

**ENVIRONMENTAL ASSESSMENT**

**for the**

**BLACK-TAILED PRAIRIE DOG CONTROL PROJECT  
BILLINGS & SLOPE COUNTIES  
NORTH DAKOTA**

**USDA FOREST SERVICE  
DAKOTA PRAIRIE GRASSLANDS  
MEDORA RANGER DISTRICT**

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# Chapter 1

## Purpose and Need

### INTRODUCTION

The control of black-tailed prairie dogs (prairie dogs) has been and continues to be a controversial topic. Many landowners are concerned about encroachment of prairie dog colonies, from national grasslands onto their lands and the resulting impacts on agricultural production, land values, and public health. Others feel that prairie dogs should be preserved regardless of their location.

The Forest Service has a responsibility to address conservation and management of prairie dogs. For the purposes of this Environmental Assessment (EA), “conservation” is used in reference to activities for helping ensure long-term persistence and health of black-tailed prairie dog populations across the project area. The term “management” is used primarily in context of reducing prairie dog populations and their habitat along property boundaries. Since prairie dog conservation direction is already established in the Dakota Prairie Grasslands Land and Resource Management Plan (Grasslands Plan), the primary focus of this EA is evaluating alternatives for managing and reducing prairie dogs along property boundaries. This analysis was initiated in response to Grasslands Plan direction, concerns expressed by neighboring landowners, and direction from USDA Under Secretary, Mark Rey’s, and Deputy Under Secretary David Tenny’s discretionary review letters dated August 13, 2007 and May 5, 2004 respectively.

The following table provides an overview of suitable prairie dog habitat and area occupied by prairie dogs, as of 2005, for the Medora ranger District.

**Table 1.1 Suitable and occupied prairie dog habitat on the Medora Ranger District.**

Unit	NFS* Land Area (acres)	Suitable Prairie Dog Habitat (acres)	Active Colony NFS Acreage	South Unit of TRNP** Colony Acreage	Total Prairie Dog Acres
Medora Ranger District	526,000	257,740	2874	1384	4,258

\* National Forest System

\*\*Theodore Roosevelt National Park is included in one of the two prairie dog complexes identified on the Medora Ranger District.

### PROPOSED ACTION

The Medora Ranger District proposes to initiate prairie dog control activities, using both lethal and non-lethal management tools at 24 locations where unwanted prairie dogs have encroached from National Forest System (NFS) lands onto adjacent private or state lands and at 2 locations where monitoring indicates encroachment is imminent. Treatment acreages range from less than

an acre to 51 acres in size (See Table 2.2). The proposed action would treat a total of approximately 311 acres of prairie dogs.

Under the proposed action, four colonies (53 acres) would be partially treated with oats treated with zinc phosphide, a lethal rodenticide, as a first step in establishing vegetative barriers. Two colonies (21 acres) would be partially treated and monitored to determine the effectiveness of this treatment to deterring further expansion. Four colonies (21 acres) which lay primarily on state or private lands, would be treated if the adjacent landowner first initiates control actions. The remaining 16 colonies (216 acres) would be totally controlled. In all situations where treatment is proposed the Forest Service will not implement control activities on National Forest System (NFS) lands unless control activities are also carried out by the adjacent land owner in more or less the same timeframe.

