official comment period, we will accept and consider all comments received by the date indicated at the end of this letter.

This amendment establishes the new Management Area 3 (MA3) – Special Management Areas, adds lands conveyed by the Army that did not have a management area assigned by the original Plan, moves some lands from Management Area 1 (MA1) to the new MA3, and designates legally required utility corridors within Management Area 2 – Administrative & Developed Recreation Sites (MA2).

MA3 is needed for remediated lands received from the Army in 2005 with soil or groundwater restrictions that limit future land use. MA3 lands require monitoring and reporting to the Army and both the US and Illinois Environmental Protection Agencies. As part of the land transfer we accept the constraints identified in the Environmental Condition of Property (ECOP) as negotiated between the regulatory agencies, Army, and Forest Service. An ECOP is completed for each transfer package based on the actual site conditions at the time of transfer.

In my original scoping letter I intended to try to amend for all current and future Army transfers. We found that we could not accurately estimate land condition for future transfers. The “cleanest” lands were transferred in the original transfer in 1997. Several parcels included in the 2005 transfer, as well as future transfers, have unique conditions. In some cases contamination is limited to one building; in others the restrictions may cover the entire parcel. Future transfers with no restrictions will be adopted as MA1 per the Prairie Plan. Future transfers with restrictions will be designated for management as part of MA3 but may have specific requirements as identified in the ECOP from the Army which might trigger another amendment.

The 2005 land transfer from the Army included several parcels that were a part of the lands identified in Section 2916 of the Illinois Land Conservation Act. At the time of the legislation and Prairie Plan those lands were considered the most contaminated and we did not know when they would be offered or if we would accept them. Because of that they were precluded from the Prairie Plan. Since that time the Army has continued testing and we accepted transfer of 861 acres of Section 2916 lands in 2005. Since we did not identify which management area would apply to Section 2916 lands in the Plan we will do so in this amendment.



Once we identified the need for MA3, and that groundwater management zones and soil restricted areas would be part of MA3, it became apparent that some lands would need to be shifted from MA1 to MA3 in order to be consistent. A total of approximately 710 acres will be changed from the original Plan. We will continue restorations in these areas but they may require special consideration and other land uses may be limited until the groundwater has reached desired standards.

The designation of utility corridors is required by the Energy Policy Act of 2005. Through this amendment I propose to identify several existing powerline and pipeline corridors as official utility corridors. By this designation it is clear that any future utility development will be located and designed to protect the fragile remnant ecosystems and newly restored prairie areas from further fragmentation or degradation.

The Environmental Assessment for this Midewin Prairie Plan Amendment is available online at <http://www.fs.fed.us/mntp>.

Please provide written comments by October 12, 2007. When finalized, this proposal will be subject to appeal pursuant to 36 CFR 217. No additional notification of this amendment will be sent unless specifically requested. Comments may also be sent via email to [comments-eastern-midewin@fs.fed.us](mailto:comments-eastern-midewin@fs.fed.us).

If you have any questions regarding this proposal or would like additional information, please contact Mary Honer, 30239 South State Route 53, Wilmington, IL 60481 or (815) 423-6370.

Thank you for your continued interest in the Midewin National Tallgrass Prairie.

Sincerely,



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LOGAN LEE,  
Prairie Supervisor



United States  
Department of  
Agriculture

Forest  
Service

Eastern  
Region

September 2007



# **Environmental Assessment**

## **Land and Resource Management Plan (Prairie Plan) Amendment**

### **Establishment of Management Area 3 – Special Management Area**

### **Designation of Utility Corridors into Management Area 2 – Administrative & Developed Recreation Sites**

### **Midwin National Tallgrass Prairie Will County, Illinois**

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## **SUMMARY**

The Midewin National Tallgrass Prairie proposes to amend the Midewin Land and Resource Management Plan (Prairie Plan), completed in February 2002. This proposed amendment establishes the new Management Area 3 (MA3) – Special Management Areas; adds lands conveyed by the Army that did not have a management area assigned by the original Plan; moves some lands from Management Area 1 (MA1) to the new MA3; and designates legally required utility corridors within Management Area 2 – Administrative & Developed Recreation Sites (MA2).

The September 2005 land transfer from the Army included multiple land parcels, including some that were not anticipated. Some parcels detailed in sections 2912 and 2916 of the Illinois Land Conservation Act (ILCA) were remediated and transferred ahead of schedule, or determined not to have the anticipated levels of contamination. The transfer of previously contaminated lands, and the identification of groundwater management zones, requires us to update our Prairie Plan.

The Prairie Plan originally designated two management areas and stated that lands to be conveyed would be managed as mapped in the Plan. We did not identify future management areas for those lands in Section 2916 in the Plan. They were identified as Department of the Army lands. The ILCA and our Prairie Plan both state that we can accept future transfers without plan amendment but we do not have appropriate direction in the Plan for management of previously contaminated land so I have chosen to go through the amendment process.

The Plan identified 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). (Prairie Plan 1-4)

It appears inappropriate to manage remediated lands under MA1 or 2 so an additional management area is needed to clarify allowed land uses and provide a means to efficiently monitor parcels with previously contaminated soil and groundwater that have been transferred from the Army. Management Area 3 (Special Management Areas) would be established by this amendment, for those purposes. The condition and future limitations on use of these lands are now clear and this amendment is reflective of actual, rather than anticipated, condition at transfer. In addition, this amendment proposes to shift some lands from Management Area 1 to Management Area 3 where soil and groundwater management restrictions apply.

The original Prairie Plan did not identify utility corridors on Midewin, which is now required by law. This amendment maps and designates utility corridors and transfers them to Management Area 2. The intention is to keep all future proposals for development of additional utilities within the designated utility corridors that currently

traverse Midewin, thus protecting fragile remnant ecosystems and newly restored sites from further fragmentation.

This Environmental Assessment (EA) evaluates the proposed action and the No Action alternative in detail. Proposed standards and guidelines to amend the 2002 Prairie Plan are described in the proposed action.

This EA is tiered to the programmatic Final Environmental Impact Statement (FEIS) of the Prairie Plan as well as the 1998 and 2004 Records of Decision (ROD) prepared by the Army for the Joliet Army Ammunition Plant (Joliet Arsenal) to address standards for cleanup of the former Arsenal.

The analysis and documentation in this programmatic EA also comply with the National Environmental Policy Act (NEPA) and other federal environmental laws.

# INTRODUCTION

## Document Structure

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The Forest Service has prepared this Environmental Assessment for the first amendment to the Midewin Land and Resource Management Plan (Prairie Plan) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Environmental Assessment (EA) discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and the no action alternative. This EA has the following main parts: Introduction, Alternatives, and Environmental Consequences. The proposed changes to the Prairie Plan are described in detail in the Alternatives section.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Midewin Supervisor's Office in Wilmington, Illinois.

## Background

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The Midewin National Tallgrass Prairie was established in 1996 as the first national tallgrass prairie in the United States under the Illinois Land Conservation Act (ILCA) of 1995. On March 10, 1997, the Department of Defense (Army) transferred the first 15,080 acres of former arsenal lands to the USDA Forest Service.

In 1998, the Army completed the Joliet Army Ammunition Plant Record of Decision (ROD), which established the standards for land cleanup prior to transfer and generally restricted the land designated for the USDA Forest Service (Midewin) from particular uses without additional cleanup. Some of the Goals/Objectives identified in the 1998 ROD, such as polychlorinated biphenyl (PCB) and landfills, were set in regulations and were final for USDA lands. Other site-specific Goals/Objectives proposed by the Army were in dispute and went through additional negotiations and analysis which were later documented in the 2004 ROD.

While additional negotiations were underway the Midewin Prairie Plan was developed and approved in February 2002. The Prairie Plan provides provisions for the conveyance of lands at Midewin: "Any parcels transferred from the Department of Defense or acquired through donation, exchange or acquisition will be managed in accordance with this Prairie Plan without need for a plan amendment." (Prairie Plan 4-15). However, at the time the Plan was approved, the specific restrictions for additional lands to be transferred from the Army were not known. Consequently, a separate management area for remediated lands was not envisioned or included in the original Prairie Plan.

