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Agriculture



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Service  
Region 2*

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National  
Forest

*July 2008*

**Nebraska and South Dakota  
Black-tailed Prairie Dog Management  
on the  
Nebraska National Forest  
and Associated Units**

**Including Land and Resource  
Management Plan Amendment 3**

**Final Environmental Impact Statement**

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**Final Environmental Impact Statement  
for  
Nebraska and South Dakota  
Black-tailed Prairie Dog Management  
on the  
Nebraska National Forest and Associated Units**

**Including Land and Resource Management Plan Amendment 3**

USDA Forest Service  
Rocky Mountain Region  
Nebraska National Forest

Located within Dawes, Sioux, and Blaine Counties, Nebraska  
and  
Custer, Fall River, Jackson, Pennington, Jones, Lyman, Stanley Counties, South Dakota

Lead agency	USDA Forest Service
Cooperating agencies	State of South Dakota USDA-APHIS-Wildlife Services Nebraska Game and Parks Commission
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**Abstract:** Direction for black-tailed prairie dog conservation was initially established in the *Land and Resource Management Plan, Nebraska National Forest and Associated Units* (2001 Forest Plan) for the National Forest System (NFS) lands in the project area (USDA Forest Service 2001c). The *Record of Decision for Black-tailed Prairie Dog Conservation and Management on the Nebraska National Forest and Associated Units, Including Land and Resource Management Plan Amendment 2* established additional direction for managing prairie dog populations in a boundary management zone between national forest system land and adjoining private land (USDA Forest Service 2005e). That effort dealt with the prairie dog colonies near the forest boundaries in boundary management zones (BMZs) and the impacts as colonies expanded onto non-NFS lands. The 2001 Forest Plan did not set acre objectives for prairie dog colonies outside the BMZs, and it limited rodenticide use to very specific situations.

This final environmental impact statement (FEIS) addresses management of black-tailed prairie dogs (*Cynomys ludovicianus*) on the Oglala, Buffalo Gap, and Fort Pierre National Grasslands (National Grasslands) in Nebraska and South Dakota. It focuses on evaluating alternatives for managing black-

tailed prairie dog populations in the interior-colony<sup>1</sup> management zones (IMZs) of the three national grasslands. The purpose of the action is to determine the techniques and objectives for managing prairie dog colonies in the interior of the National Grasslands in an adaptive fashion through the following:

- ◆ Setting objectives for desired acres of prairie dog colonies within the interior of the National Grasslands to move toward desired prairie dog acres and to maintain or move toward desired vegetation cover, protect topsoil, and prevent the potential establishment of noxious and invasive species.
- ◆ Managing black-tailed prairie dog habitat designated as a black-footed ferret management area (MA 3.63) in the 2001 Forest Plan to sustain populations of black-footed ferrets and associated species.

The proposed action may require amending the 2001 Forest Plan to expand rodenticide use on the National Grasslands. Currently rodenticide use is restricted to those situations where public health and safety risks are present or where damage to private and public facilities is occurring (USDA Forest Service 2001c).

There is a need to evaluate whether we are meeting 2001 Forest Plan objectives for vegetation, prairie dogs, and black-footed ferrets (USDA Forest Service 2001c) and whether those objectives are still valid. The need for evaluation is driven by the following information, resource conditions, and socio-economic concerns:

- ◆ The reduction of vegetation, exacerbated by the ongoing drought, has influenced prairie dog expansion and increased the potential for soil erosion impacts. Seven years of drought of varying intensities have resulted in suppressed plant growth and more bare soil on prairie dog colonies, and the potential establishment of noxious and invasive species (USDA Forest Service 2008a).
- ◆ Ranchers and counties claim the decreased growth from drought and prairie dog utilization has led to blowing soil (soil erosion) and there are concerns that this will occur across the national grasslands (Pennington County Commissioners 2004).
- ◆ Recent inventories (USDA Forest Service 2008a) have shown that prairie dog colonies continue to expand within the national grasslands and in some areas, they continue to encroach from federal land on to private land despite the use of rodenticide and non lethal methods within the BMZs of the encroaching colonies (USDA Forest Service 2008b). The Forest has received requests to limit the amount of prairie dogs on national grasslands (Rittberger letters 2007) to reduce competition with livestock and encroachment from federal on to private lands.
- ◆ Control efforts on state and private land have limited prairie dog dispersal and expansion to smaller areas on the national grasslands. Concentrating prairie dogs on the national grasslands can heighten the potential impacts to the animal, plant, and soil resources. This is especially true when large acreages of prairie dog colonies are needed for black-footed ferret habitat and there is a limited amount of national grassland surrounding the colony, with livestock and prairie dogs competing for the vegetation.