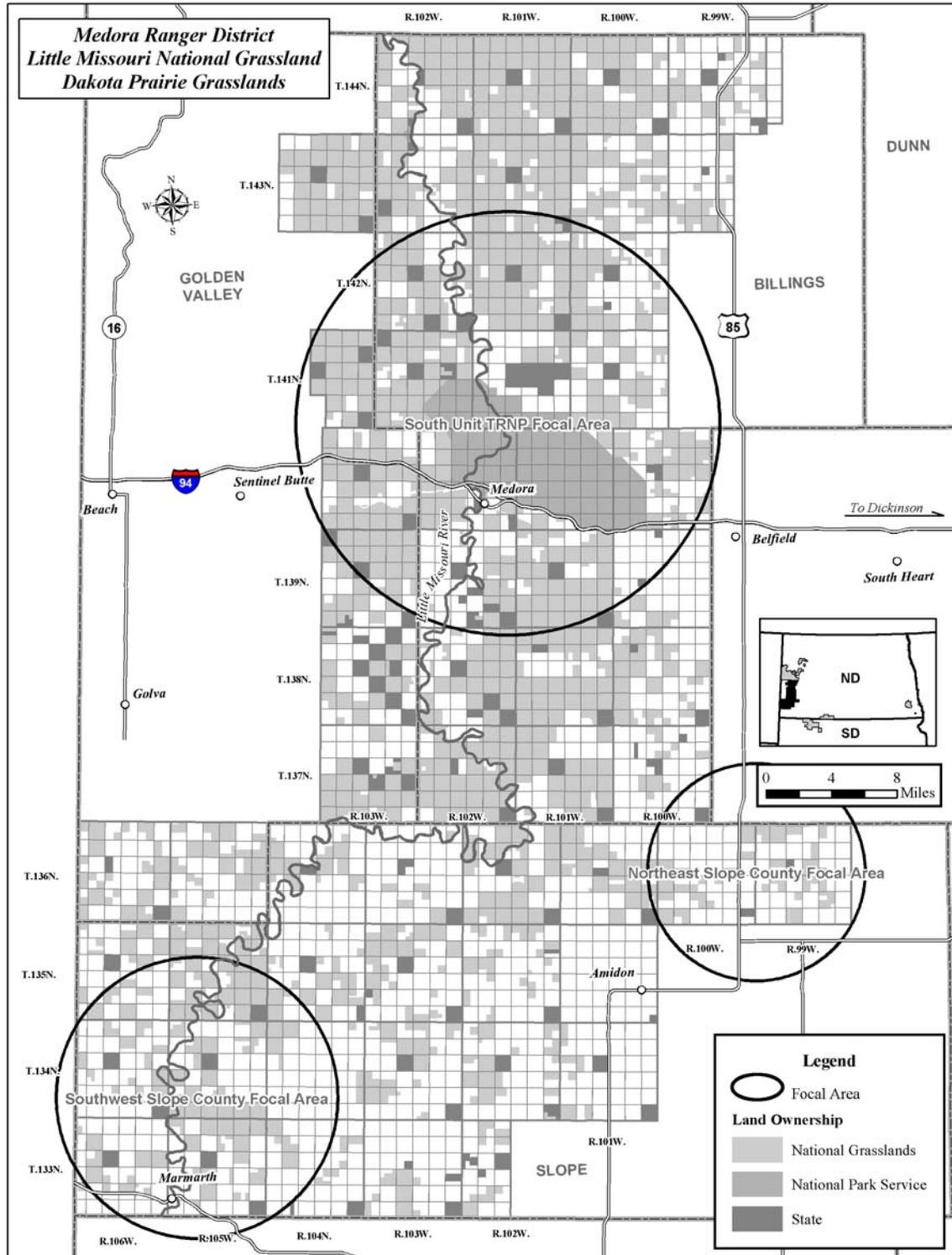
Prairie dog hunting is allowed on the Dakota Prairie Grasslands. As part of the proposed action, hunters will be encouraged to hunt colonies proposed for treatment.

The proposed action also includes treating up to 140 acres of unwanted future prairie dog encroachment over the next five years. This part of the proposed action addresses two scenarios that are likely to occur. The first is expansion of existing colonies onto private property or situations where encroachment is imminent. The second scenario is the establishment of new colonies on federal lands which then encroach onto private property. A detailed description of the proposed action is located in Chapter 2.

## **PROJECT LOCATION**

The prairie dog treatment areas are located in Billings and Slope Counties. They lie within Townships 133N-134N, 136N, 138N, 140N-142N, Ranges 99W-106W (See Figure 1).