The Prairie Plan was completed while there were still a number of outstanding issues regarding what was believed to be the "most contaminated" sites. Those parcels were identified in Section 2916 of the ILCA and the Secretary of Agriculture had the authority to decline the transfer of those parcels. Because of the uncertainty about those lands,

they were not mapped as part of the Prairie Plan. Since that time further testing has been completed and documented. Some uncontaminated, as well as some remediated, land was offered to, and accepted by, the Secretary as part of the 2005 transfer. Those lands will, by this amendment, be assigned to the appropriate Management Area.

The 2004 Joliet Army Ammunition Plant ROD documented the testing, established clean-up standards for additional contaminants and identified, by parcel, any groundwater and soil restrictions that might affect future land uses. The selected Remedial Goals and Remedial Action Objectives (RG/RAO) were responsive to Midewin's mission and protect recreational users, prairie workers, and prairie ecosystems. The objectives do not provide a standard of clean up that allows for those sites to be permanently occupied (i.e., residential standard). The Army ROD control objectives for land use restrictions are to prevent unrestricted exposure to soils with residual contamination and to prevent the development and use of the property for residential or industrial uses.

Groundwater restrictions in Groundwater Management Zones (GMZ) preclude the use or disturbance of groundwater that could cause migration of the contaminated groundwater plumes. In these GMZs, requirements exist to maintain the integrity of groundwater or monitoring wells and require that groundwater above the Maquoketa shale (see Glossary, Appendix B) not be used for potable water supply.

During the negotiations with the Army for the Environmental Condition of Property (ECOP--see Glossary, Appendix B), the Forest Service agreed to annually provide a copy of the Prairie Plan Annual Monitoring and Evaluation Report to the Army, the USEPA, and the Illinois EPA (IEPA). The report will document the status of land and groundwater use restrictions and any land use proposals that would be, or were, affected by them. The addition of another management area to the Prairie Plan and the Prairie Plan Annual Monitoring and Evaluation Report will fulfill the tracking and reporting requirements of the ECOP.

## **Purpose and Need for Action**

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The purpose of this initiative is to amend the Prairie Plan to:

- add a third Management Area (MA3)
- include lands that were transferred far ahead of schedule, and
- designate utility corridors into MA 2

Establishing Management Area 3--Special Management Areas, provides the management framework to assure limited exposure to low-level contaminants and provides a practical way to document monitoring and reporting for the USEPA, IEPA, and US Army on uses of remediated lands transferred from the US Army to the USDA Forest Service.

We are currently out of compliance with the National Forest Management Act because we have lands that were transferred and are not covered by our Prairie Plan. The Prairie Plan was completed while there were still a number of outstanding issues regarding what was believed to be the "most contaminated" sites as detailed in Section 2916 of the

ILCA. Because of the uncertainty about those lands they were not mapped as part of the Prairie Plan. Subsequent testing and remediation allowed the Forest Service in 2005 to accept transfer of 861 acres of Section 2916 land. Those lands will, by this amendment, be covered by the Plan and assigned to appropriate Management Areas based on the Army ECOP.

Additionally, utility corridors were not identified in the Midewin Prairie Plan. We have received direction to identify utility corridors as implementation of the Energy Policy Act of 2005. This amendment effectively implements that direction. With increasing suburban and industrial development in surrounding areas, the likelihood for demand for expansion or creation of new utility corridors crossing National Forest System (NFS) lands at Midewin will also increase. The intent is to focus any new utility development to the corridors designated with this amendment and not further impact NFS lands.

## Proposed Action

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An amendment to the Prairie Plan is proposed to create Management Area 3 (MA 3) - Special Management Area. This new management area will provide direction to monitor and report on land uses for remediated lands transferred from the Army.

MA 3 lands will have one or more of the following designations:

- Soil Restricted Areas (SRA)
- Groundwater Management Zones (GMZ)

See the Alternatives section of this document for restrictions related to these Special Management Area designations.

The amendment will assign management area designations to those lands not covered by the Prairie Plan and will switch those lands requiring restricted land use because of previous soil or groundwater contamination to the new Management Area 3. This will result in approximately 16,000 acres of MA 1 and approximately 1,000 acres of MA 3 in the amended Prairie Plan.

The amendment would designate certain utility corridors—approximately 690 acres--that are now included in Management Area 1-Prairie Ecosystem Restoration, into Management Area 2-Administrative Sites. The intention is to keep all future development for utilities within the designated Administrative Site Utility Corridors.

All existing utility corridors that cross Midewin lands will continue to be operated and maintained in their current condition. However, future expansion and/or development of new utilities will be limited to those corridors designated by this amendment.

## Decision Framework

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Given the purpose and need, the deciding official reviews the proposed action and the other alternatives in order to make the following decisions:

Whether or not to amend the Prairie Plan by adding another Management Area for tracking of remediated parcels, including lands already transferred from the US Army and in anticipation of future transfers. Whether to make management area designations for lands transferred from the Army but not covered by the Prairie Plan. Whether or not to designate utility corridors that are currently in Management Area 1 – Prairie Ecosystem Restoration, into Management Area 2 – Administrative Sites.

## Public Involvement

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The proposal was listed in the Schedule of Proposed Actions beginning in January 2006. The proposal was provided to the public and other agencies for comment during a 30-day scoping comment period beginning in July 2006. In addition, as part of the public involvement process, Midewin representatives presented the proposal for a Prairie Plan amendment at public meetings and events in 2006.

## Issues

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The Forest Service received three comments during the scoping comment period. Based on the comment letters and from internal interdisciplinary team discussion, no significant issues were identified. However, the Forest Service considered public safety and impacts to invasive species; threatened, endangered, and sensitive species; and soil and water resources as integral to the analysis of this proposed amendment.

## ALTERNATIVES

This section describes the proposed action and proposed amendment to sections of the Prairie Plan. Since there were no significant issues identified, the Forest Service did not develop additional alternatives to the Proposed Action. The No Action alternative is included as required by 40 CFR 1502.14.

Proposed changes to the Prairie Plan are indicated by indented, italicized text.

### Alternative 1 -- Proposed Action

#### **Prairie Plan Chapter 3 (Management Area Prescriptions) Proposed Changes**

Under the proposed action, certain utility corridors would be designated as Management Area (MA) 2 – Administrative and Developed Recreation Sites. The following would be added to 3.3. *Management Area 2 – Administrative and Developed Recreation Sites* (Prairie Plan 3-6).

##### *3.3.2. Desired Condition of Utility Corridors:*

*If approved and where compatible, new transmission lines or pipelines will be placed within existing and designated utility corridors rather than creating additional areas or expanding the corridors. Note that for some existing utility corridors that traverse sensitive resource areas, additional utilities may not be appropriate. Burial of utilities, where appropriate, is required. Compatible multiple uses are encouraged including co-location of communication and electronic towers on existing electric transmission*

towers. Coordination with utility companies will help to develop appropriate management strategies for each corridor. Utility corridors will also have other uses such as vegetation/habitat areas, dispersed recreation, and agricultural activities. Noxious weeds and invasive species will be managed under approved operating plans by utility companies.

The proposed action would also designate a third management area to the Prairie Plan. Following is the proposed prescription and activities prescribed or allowed (Table 3.1b) for the new management area.

### **3.4 MANAGEMENT AREA 3 – SPECIAL MANAGEMENT AREAS**

*This management area includes those portions of Midewin National Tallgrass Prairie that are remediated lands transferred from the Department of Defense. Lands with these permanent land use restrictions may not be suitable for any future land conveyances without consultation with Illinois EPA and USEPA and additional cleanup.*

*Lands in MA 3 will have one (or more than one) of the following designations:*

- **Soil Restriction Areas (SRA)** – SRAs are areas where soils contaminated with chemicals of concern have been cleaned up to the standards identified in the 2004 ROD or areas where bioremediated soils have been used as backfill. In either case, the sites in SRAs meet a non-residential standard and require land use constraints and tracking.
- **Groundwater Management Zones (GMZ)** – GMZs are areas which have contaminated groundwater which is expected to naturally “purify itself” over time. Use constraints will be in place until monitoring indicates that water quality meets the standards identified in the 1998 ROD.