The FEIS evaluates the following five alternatives for managing desired acre objectives for black-tailed prairie dog colonies in the interior of the National Grasslands and discloses the predicted environmental effects. The action alternatives set ranges of prairie dog acres and describe thresholds which initiate the application of specific management tools to meet objectives. Chapter 2 contains a complete description of the alternatives.

- ◆ Alternative 1 – This alternative emphasizes maintaining desired vegetation cover, protecting topsoil and preventing the potential establishment of noxious and invasive species, supporting a viable population of black-footed ferrets and associated species, and actively managing black-tailed prairie dog habitat by setting acreage objectives. In the Conata Basin MA 3.63, this alternative prioritizes black-footed ferrets and the associated need for prairie dog colonies over other multiple uses. Implementation of this

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<sup>1</sup> The term “interior” as used in the context of *interior-colony management zones* does not refer to, nor have any connection with, the Department of the Interior.

alternative would necessitate an amendment to the 2001 Forest Plan. This includes changes for the expanded use of rodenticides in the interior-colony management zones, management area changes, additional management indicator species (MIS) objectives, and authorized activities in MA 3.63.

- ◆ Alternative 2, No Action – The objective for prairie dog populations in the interior-colony management zones is to achieve population regulation and management through non-lethal methods and limited rodenticide use. This alternative emphasized black-footed ferret and prairie dogs in MA 3.63, with no constraint on colony acres or population growth. No forest plan amendment would be needed under this alternative.
- ◆ Alternative 3 – This alternative strives to ensure that, in counties containing National Grasslands, prairie dog acreage is distributed proportionately, and a rangeland similarity index<sup>2</sup> of 25 to 50 percent is maintained. Implementation of this alternative would necessitate an amendment to the 2001 Forest Plan. This includes changes for the expanded use of rodenticides in the interior-colony management zones, management area changes, additional MIS objectives, and authorized activities in MA 3.63.
- ◆ Alternative 4 – This alternative was derived from the 2005 *South Dakota Black-tailed Prairie Dog Conservation and Management Plan* (Cooper 2005). It provides acre objectives at a statewide scale except for the Conata Basin MA 3.63 where a specific objective was identified. This alternative also calls for a minimum similarity index of greater than 20 percent across the analysis area. Implementation of this alternative would necessitate an amendment to the 2001 Forest Plan. This includes changes for the expanded use of rodenticides in the interior-colony management zones, management area changes, additional MIS objectives, and authorized activities in MA 3.63.
- ◆ Alternative 5 – This alternative emphasizes two main objectives: a larger population of black-footed ferrets and associated species better able to persist over the long term and levels of black-tailed prairie dog colonies more closely resembling historic occurrences on all geographic and management areas. Implementation of this alternative would necessitate an amendment to the 2001 Forest Plan to include changes for the expanded use of rodenticides in the interior-colony management zones and additional MIS objectives.

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<sup>2</sup> Similarity index (SI) rating is a method to evaluate an ecological site. This method compares the present plant community on an ecological site to the various common vegetation states that can exist on the site or that are desired on the site. The SI is expressed as the percentage of a vegetation state plant community presently on the site to the desired vegetation state plant community. The desired vegetation state plant community must be identified as the reference plant community. The SI can provide an indication of past disturbances, as well as future management or treatments, or both, needed to achieve the client's objectives (NRCS 2006).

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Appendix O – Biological Effects of Black-tailed Prairie Dog Management Alternatives on Endangered and Threatened Species

**The following appendices have been moved to the Record of Decision as supplements to that document:**

*Appendix J – Consistency Check with the Forest Plan.*

*Appendix K - Consistency Check with the South Dakota Black-Tailed Prairie Dog Conservation and Management Plan*

*Appendix L – Forest Plan Amendment Factors Determining Significance or Non Significance*

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# Abbreviations and Acronyms