Figure 1. Project Vicinity Map



## PURPOSE AND NEED

The Grasslands Plan and its 2002 Record of Decision (ROD) provide programmatic direction for conserving and managing black-tailed prairie dogs on the Dakota Prairie Grasslands (DPG). This direction prescribes use of lethal and non-lethal methods to regulate and manage prairie dog populations. For example, rodenticide can be used on the DPG to reduce or eliminate unwanted prairie dog populations that pose public health or safety risks or if they are causing damage to private or public infrastructure or facilities, such as cemeteries and residences. Such is not the case though, for this proposed project. Rather the issue is encroachment of prairie dog colonies from national grasslands onto adjoining private or state agricultural lands, where ranchers and farmers are concerned about losses in agricultural production, costs of managing prairie dogs, and possible risks to health and safety.

The highly intermingled private, state, and federal land ownership patterns on the Medora Ranger District has fostered numerous situations where prairie dogs have encroached from NFS lands onto adjacent private and state property. In such cases, the Grasslands Plan directs that control of the prairie dog colony is acceptable if it is consistent with the statewide prairie dog conservation strategy. The Grasslands Plan also identifies that judicious use of rodenticide and/or the use of high structure vegetation are potential control options.

Additionally, U.S. Department of Agriculture, Deputy Under Secretary for Natural Resources and Environment, David Tenny conducted a discretionary review (36 CFR 217) of the appeal decisions regarding appeals of the Grasslands Plan ROD, and documented his review decision in a letter to then Forest Service Chief, Dale Bosworth dated May 5, 2004. Mr. Tenny affirmed the Forest Service appeal decisions with instructions. In part his letter stated the following: *“As the FS implements the revised LRMP’ [for the Dakota Prairie Grasslands, Nebraska National Forest, and Thunder Basin National Grassland], I am directing you [Bosworth] to ensure that local land managers work together with state and county officials and local landowners to aggressively implement the spirit and intent of the good neighbor policy. Specifically, I am instructing the FS to work with local interests and landowners to use the full suite of management tools available to them to reduce the potential for prairie dog colonies to expand onto adjacent non-federal lands. This aggressive application of the good neighbor policy should involve other governmental and local interests, as appropriate, and be done in conjunction with state prairie dog management plans.”*

In August of 2007, USDA Under Secretary for Natural Resources and Environment, Mark Rey conducted a discretionary review (36 CFR 217) of the appeal decisions regarding appeals of the Grasslands Plan Grazing ROD signed on September 20, 2006. In his August 13, 2007 memorandum to the Chief of the Forest Service, Mr. Rey directs the Forest Service “... to continue aggressive implementation of the “good neighbor” policy”.

## RELATIONSHIP TO GRASSLANDS PLAN DIRECTION

### *Levels of Decisions*

Activities that are planned in the National Forest System involve two different levels of decisions: a general programmatic decision for the entire unit (i.e. DPG) and a site-specific decision for the project area.

This EA is not a general management plan for the project area or a programmatic environmental assessment. It is a site-specific linkage between the 2001 Grasslands Plan, the requirements established by the National Environmental Policy Act (NEPA) and direction established under the Good Neighbor Policy.

This decision level involves analyzing site-specific proposals, as well as disclosing their environmental effects, to achieve the management direction of the Grasslands Plan mentioned above. This information will be used by the Responsible Official (the Medora District Ranger) to make a reasoned choice for managing the project area.

## GRASSLANDS PLAN DIRECTION

The DPG plan provides the following direction related to controlling prairie dogs it should be noted that under the recently signed Livestock Grazing Record of Decision (2006), some prairie dog management standards, in the Grasslands Plan, have been changed to guidelines.

- Manage for high vegetative structure around prairie dog towns where prairie dog expansions are not desired. Emphasize maintaining high structure between existing prairie dog colonies and private land. **Guideline** (Grasslands Plan, p. 1-16).
- Limit the use of rodenticides (grain baits) for reducing prairie dog populations to the following situations:
  - Public health and safety risks occur in the immediate area.
  - Damage to private and public infrastructure or facilities, such as cemeteries and residences.
  - To respond to unwanted prairie dog colonization on land adjoining the national grasslands when consistent with approved, state-wide prairie dog conservation strategies. **Standard** (Grasslands Plan, p.1-18).
- Do not use burrow fumigants in prairie dog colonies. **Standard** (Grasslands Plan, p.1-19).
- Restrict the use of rodenticides (above-ground grain baits) for reducing prairie dog populations outside the period October 1 to December 31 to reduce risks to migratory birds. **Guideline** (Grasslands Plan, p.1-19).