#### **3.4.1 Desired Condition**

*Former Army infrastructure will be removed and the landscape restored to a more natural appearing condition with either native prairie vegetation or agricultural grassland maintained as grassland bird habitat. Activities permitted will be similar to Management Area 1- Prairie Ecosystem Restoration. These prairie land management activities may include: prescribed fire, prairie restoration, wetland restoration, watershed restoration, other habitat restoration as appropriate, noxious and invasive species management, grassland bird habitat management, native seed production, fencerow removal, recreation, and research. Uses prohibited on these areas include removing the soil from SRA-designated lands or disturbing the groundwater or monitoring wells in GMZ-designated lands.*

Table 3.1b: Activities Prescribed or Allowed in Management Area 3

Activity	Management Area 3 Components	
	SRA	GMZ
Mowing	Prescribed	Prescribed
Agriculture Use	Prescribed	Prescribed
Prescribed Fire	Prescribed	Prescribed
Prairie Restoration	Prescribed	Prescribed
Wetland Restoration	Prescribed	Prescribed
Watershed Restoration	Prescribed	Prescribed
Other Habitat Restoration	Prescribed	Prescribed
Noxious and Invasive Species Management	Prescribed	Prescribed
Grassland Habitat Management	Prescribed	Prescribed
Seed Production	Prescribed	Prescribed
Fencerow Removal	Prescribed	Prescribed
Group Campsites	Not Permitted	Not Permitted
Recreational Hunting/Trapping	Prescribed	Prescribed
Environmental Education	Permitted	Permitted
Dispersed Camping	Not Permitted	Not Permitted
Research	Prescribed	Prescribed
Hiking Trails	Prescribed	Prescribed
Multiple Use Trails	Prescribed	Prescribed
Public Motorized Access	Prohibited	Prohibited
Guided Shuttle or Tours	Permitted	Permitted
Road Decommission	Prescribed	Prescribed
Infrastructure Demolition/Removal and Environmental Cleanup	Prescribed	Prescribed

*Permitted: Activity allowed without needing NEPA documentation.*

*Prescribed: Activity allowed pursuant to NEPA documentation.*

#### **Prairie Plan Chapter 4 (Standards and Guidelines) Proposed Changes**

The proposed action designates utility corridors into MA 2 (from MA 1) for the purpose of locating future utility proposals into the existing and designated corridors. The following new Standards would be added to 4.2.4.1 *Special Use Administration*.

4. *All new utilities must be placed within designated utility corridors in Management Area 2. (See Management Area 2 - Lands and Special Uses Guidelines for more information.)*
5. *Previously existing, Army-authorized, utilities that occur outside designated utility corridors will be honored but may be subject to land use constraints to protect natural resources.*

The following Standard related to new utilities will be added with this amendment, MA 2 Standards and Guidelines, 4.4.3. *Lands and Special Uses* (Prairie Plan 4-34):

*4.4.3.2. For New Utilities under Special Uses Standards*

- 1. There will be no new utilities added in designated corridors if they are determined to have adverse effects on sensitive resources, including: populations of Threatened, Endangered, and Sensitive plants and animals; cultural resources; native vegetation remnants; and high quality aquatic resources.*

Under the proposed action Prairie-wide Guidelines regarding new utilities would be moved from 4.2.4.2 *For New Utilities under Special Uses* (Prairie Plan 4-14), edited as indicated below, and added to MA 2 Standards and Guidelines, 4.4.3. *Lands and Special Uses* (Prairie Plan 4-34):

*4.4.3.2. For New Utilities under Special Uses Guidelines*

- 1. Where technology exists, bury new utility lines within designated corridors. If overhead utilities are necessary, they should be located outside of lands with viewsheds determined to be Concern Level 1 or 2.*
- 2. New utilities that cannot be buried (e.g. radio and cellular transmission towers, high voltage transmission lines and towers etc) should not be placed on Prairie lands, unless all other ownership locations are determined unfeasible.*
- 3. When technically feasible, permitted communication towers should serve multiple purposes (e.g. cellular phone, radio, etc.).*
- 4. Avoid construction of additional communication towers.*
- 5. Avoid tower installation on Prairie lands in the viewshed of a Concern Level 1 or 2 travel way or use area. Use the shortest possible tower in a given location. Consider a series of shorter, strategically placed, non-lighted towers rather than constructing a tall, lighted tower.*
- 6. Use appropriate mitigation measures to reduce visual impacts.*

The proposed action designates a third management area (MA 3 – Special Management Areas) to the Prairie Plan. Following are the proposed standards for MA 3. There are no proposed guidelines for MA 3, only standards.

**4.5 MANAGEMENT AREA 3 – SPECIAL MANAGEMENT AREAS STANDARDS**

- 1. SRA – Movement of soil from soil restricted areas (SRA) can only be moved within the same parcel or to another soil restricted area.**

*Incidental soil movement, including but not limited to soil on equipment, plant salvage and soil sampling, is not subject to this restriction.*

2. **GMZ** – *Prohibit installation of groundwater production wells, or any other activities that could cause migration of contaminated groundwater, within the boundaries of groundwater management zones (GMZ) defined by the Army.*
3. **GMZ** – *If groundwater management zones are reduced or eliminated as a result of Army monitoring, the parcel cleared by the Army will revert to MA 1 – Prairie Ecosystem Restoration, without need of a Prairie Plan amendment.*
4. *In areas that are comprised of more than one component of Management Area 3 (i.e. SRA and GMZ in the same area), applicable standards and guidelines will be followed for all component areas.*

**Prairie Plan Chapter 6 (Monitoring and Evaluation Plan) Proposed Changes**

The following monitoring question would be added to Table 6-1, Chapter 6 (Monitoring and Evaluation Plan) of the Prairie Plan to reflect this proposed amendment.

Monitoring Question	Monitoring Priority	Monitoring Driver	Sampling Unit	Sampling Methods	Scale	Frequency
<b>22. Management Area 3 –Special Areas</b> <b>22.1. Has there been any non-compliance of restrictions for MA 3 lands? If so, describe actions taken to remedy the non-compliance and explain the reasons for the non-compliance.</b>	Great Consequences; Key Issue	Agreement with Army; regulatory agencies*	Each site in MA 3	Monitor actual land uses on MA 3 sites	Site	Annually

\*Each year send a copy of the Midewin Annual Monitoring and Evaluation Report to the USEPA – Region 5; Illinois EPA; and the US Army.

**Alternative 2 -- No Action**

Under the No Action alternative, the Prairie Plan would not be amended. Remediated lands from the Army would not be tracked in a separate management area and utility corridors would remain in Management Area 1 – Prairie Ecosystem Restoration.

## Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Information in the table is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

Table 1. Alternative Comparison

	<b>Alternative 1 (Proposed Action)</b>	<b>Alternative 2 (No Action)</b>
Creation of MA 3	Remediated lands would be specifically designated and managed per the Army ECOP.	MA 3 would not be added to the 2002 Prairie Plan, tracking of remediated parcels would be more difficult and require separate documentation.
Management Area (MA) designation of lands not covered by Prairie Plan	A Management Area would be assigned to lands currently not covered by the Prairie Plan. Direction provided by the Prairie Plan for MAs would benefit natural resources present on these lands.	Lands not covered by the Plan would remain without a MA designation. Midewin would be in non-compliance with NFMA. Benefits for natural resources on these lands would be limited without the MA designation.
Designation of Utility Corridors into MA2	Utility Corridors would be designated and Midewin would be in adherence with the Energy Policy Act. Future utility development would occur in those corridors, resulting in less fragmentation and less impacts to Midewin lands.	Possibility of increased fragmentation and more impacts to Midewin due to lack of officially designated utility corridors. Midewin would be in non-compliance of the Energy Policy Act.

## AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The affected environment and impacts of the alternatives on important resources are reviewed in this section. This amendment represents a programmatic Land and Resource Management Plan decision. No site-specific activities are identified in this Environmental Assessment. There would be no measurable direct, indirect, or cumulative effects under either of the alternatives. Future management activities will be analyzed and addressed under site-specific project analyses as they are proposed.

### Vegetation

**Affected Environment** Existing vegetation on Midewin consists largely of plant cover that is either directly managed by human activities (such as growing crops or livestock grazing) or has grown up after human activities have ceased (abandoned crop fields, shrublands, and successional woodlands). The predominant vegetation in areas under active management consists mostly of planted crops (soybeans, winter wheat) or non-native pasture grasses (smooth brome, bluegrass, redtop, tall fescue). Areas where vegetation has colonized after human activities ceased, are now dominated by a mixture of non-native and disturbance tolerant native plants. Some typical plants that would be

encountered in these areas include eastern cottonwood, green ash, box elder, white mulberry, Osage-orange, red hawthorn, autumn-olive, Amur honeysuckle, poison-ivy, common teasel, sweet-clover, orchard grass, garlic mustard, Virginia stickseed, wild carrot, and common evening-primrose. As restoration on Midewin proceeds, the amount of cropland and successional vegetation will decline and be replaced by restored native vegetation, but at least 6,700 acres of agricultural grasslands will be maintained to support populations of area-sensitive grassland birds.