APHIS	Animal and Plant Health Inspection Service
AUMs	Animal Unit Month(s)
ARP	Adaptive Response Protocol
B.A.	Bachelor of Arts
B.S.	Bachelor of Science
BA	Biological Assessment
BCR	Bird Conservation Regions
BE	Biological Evaluation
BEA	Bureau of Economic Analysis
BFF	Black-footed ferret
BGNG	Buffalo Gap National Grassland
BMZ	Boundary Management Zone
BP	Before Present
BRD	Bessey Ranger District
BTPD	Black-tailed Prairie Dog
BTPDCM	Black-tailed Prairie Dog Conservation and Management
CAA	Clean Air Act
CBSG	Conservation Breeding Specialist Group
CD	Compact Disk
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CRP	Conservation Reserve Program
DDT	Dichloro-diphenyl-trichloroethane
DEIS	Draft Environmental Impact Statement
DR	District Ranger
EBI	Earnings by Industry
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESD	Ecological Site Description
FEIS	Final Environmental Impact Statement
FPNG	Fort Pierre National Grassland
FRRD	Fall River Ranger District
FRWGA	Fall River West Geographic Area
FS	Forest Service
FSM	Forest Service Manual
FWS	U.S. Fish and Wildlife Service
GA	Geographic Area(s)
GIS	Geographic Information System
GPS	Global Positioning System
HCPC	Historical Climax Plant Community
HUC	Hydrologic Unit Code
IDT	Interdisciplinary Team
IMZ	Interior-colony Management Zone
LRMP	Land and Resource Management Plan, <i>also</i> Forest Plan

MA	Management Area
MIS	Management Indicator Species
MLRA	Major Land Resource Area
M.S.	Master of Science
NAICS	North American Industry Classification System
NE	Nebraska
NEPA	National Environmental Policy Act
NF	National Forest
NFMA	National Forest Management Act
NFS	National Forest System
NG	National Grassland
NHPA	National Historic Preservation Act
NNF	Nebraska National Forest
NOA	Notice of Availability
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
NRDC	National Resources Defense Council
NRHP	National Register of Historic Places
ONG	Oglala National Grassland
PCPI	Per Capita Personal Income
PRRD	Pine Ridge Ranger District
RAMP	Rangeland Allotment Management Plan
RD	Ranger District
ROD	Record of Decision
SCP	Species Conservation Project
SD	South Dakota
SI	Similarity Index
SRMNF	Samuel R. McKelvie National Forest
T&E	Threatened & Endangered
TES	Threatened, Endangered, and Sensitive
TPI	Total Personal Income
U.S.C.	United States Code
USDA	United States Department of Agriculture
WEPP	Water Erosion Prediction Project
WO	Washington Office
WRD	Wall Ranger District

# Document Structure

**How to Read this EIS Document.** The Forest Service has prepared this Final Environmental Impact Statement (FEIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. This FEIS discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed alternatives. The document is organized into four chapters. Chapters 1 and 2 are summaries while Chapter 3 contains detailed supporting information. Below is an explanation of each chapter and/or section.

- Chapter 1**      **Purpose of and Need for Action:** This chapter includes information on the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- Chapter 2**      **Description and Comparison of the Alternatives:** This chapter provides a more detailed description of the agency's proposed alternative methods for achieving the stated purpose. These alternatives were developed based on key issues raised by the public and other agencies. This section also provides a summary table of the environmental consequences associated with each alternative.
- Chapter 3**      **Affected Environment and Environmental Consequences:** This chapter describes the environmental effects of implementing the proposed alternatives. The following resource areas are included: air, soil and water resources, heritage resources, paleontology, rangeland vegetation, species at risk, management indicator species (MIS), recreation, and social and economic factors.
- Chapter 4**      **Contribution and Coordination:** This chapter provides a list of the preparers and information about the distribution of the FEIS.
- Appendices**      The appendices provide more detailed information to support the analyses presented in the FEIS.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Nebraska National Forest Supervisor's Office. Additionally, this analysis incorporates, by reference, all portions of the 2001 Forest Plan along with administrative record documentation.

# Changes Between Draft and Final

Key changes and/or additions between the draft and final EIS are briefly described below for those chapters and appendices in which changes occurred. Minor typographical corrections, formatting changes, or changes in sentence structure for better clarification are not identified.

Chapter 1 Purpose of and Need for Action	Definition of similarity index was revised. Vicinity map was revised to show Conata Basin MA 3.63 and Smithwick MA 3.63.
Chapter 2 Description and Comparison of Alternatives	Tables were added to better compare effects of the alternatives. Definition of similarity index was revised. Desired condition for prairie dog colonies was defined. A map showing the distribution of geographic areas across the planning area was added.
Chapter 3 Affected Environment and Environmental Consequences	Revisions were made in the rangeland vegetation, species at risk, and social and economic factors sections.
Appendix B	Tables were added to provide more consistent acreage numbers throughout the document.
Appendix H – Implementation Plan	Adaptive response protocol questions were clarified. The appendix was divided into sections to improve readability. Three tables were added to provide additional information.
Appendix I – Response to Comments	New appendix that lists the summarized public comments received and our responses to them.
Appendix N – Biological Evaluation for Region 2 Sensitive Species	New
Appendix O – Biological Effects of Black-tailed Prairie Dog Management Alternatives on Endangered and Threatened Species	New

Chapter

# 1

## Purpose of and Need for the Action

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Introduction

Purpose of and Need for Action

Proposed Action

Decision Framework

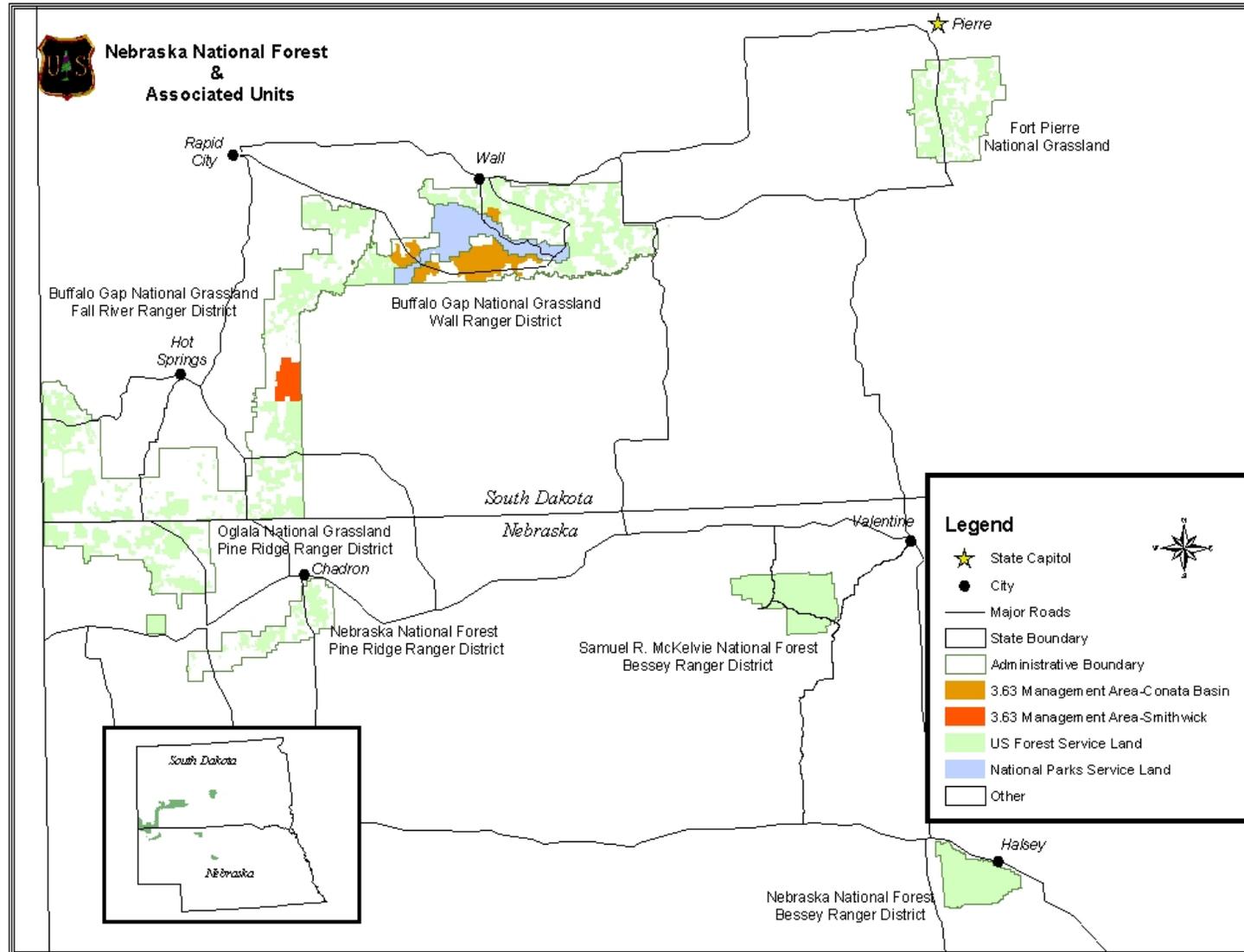
Public Involvement

Issues

Other Related Efforts

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Figure 1-1. Vicinity map for the project area.



# CHAPTER 1

## PURPOSE OF AND NEED FOR ACTION

### Introduction

This Final Environmental Impact Statement (FEIS) addresses management of black-tailed prairie dogs (*Cynomys ludovicianus*) on several National Forest System (NFS) units in Nebraska and South Dakota. It focuses on evaluating alternatives for managing black-tailed prairie dog populations in the interior-colony management zones (IMZs) of the NFS units.