A smaller portion of Midewin (approximately 850 acres) consists of restored and reconstructed native habitats. These are areas of degraded natural vegetation or areas more heavily altered by human activities that are in the process of being restored to a semblance of their original condition, either native prairie, prairie wetlands, or oak savanna. Although these restorations are in their early stages (none greater than 4 years old) they are now dominated by appropriate native plants, although they do not yet have the structure or composition found in high-quality natural vegetation. Eventually at least 10,000 acres at Midewin will consist of restored or reconstructed native vegetation.

Approximately 750 acres of Midewin consists of native vegetation remnants. These are remnants of the original natural vegetation that survived amid a highly altered landscape, largely because they were unsuitable for intensive agriculture or other uses. Most of these remnants consist of native forest and woodland, but there are considerable remnants of oak savanna, dolomite prairie, wet prairie, sedge meadow, and marsh. A few tiny remnants of upland prairie and seep wetlands are still present on Midewin. All these native vegetation remnants are recognizable through the persistence of dominant native plants (oaks, prairie grasses, tussock sedges) and the presence of relatively conservative native plants, such as woodland sedges, prairie dropseed, or spring-flowering forbs. At present, because of their small size and susceptibility to invasion by non-native plants, native vegetation remnants are highly vulnerable to disturbance. The area covered by native remnants will not increase significantly with restoration, but their boundaries will be harder to discern as intervening areas are restored to native habitats.

**Effects Analysis** Alternative 1 does not place any limitations on techniques used to manage and restore vegetation in the proposed Management Area 3. In places where landscape restoration might require removing a berm or filling in a railroad cut, there would be restrictions on soil transportation. However, these would affect fairly small areas (less than 1-2 acres) and would not have significant effects on the larger landscape restoration. These sites might be restored at a lower species diversity than surrounding areas because of restrictions on soil movement.

Restrictions placed on groundwater disturbance and soil movement does not have any adverse impact on native vegetation remnants. Control of invasive plants, prescribed burning, and other management activities would continue in these areas, even though they had been transferred from MA1 to MA3.

Lands added to MA1 under this EA (541 acres) would be managed primarily for ecosystem restoration; thus existing native vegetation on these lands would be managed

and eventually surrounded by restored native habitats. Native vegetation remnants on these lands include representatives of wet prairie, sedge meadow, seep, and marsh habitats.

Because Alternative 1 restricts the addition of new utilities to a few existing corridors, there will be reduced impacts on restored vegetation and existing native remnants. Several native vegetation remnants occur above or near existing pipelines or below utility lines; restricting the addition of new utilities to the indicated corridors will reduce disturbance to these remnants and to vegetation in general on Midewin. In addition, the proposed standard will help protect those remnants that are crossed by designated utility corridors from further disturbance. This is especially important since dolomite prairie, a very rare prairie type, is among the remnants present in the designated utility corridors. Dolomite prairie has very shallow soils and supports populations of regionally and globally rare plant and animal species; installation of new pipelines could destroy or irreparably damage a portion of dolomite prairie habitat.

Under Alternative 2, new utility corridors could be placed anywhere on Midewin (following effects analysis), and all extant utility corridors could be enlarged through the addition of pipelines and overhead lines. Native vegetation (both remnant and restored) would be more likely to be disturbed by the installation and maintenance of new utilities.

Lands not designated by the original Prairie Plan would remain without management area designation and direction. These lands would not be managed for ecosystem restoration, resulting in degradation of existing native vegetation remnants.

**Cumulative Effects** In the long-term, Alternative 1 is likely to have less adverse effects on Midewin's vegetation than Alternative 2, largely because utilities and pipelines will be concentrated into a few corridors. This will minimize future disturbances to restored and remnant native vegetation from utility corridor maintenance and upgrades, and restrict these types of activities to designated corridors that are on or relatively close to Midewin's boundaries. Incorporation into MA1 of 541 acres of new lands received from the Army in the 2005 transfer will also contribute to the overall restoration of native vegetation on Midewin.

## Invasive Plants

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**Affected Environment** Invasive plants are those plant species that are considered to cause serious ecological damage; in many cases they also cause economic loss or threaten human health and safety. The ecological damage caused by invasive plants includes altering fire regimes, changing habitat structure, displacing native plants, disrupting hydrology, and otherwise eliminating native habitats and reducing ecosystem services. Most invasive plants of highest concern on Midewin are not native to northern Illinois or even eastern North America. In some cases, they are aggressively changing existing habitats and require constant management. Among the most damaging of these non-native plants are autumn-olive, Amur honeysuckle, Osage-orange, multiflora rose, reed canary-grass, common reed, Canada thistle, and garlic mustard. Some non-native plants that pose serious threats elsewhere in northern Illinois are uncommon on or absent from

Midewin, but their presence is likely to increase without prevention and management. Among these plants are purple loosestrife, common buckthorn, dame's-rocket, and Korean pear.

Also present on Midewin are many native plants that have become overabundant because of human activities, such as fire suppression, grazing, and agricultural runoff into wetlands. Among these aggressive native plants are green ash, eastern cottonwood, red hawthorn, and cattails. These species have invaded many native prairie, woodland, and wetland remnants on Midewin, and are management problems in restored native habitats.

As Midewin is restored, these invasive and aggressive plants are expected to decline, and some non-native species will be eliminated from Midewin. Management and monitoring needed to detect and control these plants will be increasingly limited to Midewin's boundaries. Aggressive native plants will become more restricted to their appropriate habitats; hydrological restoration and prescribed burning will be sufficient to keep these species under control.

**Effects Analysis** Alternative 1 does not place any limitations on techniques used to monitor and treat invasive plants in MA 3, so there will not be any effects. Because Alternative 1 restricts the addition of new utilities to a few existing corridors, there will be a reduced number of corridors in which new construction or maintenance could lead to new infestations. In the past, maintenance of utility corridors has created soil disturbance and introduced weed seeds, leading to new infestations of invasive species. The consolidation of designated utility corridors combined with guidelines in the Prairie Plan, will reduce new infestations from this source, reducing the need for monitoring and treatment.

Placement into MA1, under Alternative 1, of 541 acres of lands received from the Army in the 2005 land transfer ensures that ecosystem restoration, including invasive plant control, will be one of the primary goals for these areas. This will contribute to overall invasive species control on Midewin.

Under Alternative 2, new utility corridors could be placed anywhere on Midewin (following effects analysis), and all extant utility corridors could be enlarged through the addition of pipelines and overhead lines. Increasing the amount of utility corridors could result in increased invasive plant infestations, especially away from Midewin's boundaries. This situation would require increased monitoring and treatment along a wider dispersed network of utility corridors. Under Alternative 2, 541 acres received from the Army in 2005 would not be placed in MA1. As a result, they would not be managed primarily for ecosystem restoration. Although invasive plants would be controlled, it would not be through an integrated approach that replaced invasive plants through the restoration of native habitats.

**Cumulative Effects** In the long-term, Alternative 1 is likely to prove more effective for the control of invasive plants on Midewin's vegetation, largely because utilities and pipelines will be concentrated into a few corridors. This will help limit future

disturbance and subsequent infestations to Midewin's boundaries. Under Alternative 2, there could be a growing network of utility corridors throughout Midewin, leading to increased infestations and an increasing need for monitoring and treatments.

## Wildlife

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**Affected Environment** Most wildlife (including insects and other invertebrates) on Midewin can be placed into two ecological types. Most widespread, common wildlife consists of ecologically tolerant forms that can utilize a diversity of habitat types, and are not restricted to large remnants of high-quality habitat. These generalist wildlife species are widespread outside of Midewin, and most are not highly sensitive to human presence. Among these types of wildlife are coyote, raccoon, white-tailed deer, striped skunk, fox squirrel, short-tailed shrew, red-tailed hawk, mallard, great-horned owl, northern cardinal, American robin, red-winged blackbird, indigo bunting, song sparrow, common garter snake, bullfrog, and tiger swallowtail butterfly.

The other ecological category consists of wildlife that is habitat-specific. These wildlife species often require a specific habitat type, and often are only present if the habitat meets certain criteria, such as area, structure, or plant species composition. Among these types of wildlife are dickcissel, grasshopper sparrow, eastern meadowlark, sora rail, deer mouse, smooth green snake, northern leopard frog, prairie-dock stem-borer moth, and many types of aquatic invertebrates.

**Effects Analysis** Alternative 1 and Alternative 2 will not have any adverse impacts on generalist wildlife. These adaptable species will continue to exist in good numbers on Midewin regardless of the alternative.

Creation of MA3 will not have adverse impacts on specialized wildlife species, regardless of whether they are found in woodlands, grasslands, wetlands, or streams. Their habitats can be restored, even in groundwater management zones and soil restriction areas.

Placing 541 acres into MA1 will benefit specialist wildlife species that occupy these sites by prescribing ecosystem management in these areas. This benefit would not necessarily occur under Alternative 2, or would be delayed until after further analysis.

Restricting new utilities to designated corridors will benefit specialist wildlife species, by reducing future fragmentation and disturbance of their habitats. The burying of utility lines should help in minimizing collisions of birds and wires, while the standard proposed in this amendment should help avoid future impacts in designated utility corridors that cross sensitive resource areas.

**Cumulative Effects** In the long-term, Alternative 1 is likely to have less adverse effects on Midewin's wildlife, largely because utilities and pipelines will be concentrated into a few corridors. This will minimize future disturbances to specialized wildlife species from utility corridor maintenance and upgrades, and restrict these types of activities to designated corridors that are on or relatively close to Midewin's external boundaries.

## Threatened, Endangered, and Sensitive Plant and Animal Species

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**Affected Environment** Native plants and animals present on Midewin include forty-seven species designated with specific status because the entire population or a large portion of the population is considered vulnerable to further declines and extinction. These include designations by the US Fish and Wildlife Service (Federally Threatened, Federally Endangered), the Eastern Region of the USDA Forest Service (Regional Forester Sensitive or RFSS) and the State of Illinois (State Endangered, State Threatened). Several species in each of these categories occur in or adjacent to specific sites affected by this amendment. These species are discussed briefly below.

Leafy Prairie Clover (Federally Endangered) – This plant occurs in and adjacent to an existing utility right-of-way. Habitat destruction, lack of habitat management, competition from invasive plants, and overabundant deer are the major threats to this species.

Eastern Prairie Fringed Orchid (Federally Threatened) – This plant occurs on state land near an existing pipeline right-of-way. Suitable habitat occurs above and immediately adjacent to this pipeline. Habitat destruction, lack of habitat management, competition from invasive plants, loss of pollinators, and collecting are the major threats to this species.

Mead's Milkweed (Federally Threatened) – This rare plant is being grown in seed beds on Midewin; they are not near or adjacent to any existing utility or pipeline rights-of-way. Habitat destruction is the major cause of decline.

Indiana Bat (Federally Endangered) – Suitable habitat (riparian forests and woodlands) for this bat occurs in several rights-of-way. This species has not been found on or adjacent to Midewin, either in surveys conducted during the 1990s (Glass 1994, 14-15) or more recent surveys (Widowski 2007). The major threats to this species remain uncertain, but disturbance of hibernation sites and accumulation of pesticides are probable causes of decline.

Whooping Crane (Federally Endangered) – Birds from a restored population that migrates between Wisconsin and Florida have stopped on Midewin during migration. Some potential habitat for migrant birds lies in or adjacent to utility and pipeline rights-of-way. This large bird declined because of overhunting and habitat destruction. Illegal shooting, avian diseases, and collisions with power lines are now the major threats to this species.

Nine species of RFSS plants occur within or immediately adjacent to an existing pipeline or utility rights-of-way. Five of these plants are also listed as Endangered or Threatened by the State of Illinois. Habitat destruction, lack of habitat management, and competition from invasive plants are among the major threats to these plants.

Twenty-four species of RFSS animals occur within or immediately adjacent to an existing pipeline or utility rights-of-way: Ten of these animals are also listed as Endangered or Threatened by the State of Illinois. Habitat destruction, lack of habitat management, loss of food plants (for insects), habitat fragmentation, human disturbance,

and water pollution (for stream and wetland species) are among the major threats to these animals.

Lands received from the Army include populations of two RFSS plants (Sullivant's coneflower, Crawe's sedge) and contain known breeding habitat for four RFSS birds (bobolink, migrant loggerhead shrike, upland sandpiper, and Henslow's sparrow). These lands also contain potential habitat for additional RFSS plant and animals.

**Effects Analysis** The designation of MA3 should not have any effects on threatened, endangered, or sensitive species, as this designation will not impact habitat management and restoration for these plants and animals.

Because Alternative 1 restricts the addition of new utilities to a few existing corridors, there will be reduced impacts on habitat for many of these threatened, endangered, and sensitive plants and animals. Habitat disturbance and fragmentation by future utilities will be reduced or restricted because proposed utility corridors generally run along Midewin's perimeters. One existing pipeline right-of-way along Midewin's western boundary traverses occupied habitat for many of these plants and animals. This pipeline will continue to exist outside the designated corridors proposed with this amendment, so any new pipelines or other utilities proposed in the future will be located elsewhere (in designated corridors). This will reduce future impacts on Eastern Prairie Fringed Orchid (Federally Threatened).

Several threatened, endangered, and sensitive plants and animals are present in designated utility corridors (Alternative 1) that cross Drummond Dolomite Prairie. One of the plants present in these corridors is the leafy prairie-clover (Federally Endangered). Additional utilities in this corridor will require proposals, surveys, and environmental analysis on TES species prior to new utility installation. Existing and proposed standards and guidelines should be sufficient to ensure protection of leafy prairie clovers and sensitive plant and animal populations present within this designated corridor.

Designation of MA1 for 541 acres received from the Army in 2005 will benefit existing populations of RFSS plants and animals on these lands, as ecosystem restoration and management will be the primary goal. Ecosystem restoration will also benefit other RFSS species, through increased habitat and connectivity of existing habitats across these lands.

Under Alternative 2, new utility corridors could be placed anywhere on Midewin (following effects analysis), and all extant utility corridors could be enlarged through the addition of pipelines and overhead lines. Habitat or populations of threatened, endangered, and sensitive species would be more likely to be disturbed or fragmented by the installation of new utilities under Alternative 2. Additionally, habitats or populations of TES species on lands received from the Army in 2005 that do not currently have a MA designation would not, under Alternative 2, be in a Management Area where ecosystem restoration and management is an objective.

**Cumulative Effects** In the long-term, Alternative 1 is likely to have less adverse effects on Midewin's threatened, endangered, and sensitive species, largely because utilities and pipelines will be concentrated into a few corridors, minimizing or avoiding impacts on these species. Because 541 acres of lands received from the Army in 2005 would be placed into MA1, there would probably be benefits to these species. This action (Alternative 1) should not cause significant adverse effects on these species or the projected outcomes in the Prairie Plan.

## Management Indicators

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**Affected Environment** Management Indicators are defined as “plant or animal species, communities, or special habitats selected for their emphasis in planning, which are monitored during forest plan (Prairie Plan in this case) implementation in order to assess the effects of management activities on their populations and the populations of other species with similar habitat needs which they may represent (FSM 2620.5, WO amendment 2600-91-5). Management indicators provide a means of monitoring and evaluating the effects of actions on biotic resources, including specific species, communities, habitats, and interrelationships among organisms. By selecting a limited but appropriate set of Management Indicators, inventory and monitoring efforts can be focused where needed.

Management Indicators selected for Midewin fall into four groups:

Native Habitats – These are habitats selected for restoration on appropriate sites and to support the diversity of native flora and fauna on Midewin. These habitats include dolomite prairie, upland prairie, wet prairie, sedge meadow, marsh, seep, savanna, and woodland/forest.

Grassland Habitat – These three types of habitats are used to indicate sufficient habitat for different guilds of grassland wildlife: short-stature grassland; medium stature grassland habitat; and tall stature grassland habitat.