Direction for prairie dog management is contained in the 2001 *Land and Resource Management Plan, Nebraska National Forest and Associated Units* (2001 Forest Plan) (USDA Forest Service 2001c) and in the *Record of Decision for Black-tailed Prairie Dog Conservation and Management on the Nebraska National Forest and Associated Units, Including Land and Resource Management Plan Amendment 2* (USDA Forest Service 2005e). The 2005 amendment to the 2001 Forest Plan dealt with managing prairie dog populations in a boundary zone between National Forest System (NFS) land and adjoining private land. The purpose of the 2005 decision was to manage unwanted prairie dog encroachment from federal land to private land. Except as amended by this effort, the final environmental impact statements supporting those two documents and associated administrative records are adopted into this analysis.

Managing prairie dog habitat and preserving agricultural heritage is a challenge the Forest Service has faced since the 1960s. Both are vital attributes of national grasslands management and striking a balance between them, as well as other multiple use objectives, is a concern that has been heightened by the recent drought in South Dakota and Nebraska. As illustrated in the following table, prairie dog management has alternated between controlling populations using rodenticides and encouraging prairie dog expansion (USDA Forest Service 2007d).

**Table 1-1. Chronology of prairie dog management in the project area and adjacent lands.**

Date	Prairie Dog Management Decision or Event
1960 to 1970	Colonies limited to 3,000 acres through the use of rodenticides.
1972	Rodenticide use banned by Executive Order 11643.
1978	Rodenticide use resumed by Executive Order 11870. Prairie dog colonies expanded to almost 30,000 acres. New direction to retain 5,200 acres of prairie dog colonies; the remaining acres to be treated with rodenticide.
1981	Prairie dog acres expanded to 44,000 acres. Amendment to the 1978 Prairie Dog Management Decision Conata Basin retains a minimum of 1,280 acres. Outside of Conata Basin retain 1,570 acres
1989	Nebraska National Forest prairie dog management plan established the following management direction: Wall Ranger District (Conata Basin) retain 5,400 – 6,180 acres and outside Conata Basin, retain 1,000 – 1,700 acres. In addition, approximately 11,650 acres of prairie dog colonies would undergo periodic rodenticide treatment (USDA Forest Service 1988).
1994	Black-footed ferret reintroduction FEIS and ROD Reintroduction area is designated in both the Badlands National Park and the Buffalo Gap National Grassland. The initial reintroduction will occur on the Badlands National Park. An additional 206,300 acres of Buffalo Gap outside the reintroduction area are designated as dispersal habitat for ferrets that might move outside the reintroduction area. No change in the management of prairie dogs on the Nebraska National Forest is proposed.

Date	Prairie Dog Management Decision or Event
1994-1996	Annual black-footed ferret reintroduction begins in Badlands National Park in 1994 and in Conata Basin in 1996.
1998	Black-tailed prairie dog petitioned for listing, as threatened, under the Endangered Species Act (ESA). U.S. Forest Service issues national guidance to limit use of rodenticide.
2000	U.S. Fish and Wildlife Service designated the black-tailed prairie dog as a candidate for possible listing under the ESA.
2002	Revised <i>Land and Resource Management Plan for the Nebraska National Forest</i> provides new direction for prairie dog management and established two management areas for black-footed ferrets totaling about 100,000 acres. The plan limits the use of rodenticides to the following situations: public health and safety risk occur in the immediate area and damage to private and public facilities, such as cemeteries and residences.
2004	Forest Service Chief rescinds 1998 national guidance and encourages units to use existing authorities, including forest plans, to help manage and conserve black-tailed prairie dogs. The Chief encourages a strategic and integrated approach to prairie dog management that also includes land ownership adjustments and livestock grazing management through allotment management plans and annual operating plans. U.S. Fish and Wildlife Service removes black-tailed prairie dogs from the candidate list. In South Dakota, selected colonies on private land and the Buffalo Gap National Grassland are treated with rodenticide.
March 2005	The Nebraska National Forest issues a <i>Draft Environmental Impact Statement for Black-tailed Prairie Dog Conservation and Management on the Nebraska National Forest and Associated Units</i> .
August 2005	The Nebraska National Forest releases the <i>Final Environmental Impact Statement for Black-tailed Prairie Dog Conservation and Management on the Nebraska National Forest and Associated Units</i> (Forest Plan Amendment 2). The selected alternative prescribed expanded rodenticide use <sup>3</sup> and non-lethal management along the perimeter of the national grasslands. These boundary management zones are 0.25 or 0.5 mile in width.

The national grasslands listed in the following table define the project area and are collectively managed as an administrative unit (Nebraska National Forest and Associated Units) of the Forest Service. The administrative unit includes the Buffalo Gap and Fort Pierre National Grasslands in South Dakota and the Nebraska and Samuel R. McKelvie National Forests and Oglala National Grassland in Nebraska. For an overview of the environmental, social, and economic characteristics of each NFS unit in the project area, consult the *Final Environmental Impact Statement for the Northern Great Plains Management Plans Revision* (USDA Forest Service 2001b).

Current black-tailed prairie dog distribution in the project area is shown below and in Appendix F - Maps. The project area is defined as the Oglala, Buffalo Gap, and Fort Pierre National Grasslands. There are no known prairie dog colonies on the Samuel R. McKelvie National Forest and Pine Ridge Ranger District of the Nebraska National Forest.

<sup>3</sup> The laws, policy, and direction applying to the use of rodenticides and management of prairie dogs by USDA Forest Service can be found in the *Final Environmental Impact Statement for the Northern Great Plains Management Plans Revision* (page 3-157).

**Table 1-2. National forests and grasslands, in the project area, containing prairie dog colonies.**

Unit	NFS Land Area (acres)	Current Active Colony Acreage	Counties and State
Oglala National Grasslands	94,484	1,125	Dawes and Sioux Counties, NE
Buffalo Gap National Grasslands	589,234	30,451	Custer, Fall River, Jackson and Pennington Counties, SD
Fort Pierre National Grasslands	116,053	1,735	Jones, Lyman and Stanley Counties, SD
All areas combined	799,771	33,311	Nebraska and South Dakota

## Purpose of and Need for Action

The 2005 *Record of Decision for Black-tailed Prairie Dog Conservation and Management on the Nebraska National Forest and Associated Units, Including Land and Resource Management Plan Amendment 2* focused on the encroachment of prairie dog colonies from national grasslands onto adjoining private or tribal agricultural lands (USDA Forest Service 2005e), where ranchers and farmers are concerned about losses in agricultural production, costs of managing prairie dogs, effects on land values, and risks to health and safety. That effort dealt with the prairie dog colonies near the National Grassland boundaries in boundary management zones (BMZs) and the impacts as colonies expanded onto non-NFS lands. The 2001 Forest Plan did not set acre objectives for prairie dog colonies outside the BMZs, and it limited rodenticide use to very specific situations (USDA Forest Service 2001c).

The purpose of this action is to determine the techniques and objectives for managing prairie dog colonies in the interior of the Oglala, Buffalo Gap, and Fort Pierre National Grasslands (National Grasslands) in an adaptive fashion through the following:

- ◆ Setting objectives for desired acres of prairie dog colonies within the interior of the National Grasslands to move toward desired prairie dog acres and to maintain or move toward desired vegetation cover, protect topsoil, and prevent the potential establishment of noxious and invasive species.
- ◆ Managing black-tailed prairie dog habitat designated as a black-footed ferret management area (MA 3.63) in the 2001 Forest Plan to sustain populations of black-footed ferrets and associated species.

To provide for effective prairie dog management in an adaptive fashion, a full suite of management tools is necessary. The proposed action will require amending the 2001 Forest Plan to expand rodenticide use on the Oglala, Buffalo Gap, and Fort Pierre National Grasslands. Currently rodenticide use is restricted to those situations where public health and safety risks are present or where damage to private and public facilities is occurring (USDA Forest Service 2001c).

There is a need to evaluate whether we are meeting 2001 Forest Plan objectives for vegetation, prairie dogs, and black-footed ferrets (USDA Forest Service 2001c) and whether those objectives are still valid. The need for evaluation is driven by the following information, resource conditions, and socio-economic concerns:

- ◆ The reduction of vegetation, exacerbated by the ongoing drought, has influenced prairie dog expansion and increased the potential for soil erosion impacts. Seven years of drought of varying intensities have resulted in suppressed plant growth and more bare soil on prairie dog colonies, and the potential establishment of noxious and invasive species (USDA Forest Service 2008a).
- ◆ Ranchers and counties claim this decreased growth from drought and prairie dog utilization has led to blowing soil (soil erosion) and there are concerns that this will occur across the national grasslands (Pennington County Commissioners 2004).

**Need for evaluation, cont.**

- ◆ Recent inventories (USDA Forest Service 2008a) have shown that prairie dog colonies continue to expand within the national grasslands and in some areas, they continue to encroach from federal land on to private land despite the use of rodenticide and non lethal methods within the BMZs of the encroaching colonies (USDA Forest Service 2008b). The Forest has received requests to limit the amount of prairie dogs on the national grasslands (Rittberger letters 2007) to reduce competition with livestock for forage and encroachment from federal on to private lands.
- ◆ Control efforts on state and private land have limited prairie dog dispersal and expansion to smaller areas on the national grasslands. Concentrating prairie dogs on the national grasslands can heighten the potential impacts to the animal, plant, and soil resources. This is especially true when large acreages of prairie dog colonies are needed for black-footed ferret habitat and there is a limited amount of national grassland surrounding the colony, with livestock and prairie dogs competing for the vegetation.