Individual Species – These consist of three species of interest to specific public groups (white-tailed deer), of conservation concern (leafy prairie-clover), and one species sensitive to habitat management (Henslow's sparrow).

Ecologically similar groups of species – This category is used to monitor water quality and habitat conditions in permanent streams. Benthic macroinvertebrates are widely used as an index for these conditions elsewhere, and there is a well-tested sampling protocol.

**Effects Analysis** The designation of MA3 should not have any effects on management indicators, as this designation will not impact habitat management and restoration. The addition of 541 acres to MA1 would also increase acreage for some management indicators above those originally indicated in the plan.

The designation of utility corridors (Alternative 1) should not have adverse effects on any management indicators, as this does not preclude habitat management and there are guidelines in place to protect indicator species sensitive to disturbance. By designating utility corridors, future installation and placement of corridors will minimize habitat fragmentation and disturbance, reducing adverse effects on management indicators. This would not occur under Alternative 2.

**Cumulative Effects** Because Alternative 1 designates specific utility corridors, there are less likely to be any long-term adverse effects on management indicators. Alternative 2 could have greater adverse consequences in the long-term, as it might lead to the development of a network of utilities installed across Midewin, instead of limiting utilities to the edges.

## Soils

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**Affected Environment** Midewin mainly consists of fine-grained soils that hold water well and have gentle slopes. Small portions of the land have steeper slopes and/or more sandy soils with less water-holding capacity. Some land areas on Midewin have been subjected to excavation, manipulation and chemical treatments by the Army and farmers for several decades prior to Forest Service acquisition. Clean-up procedures for contaminated soil by Army contractors often consists of replacing the excavated, contaminated soil with bioremediated soil which is subject to restrictions. These areas of bioremediated soil are termed soil restricted areas (SRAs).

**Effects Analysis** Alternative 1 would limit soil movement to within a SRA or between SRAs in Management Area 3. No permanent tracking would be needed because the soil is remaining in a SRA. Management Area 2 would limit soil disturbance related to utilities to areas that already have experience such disturbances in the past.

Under Alternative 2 movement of soil would be allowed within Midewin lands without restriction, but soil moved from a SRA to a non-SRA would still need to be tracked. Tracking would be accomplished using a Geographic Information System (GIS) and the land where any SRA-soil is moved to would also become a SRA. Not designating utility corridors into Management Area 2 may result in more ground disturbance across Midewin due to construction of utilities outside of current utility areas.

**Cumulative Effects** Alternative 1 would result in fewer opportunities to disturb soils on Midewin related to utility construction and eliminate the need for detailed tracking of soil moved from SRAs.

## Water Resources

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**Affected Environment** Surface water on Midewin drains through four main streams that generally flow in a west-southwesterly direction: Jackson, Prairie, Grant, and Jordan Creeks. Water quantity through these streams varies considerably throughout the season and they may exhibit dry bed conditions during the year. Grant Creek is the only stream listed for Illinois 303(d) impairment of aquatic life due to unknown cause(s) (IEPA 2006, Appendix A, p57). Jackson and Prairie Creeks fully support aquatic life while Jordan Creek has not been assessed. All four of the main streams flowing through Midewin may be potentially affected by the proposed project. Contaminated groundwater exists in some places within and around Midewin land which are being monitored by the Army. Groundwater management zones (GMZs) were designated by the Army to manage groundwater pollution plumes.

**Effects Analysis** Designating Management Area 3 will simplify the process of keeping track of SRAs and GMZs and aid in accounting for their management during project-specific environmental analysis. The addition of previously undesignated lands to MA1 will make eligible approximately 3 miles of streams for riparian and hydrologic restoration activities. Designation of utility corridors in Management Area 2 will keep disturbance from utilities within existing areas of Midewin streams, limiting the amount of stream area that could be impacted.

No effect on water resources is expected if Management Area 3 is not designated under the No Action Alternative (Alternative 2), but it will be more difficult to keep track of these special areas (SRAs and GMZs) and account for them in future project-specific environmental analysis. Approximately 3 miles of streams would not be eligible for riparian or hydrologic restoration activities since those areas would remain without a MA designation under Alternative 2. If utility corridors are not designated into Management Area 2 (Alternative 2), additional stream areas may be impacted due to construction of utilities outside of existing corridors.

**Cumulative Effects** Alternative 1 would result in fewer opportunities to disturb aquatic streams on Midewin related to utility construction and ensure GMZs are accounted for during future environmental analysis.

## Air

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**Affected Environment** The Illinois Environmental Protection Agency (IEPA) uses a national standard for reporting air pollution levels to the general public called the Air Quality Index (AQI) (IEPA 2005). The AQI is a composite formula from six pollutant criteria and results over 100 indicate potential air quality problems. There were 3 instances of AQI from 101 to 150 in Will County in 2005 (1.4% of total), a range that is considered unhealthy for sensitive groups such as the elderly, those with respiratory problems, and active children and adults (IEPA 2005, 19).

The annual report from the IEPA also provides estimates for stationary point emissions for 102 counties in Illinois (IEPA 2005, 91-93). From this data, Will County is in the top 5 most emissions for all 5 emission categories: carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, and volatile organic material. This data indicates that emissions from point sources in Will County contribute a significant portion of total air pollution within the county.

**Effects Analysis** There are no effects on air quality if either Alternative 1 or Alternative 2 is chosen for the proposed amendment since no site-specific activities are proposed. Air quality has the potential to be affected by future proposed actions.

**Cumulative Effects** There are no cumulative effects on air resources resulting from this proposed amendment.

## **Cultural Resources**

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This amendment is programmatic in nature and serves to provide Management Area (MA) designations for select parcels of land. It specifies which types of activities will be allowed within MAs, however no project-level activities are planned.

When actions are planned for specific parcels of land, appropriate cultural resource surveys will be carried out under Section 106 of the National Historic Preservation Act of 1966, as amended. Any undertaking that may affect cultural resources will be reviewed, and proper consultation will be conducted with the Illinois State Historic Preservation Office (SHPO). No specific consultation with SHPO is necessary for this amendment.

## **Recreation and Safety**

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Alternative 1 would limit soil movement to within a soil restricted area (SRA) or between SRAs. Installation of water wells in groundwater management zones (GMZ) would be prohibited. Continued compliance with the 1998 and 2004 Army Records of Decision and the land transfer conditions entail knowing the status of each parcel and GMZ boundaries, in order to annually certify to the Army and both the US and IL Environmental Protection Agencies (EPAs) that no activities inconsistent with land transfer requirements have occurred.

Designation of Management Area 3 under Alternative 1 also allows routine control of potential public and employee exposure, resulting in better safety conditions for remediated parcels transferred from the Army. Safety to public visitors as well as Midewin staff and volunteers will remain the priority.

Dispersed camping will not be permitted in MA3, and in MA1--although not currently allowed--it will be permitted in the future (Prairie Plan 2002, 3-7). Recreational opportunities may be slightly diminished in MA 3 as a result, but MA 1 will be available for this activity as Midewin continues phased opening to the public. The designation of utility corridors will reduce fragmentation that can be detrimental to wildlife. As a result, there will be more recreational opportunities associated with wildlife viewing and hunting activities.

Under Alternative 2, the No Action alternative, the status of parcels (SRAs, GMZs) would not be readily known or shown on maps. As a result, annual certification would be more difficult. Each action on the ground would need to be scrutinized in order to determine its exact location and the restrictions pertaining to that particular area. While this could be done, it would not be efficient and would have a negative effect on the public and employee safety conditions for these remediated parcels. The lack of designation of utility corridors could also result in increased habitat fragmentation and decrease the quality of visitor's experience, as corridors could be placed at any point crossing Midewin.

## Economics, Civil Rights and Environmental Justice \_\_\_\_\_

Most existing utility corridors that cross Midewin lands will remain available for future development, following the required environmental analysis. However, by designating corridors specifically and focusing future development in only those corridors, the future expansion of utility corridors across Midewin and the economic opportunity associated, could be limited. While the future expansion of utility corridors will be limited to designated, existing corridors; the majority of existing corridors that cross Midewin will remain available for future expansion, providing ample opportunities if and when the need arises.

Neither alternative is expected to disproportionately impact human populations. There are no human health or safety factors associated with biological or physical factors of the alternatives that would affect low income or minority populations in the Wilmington, Joliet, or Kankakee area. None of the alternatives are expected to affect the civil rights of anyone in the area.