## Proposed Action

The Forest Service proposes to use an adaptive management approach for managing prairie dog colonies to sustain black-footed ferrets and to maintain or move towards desired vegetation cover, protect topsoil, and prevent the potential establishment of noxious and invasive species. Various management options are currently available and will be used over time. However, the Forest believes a full range of management tools is needed, including expanded rodenticide use in the IMZ, as part of the overall prairie dog and rangeland management strategy. This proposed action will apply to the Oglala, Buffalo Gap and Fort Pierre National Grasslands administered by the Nebraska National Forest and will require an amendment to the 2001 Forest Plan to expand the use of rodenticides and to set acreage objectives for prairie dog colonies. The Forest will develop thresholds to determine specifically when, where, and how adaptive management may be used, including the process for implementation (see Appendix H – Implementation Plan). The proposed action would also facilitate site-specific prairie dog management options, including the use of rodenticides, when addressing management threshold concerns.

Alternatives for implementing the proposed action set desired prairie dog colony acre objectives and establish threshold objectives that will frame adaptive management options in managing for multiple use values. Although not exhaustive, a list of management tools that can be adaptively utilized in addressing threshold objectives is provided in Chapter 2 of this document. Detailed descriptions of the alternatives for implementing the proposed action are also presented in Chapter 2.

## Decision Framework

The Forest Supervisor is the responsible official who will make two decisions about prairie dog colonies in the interior-colony management zones (IMZs): 1) Whether to set a minimum and maximum range of prairie dog colony acres for each geographic area (GA) and 2) Whether to manage prairie dog colony acres to sustain black-footed ferrets and to maintain or move toward desired vegetation cover, protect topsoil, and prevent the potential establishment of noxious and invasive species. Current forest plan direction focuses on prairie dog management in the boundary management zones and allows limited rodenticide use where human health and safety or infrastructure is threatened (USDA Forest Service 2005e, 2001c).

As a result of the analysis in the FEIS, the following questions will be answered:

- ◆ Will a minimum and maximum range of prairie dog colony acres be defined for each GA?
- ◆ Will prairie dog colony acres in the IMZ be managed?
- ◆ Is current management of prairie dog colony acres meeting 2001 Forest Plan goals and objectives for black-footed ferrets, desired vegetation condition, and prairie dogs?
- ◆ What is the desired condition for vegetation on prairie dog colonies?

If the decision is to set a minimum and maximum range of prairie dog colony acres for the GAs and to manage prairie dog colony acres in the IMZ, the following questions will be answered:

- ◆ What range of minimum and maximum prairie dog colony acres is appropriate to address biological considerations; protect and maintain existing vegetation, soil, and water resources; and meet the socio-economic concerns of ranchers and farmers?
- ◆ What management approach or approaches (including expanded rodenticide use) will be utilized?
- ◆ What thresholds will be used to initiate management efforts on prairie dog colonies?
- ◆ Will the decision to manage prairie dog colony acres in the IMZ require an amendment to the 2001 Forest Plan?

This FEIS is not a decision document. It discloses the environmental consequences of implementing the proposed action and alternatives to that action. The Forest Service decision will be stated and explained in a separate Record of Decision.

The FEIS focuses on prairie dog colony acres in interior-colony management zones on the Oglala, Buffalo Gap, and Fort Pierre National Grasslands. It does not evaluate options for managing prairie dog colony acres in the boundary management zones or on other units administered by the Nebraska National Forest. It does analyze the cumulative effects of managing prairie dog colony acres in combination with other past, present, and reasonably foreseeable future actions on National Forest System lands and, to the degree feasible, on adjacent state, private, and tribal lands.

## Public Involvement

A Notice of Intent (NOI) to prepare a DEIS was published in the Federal Register on September 29, 2006. Letters were sent to interested parties informing them of the NOI and the 30-day comment period (see Chapter 4 – Contribution and Coordination). Over 55,000 letters were received during the comment period. Forest Service officials also met with or contacted various individuals, groups, tribes, state agencies, local agencies, and other federal agencies with an interest in prairie dog conservation and management on NFS lands. The state of South Dakota, USDA APHIS-Wildlife Services, and Nebraska Game and Parks Commission are cooperating agencies for this project.

The Forest Service has a long history and considerable experience in prairie dog conservation and management on the national grasslands and forests in South Dakota and Nebraska. This includes working with many interested individuals, conservation and industry organizations, landowner associations, tribes, and government agencies. The 2001 Forest Plan and the 2005 *Record of Decision for Black-tailed Prairie Dog Conservation and Management on the Nebraska National Forest and Associated Units, Including Land and Resource Management Plan Amendment 2* both provided an opportunity for public involvement and for the agency to listen, document, and consider public, tribal, and agency comments relating to prairie dog conservation and management. Forest Service officials, including members of the EIS interdisciplinary team, have considered this information in the development and evaluation of the proposed action and alternatives. Also considered were the comments from the South Dakota and

Nebraska public involvement programs addressing prairie dog conservation and management across each state. This information provided a larger statewide perspective that is relevant to this proposed action.

## Issues

The Forest Service separated the issues into two groups: significant and non-significant (Council on Environmental Quality Regulations 40 CFR 1501.7). Significant issues were defined as effects on a physical, biological, social, or economic resource caused by implementing the proposed action. Non-significant issues were those 1) outside the scope of the proposed action; 2) already decided by law, regulation, forest plan, or other higher level decision; 3) not relevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence.

The following significant issues were associated with the proposed action:

- ◆ **Prairie dog colony expansion.** The proposal may have a negative impact on prairie dog colony expansion. This may negatively affect other wildlife species that utilize prairie dogs as a food source or use prairie dog colonies as habitat. It may positively impact vegetation and soil resources in areas where prairie dog colony expansion may cause resource damage.

*Indicator:* Total acreage, vegetation conditions, and distribution of active prairie dog colonies.

- ◆ **Recovery of black-footed ferrets.** The proposal may have a negative impact on the recovery of the black-footed ferret and may negatively impact other wildlife species.

*Indicator:* Biological determinations for Threatened, Endangered, and Sensitive (TES) species and attainment of Management Indicator Species (MIS) objectives.

Some issues did not need further evaluation because existing regulatory and policy requirements address them. For example, environmental and public health and safety issues associated with rodenticide use are remedied by ensuring that pesticide label instructions and Forest Service manual policy and procedures for pesticide use (FSM 2150) are met during storage, transportation, and application of rodenticide.

## Other Related Efforts

Landownership adjustments to better consolidate national grassland parcels and reduce encroachment issues on adjacent private lands has been and continues to be a very effective long-term solutions to prairie dog conflicts at some locations. Since 1985, there have been 71 land adjustment cases completed on the Nebraska National Forest. These land adjustments have acquired over 82,000 acres for the United States and has exchanged or conveyed over 83,800 acres of land in seven counties in South Dakota and three counties in Nebraska (USDA Forest Service 2008b). These types of actions are ongoing and require separate environmental analyses and public disclosure processes.

Periodic annual rest or light livestock grazing intensities could be used in selected locations as vegetation management tools to help regulate and manage prairie dog populations. These management tools increase the height and density of grassland vegetation around colonies and decrease the amount of soil disturbance, resulting in conditions less suitable for prairie dogs. Long-term modifications of livestock grazing strategies are generally accomplished through a grazing allotment management planning process which requires separate environmental analyses and public disclosure. Annual temporary adjustments in livestock grazing primarily in response to low precipitation periods (drought) conditions usually do not require additional environmental analyses and public disclosure.

The national black-footed ferret recovery program involves a large number of partners (25 to 30) and contributes substantial financial, operational, and professional support to the successful captive breeding

of black-footed ferrets and the Conata Basin black-footed ferret reintroduction program. The Conata Basin black-footed ferret reintroduction program is recognized by the Black-Footed Ferret Recovery Implementation Team and the Fish and Wildlife Service as the most successful black-footed ferret recovery site in North America. Beginning in 1999 to the current time, wild born black-footed ferret kits have been captured from Conata Basin MA 3.63 and moved to other locations to further recovery efforts. Conata Basin was the first black-footed ferret reintroduction program to undertake wild ferret translocations and has accomplished more than all other sites combined.

Recent drought conditions in Nebraska and South Dakota have accelerated prairie dog colony expansion and establishment. This has resulted in increased complaints from many neighboring landowners about prairie dog colonies encroaching onto their lands from national grasslands. The Nebraska National Forest responded to this issue in 2005 by amending the 2001 Forest Plan to allow use of lethal control in boundary management zones up to one-half mile wide on the Buffalo Gap and Oglala National Grasslands and up to one-quarter mile wide on the Fort Pierre National Grassland, from October 1 through January 31 (USDA Forest Service 2005e).