## Other Required Disclosures \_\_\_\_\_

**NFMA Significance** This proposed amendment is not a significant change in the Midewin Land and Resource Management Plan. The determination that this is a non-significant amendment is made in accordance with the NFMA (16 USC 1604(f)(4)), the 1982 planning rule (36 CFR 219.10(f)), and Forest Service Manual 1926.5. This plan amendment meets the criteria for a non-significant amendment because these changes will not “significantly alter the long-term relationship between levels of multiple-use goals and objectives originally projected...[or] have an important effect on the entire forest plan or affect resources throughout a large portion of the planning area during the planning period (FSM 1926.52).

In addition, no irreversible or irretrievable commitments of resources would result from either of the alternatives.

## **CONSULTATION AND COORDINATION**

The Forest Service consulted the following individuals and Federal and State agencies during the development of this environmental assessment:

### ***ID TEAM MEMBERS:***

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Eric Ulaszek, Horticulturist

### ***FEDERAL AND STATE AGENCIES:***

United States Army

United States Environmental Protection Agency

Illinois Environmental Protection Agency

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## **APPENDIX A -- FIGURES/MAP**

**Figure 1**  
**Midewin National Tallgrass Prairie**

Management Areas  
 Amendment 1

**LEGEND**

**Management Area 1**

Restoration

**Management Area 2**

Utility Corridor

Administrative and Developed Rec. Sites

**Management Area 3**

Groundwater Management Zone (GMZ)

Soil Restricted Area (SRA)

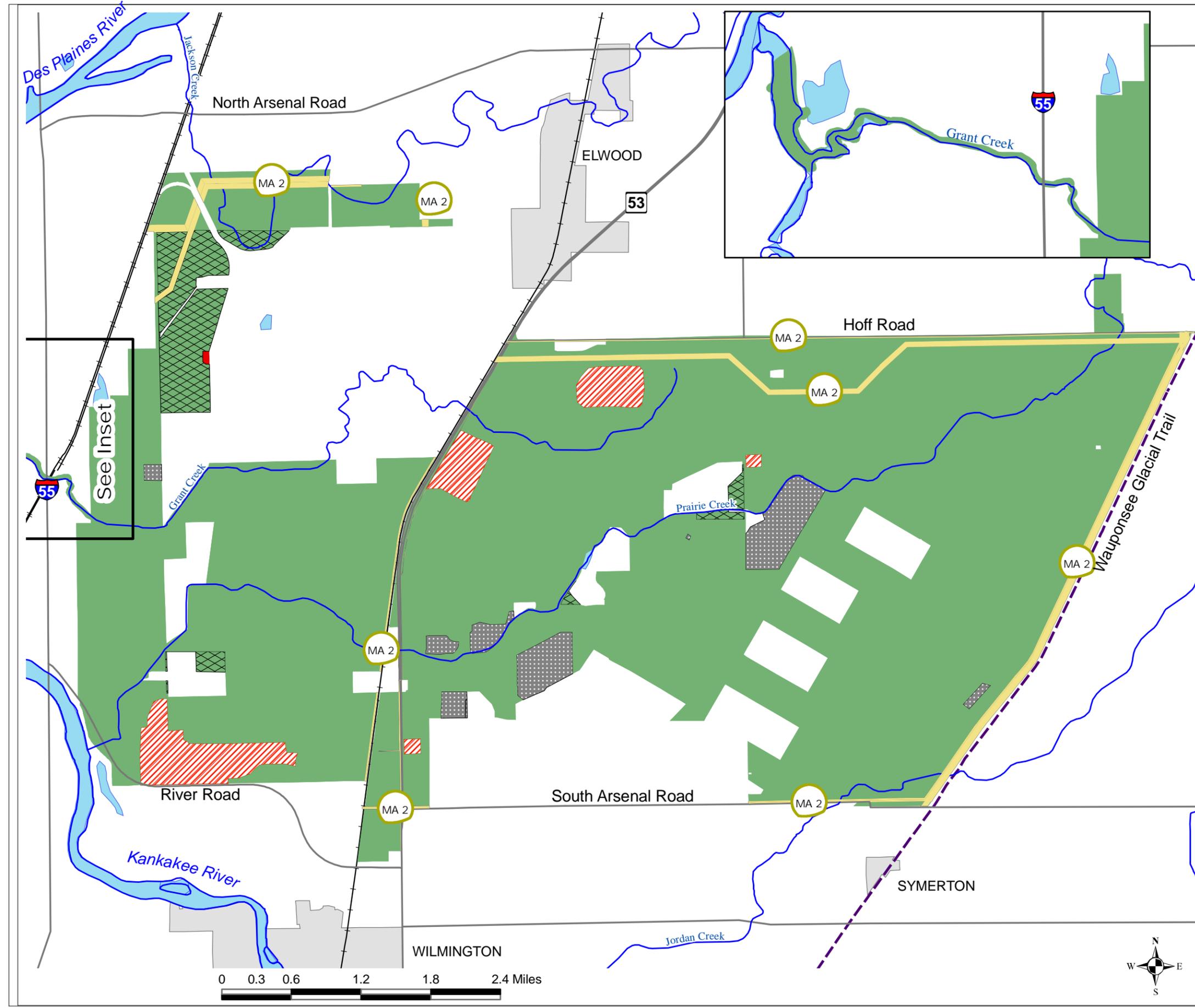
SRA/GMZ

Public Roads

Wauponsee Trail

Railroad

Municipality



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## APPENDIX B – GLOSSARY

<b>Bioremediated Soil</b>	Soil subjected to a process using microorganisms to biodegrade (break down) contaminants present in the soil.
<b>Concern Level</b>	Measure of the degree of public importance placed on landscape viewed from travel ways and use areas. Concern level 1 is a “high” concern level and Concern level 2 is considered to have a “moderate” concern level.
<b>Contaminated soil</b>	Soil that has been exposed to hazardous substances.
<b>ECOP</b>	Environmental Condition of Property--An Army document used to certify the environmental condition of lands to be transferred by the Army.
<b>Ecological Receptor</b>	Any plant or animal considered to have the potential to be exposed to a contaminant being evaluated.
<b>FSM</b>	Forest Service Manual
<b>GMZ</b>	Groundwater Management Zone
<b>Groundwater</b>	Water within the earth that supplies wells and springs. Specifically, water in the zone of saturation where all openings in soils and rock are filled; the upper surface level forms the water table.
<b>Groundwater Plume</b>	The shape contaminants in groundwater acquire over time, generally elongated in the direction of groundwater flow.
<b>IEPA</b>	Illinois Environmental Protection Agency
<b>Management Area</b>	Lands having common management direction.
<b>Maquoketa shale</b>	A geologic formation composed of shale that inhibits downward movement of groundwater above the shale.
<b>NFS</b>	National Forest System
<b>Permitted</b>	Activity allowed without requiring NEPA documentation.
<b>Prescribed</b>	Activity allowed pursuant to NEPA documentation.

<b>RFSS</b>	Regional Forester Sensitive Species
<b>Remediation Goal (RG)</b>	A value considered to be protective of the human health and/or the environment based on a selected threshold.
<b>Special Management Areas</b>	Lands having atypical management directions.
<b>TES</b>	Threatened, Endangered, and Sensitive species
<b>USEPA</b>	United States Environmental Protection Agency
<b>Unrestricted Exposure Scenarios</b>	The risk assessment scenario that assumes no engineering or institutional controls are in place.
<b>Utility Corridors</b>	Utility right-of-way designated as corridors
<b>UXO</b>	Unexploded Ordnance

## APPENDIX C – AMENDED FOREST PLAN PAGES

### *Page 3-6*

#### **3.3. MANAGEMENT AREA 2 – ADMINISTRATIVE AND DEVELOPED RECREATION SITES**

This area includes those portions of Midewin National Tallgrass Prairie that contain facilities developed for administration and recreational use.

Administrative sites include all current and proposed sites for the administrative office and work center, including the Hot Shot firefighting facilities, seedbed production areas and parking areas. Developed recreation sites include proposed visitor center and access points, proposed group campground and picnic area, and associated grounds and parking areas.

##### **3.3.1. *Desired Condition***

Land, resources, vegetation and facilities contribute to safe, attractive, efficient, and user-friendly settings for administration and visitor uses. Recreational and administrative developments and uses are emphasized, but prairie restoration and natural resources management also occur.

- a) Infrastructure to support designated uses of sites will be constructed, including parking lots, water and sanitation facilities, buildings or shelters, signs, interpretive trails and roadways.
- b) New recreational and administrative facilities will be designed according to the Master Site Plan, the Built Environment Image Guide, the scenic integrity objectives and architectural themes appropriate for Midewin.
- c) Administrative sites and visitor facilities will be designed to minimize impacts on resources, and provide for visitor safety and security.
- d) Noxious weeds and invasive plant species will be controlled or eradicated.
- e) Native seed production will be expanded to increase seed production capacity needed to meet restoration goals.

##### **3.3.2 *Desired Condition of Utility Corridors:***

If approved and where compatible, new transmission lines or pipelines will be placed within existing and designated utility corridors rather than creating additional areas or expanding the corridors. Note that for some existing utility corridors that traverse sensitive resource areas, additional utilities may not be appropriate. Burial of utilities, where appropriate, is required. Compatible multiple uses are encouraged including co-location of communication and electronic towers on existing electric transmission towers. Coordination with utility companies will help to develop appropriate management strategies for each corridor. Utility corridors will also have other uses such as vegetation/habitat areas, dispersed recreation, and agricultural activities. Noxious weeds and

invasive species will be managed under approved operating plans by utility companies.

## **Page 3-8**

### **3.4 MANAGEMENT AREA 3 – SPECIAL MANAGEMENT AREAS**

This management area includes those portions of Midewin National Tallgrass Prairie that are remediated lands transferred from the Department of Defense. Lands with these permanent land use restrictions may not be suitable for any future land conveyances without consultation with Illinois EPA and US EPA and additional cleanup.

Lands in MA 3 will have one (or more than one) of the following designations:

- **Soil Restriction Areas (SRA)** SRAs are areas where soils contaminated with chemicals of concern have been cleaned up to the standards identified in the 2004 ROD or areas where bioremediated soils have been used as backfill. In either case, the sites in SRAs meet a non-residential standard and require land use constraints and tracking.
- **Groundwater Management Zones (GMZ)** GMZs are areas which have contaminated groundwater which is expected to naturally “purify itself” over time. Use constraints will be in place until monitoring indicates that water quality meets the standards identified in the 1998 ROD.

#### **3.4.1 Desired Condition**

Former Army infrastructure will be removed and the landscape restored to a more natural appearing condition with either native prairie vegetation or agricultural grassland maintained as grassland bird habitat. Activities permitted will be similar to Management Area 1- Prairie Ecosystem Restoration. These prairie land management activities may include: prescribed fire, prairie restoration, wetland restoration, watershed restoration, other habitat restoration as appropriate, noxious and invasive species management, grassland bird habitat management, native seed production, fencerow removal, recreation, and research. Uses prohibited on these areas include removing the soil from SRA-designated lands or disturbing the groundwater or monitoring wells in GMZ-designated lands.

**Table 3.1b: Activities Prescribed or Allowed in Management Area 3**

<b>Activity</b>	<b>Management Area 3 Components</b>	
	<b>SRA</b>	<b>GMZ</b>
Mowing	Prescribed	Prescribed
Agriculture Use	Prescribed	Prescribed
Prescribed Fire	Prescribed	Prescribed
Prairie Restoration	Prescribed	Prescribed
Wetland Restoration	Prescribed	Prescribed
Watershed Restoration	Prescribed	Prescribed
Other Habitat Restoration	Prescribed	Prescribed

Noxious and Invasive Species Management	Prescribed	Prescribed
Grassland Habitat Management	Prescribed	Prescribed
Seed Production	Prescribed	Prescribed
Fencerow Removal	Prescribed	Prescribed
Group Campsites	Not Permitted	Not Permitted
Recreational Hunting/Trapping	Prescribed	Prescribed
Environmental Education	Permitted	Permitted
Dispersed Camping	Not Permitted	Not Permitted
Research	Prescribed	Prescribed
Hiking Trails	Prescribed	Prescribed
Multiple Use Trails	Prescribed	Prescribed
Public Motorized Access	Prohibited	Prohibited
Guided Shuttle or Tours	Permitted	Permitted
Road Decommission	Prescribed	Prescribed
Infrastructure Demolition/Removal and Environmental Cleanup	Prescribed	Prescribed

Permitted: Activity allowed without needing NEPA documentation.  
 Prescribed: Activity allowed pursuant to NEPA documentation.

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**4.2.4. LANDS AND SPECIAL USES**

**4.2.4.1. Special Use Administration Standards**

1. Private uses of National Forest System lands will not be granted where such uses can reasonably be accommodated on other lands.
2. New special use requests will be reviewed for compatibility with the Land and Resource Management Plan, Illinois Land Conservation Act, and environmental values, economic feasibility, and social and economic benefits.
3. Upon renewal or transfer of a permit, terminate or bring into conformance existing uses that are not compatible with the Prairie Plan.
4. All new utilities must be placed within designated utility corridors in Management Area 2. (See Management Area 2 - Lands and Special Uses Guidelines for more information.)
5. Previously existing, Army-authorized, utilities that occur outside designated utility corridors will be honored but may be subject to land use constraints to protect natural resources.

**Page 4-34****4.4.3. LANDS AND SPECIAL USES****4.4.3.1. Livestock Grazing****Guidelines**

1. After sites are developed, prohibit livestock grazing in developed recreation sites.

**4.4.3.2. For New Utilities under Special Uses:****Standards**

1. There will be no utilities added in designated corridors if they are determined to have adverse effects on sensitive resources, including: populations of Threatened, Endangered, and Sensitive plants and animals; cultural resources; native vegetation remnants; and high quality aquatic resources.

**Guidelines**

1. Where technology exists, bury new utility lines within designated corridors. If overhead utilities are necessary, they should be located outside of lands with viewsheds determined to be Concern Level 1 or 2.
2. New utilities that cannot be buried (e.g. radio and cellular transmission towers, high voltage transmission lines and towers etc) should not be placed on Prairie lands, unless all other ownership locations are determined unfeasible.
3. When technically feasible, permitted communication towers should serve multiple purposes (e.g. cellular phone, radio, etc.).
4. Avoid construction of additional communication towers.
5. Avoid tower installation on Prairie lands in the viewshed of a Concern Level 1 or 2 travel way or use area. Use the shortest possible tower in a given location. Consider a series of shorter, strategically placed, non-lighted towers rather than constructing a tall, lighted tower.
6. Use appropriate mitigation measures to reduce visual impacts.

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**4.5. MANAGEMENT AREA 3 – SPECIAL MANAGEMENT AREAS**

**Standards**

1. **SRA** – Movement of soil from soil restricted areas (SRA) can only be moved within the same parcel or to another soil restricted area. Incidental soil movement, including but not limited to soil on equipment, plant salvage and soil sampling, is not subject to this restriction.
2. **GMZ** – Prohibit installation of groundwater production wells, or any other activities that could cause migration of contaminated groundwater, within the boundaries of groundwater management zones (GMZ) defined by the Army.
3. **GMZ** – If groundwater management zones are reduced or eliminated as a result of Army monitoring, the parcel cleared by the Army will revert to MA 1 – Prairie Ecosystem Restoration, without need of an amendment.
4. In areas that are comprised of more than one component of Management Area 3 (i.e. SRA and GMZ in the same area), applicable standards and guidelines will be followed for all component areas.

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The following monitoring question would be added to Table 6-1, Chapter 6 (Monitoring and Evaluation Plan) of the Prairie Plan to reflect this amendment.

Monitoring Question	Monitoring Priority	Monitoring Driver	Sampling Unit	Sampling Methods	Scale	Frequency
<b>22. Management Area 3 –Special Areas</b> <b>22.1. Has there been any non-compliance of restrictions for MA 3 lands? If so, describe actions taken to remedy the non-compliance and explain the reasons for the non-compliance.</b>	Great Consequences; Key Issue	Agreement with Army; regulatory agencies	Each site in MA 3	Monitor actual land uses on MA 3 sites	Site	Annually

\*Each year send a copy of the Midewin Annual Monitoring and Evaluation Report to the USEPA – Region 5; Illinois EPA; and the US Army.