The proposal lies within management areas (MAs) 3.51 “Bighorn Sheep Habitat”; MA 3.65 “Rangelands With Diverse Natural-Appearing Landscapes”; MA 4.22 “River and Travel

Corridors”; MA 4.32 “Dispersed Recreation: High Use”; and MA 6.1 – “Rangeland with Broad Resource Emphasis”. None of these MAs provide specific direction related to prairie dog control. Direction related to prairie dogs is provided by the previously identified standards and guidelines located in Chapter 1 of the Grasslands Plan and on page seven of the Grasslands Plan Record of Decision (ROD).

## **TIERED and REFERENCED DOCUMENTS**

Agencies are encouraged to tier their analysis documents to other analyses as a means to eliminate repetitive discussions of the same issues. Agencies are also directed to incorporate by reference material that will help cut down on the bulk of a document. The following documents support this analysis:

### ➤ *Northern Great Plains FEIS and Grasslands Plan*

- The 2001 Northern Great Plains (NGP) Final Environmental Impact Statement (FEIS), Appendix H - Biological Assessment and Evaluation - of the NGP FEIS provides analysis information related to black-tailed prairie dogs.
- The Grasslands Plan, Chapter 1, Sections F- Biological Resources and H - Animal Damage Management, and Chapter 2, Badlands and Rolling Prairie Geographic Areas, Little Missouri National Grassland. Both chapters provide standards and guidelines for the management of prairie dogs on the DPG.
- Grasslands Plan Record of Decision (ROD) signed July 31, 2002 – The Managing Prairie Dogs section, located on page seven, describes under what conditions rodenticides may be used for reducing prairie dog populations.

### ➤ *Black-tailed Prairie Dog Conservation Assessment and Strategy for the Medora Ranger District*

- This document assesses the past, present, and desired conditions of black-tailed prairie dogs on the district, and then provides a general strategy for prairie dog management that would ultimately meet the goals and objectives of the Grasslands Plan. The document is not binding. It is neither a decision document nor a National Environmental Policy Act (NEPA) document; rather, it is an internal document used to guide prairie dog management. The proposed action for this project was taken primarily from colony-specific recommendations in the assessment.

### ➤ *Animal Damage Control Program FEIS*

- The 1994 Animal Damage Control Program FEIS assesses the biological, sociocultural, economic, and physical impacts of alternatives for the U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS) to conduct an Animal Damage

Control (ADC) program. Applicable portions of the FEIS include Chapter 4 and Appendix P of the FEIS. Appendix P provides an analysis of the effects of zinc phosphide (rodenticide) on primary and secondary nontarget species, which include granivorous (seed eating) birds, animals and predators. The appendix also discusses the decomposition and mobility of zinc phosphide in soils. Chapter 4 provides analysis information related to the environmental consequences of poisoning prairie dogs.

## **DECISION TO BE MADE**

An EA is not a decision document. It is a document disclosing the potential environmental impacts of implementing the different alternatives, including the No Action Alternative.

Based on the information in this analysis and a consideration of public comments, the Deciding Officer will document his decision. If the analysis finds no significant impacts to the human environment, the decision will be documented in a Decision Notice and Finding of No Significant Impact. If the analysis determines significant impacts may occur, an Environmental Impact Statement will be prepared to further analyze the significant issue.

For the proposed prairie dog control project, the responsible official must decide whether to approve, deny, or modify the proposed treatment actions for the identified 26 colonies. He must also decide whether or not to accept the management strategy for dealing with future unwanted prairie dog encroachments.

# Chapter 2

## Issues and Alternatives

### INTRODUCTION

This chapter describes and compares the alternatives considered by the Forest Service for the proposed project. It includes a discussion of how alternatives were developed, alternatives considered but deleted from detailed analysis, design criteria, monitoring, and a comparison of the alternatives focusing on the key issues. Chapter 2 is intended to present the alternatives in comparative form, sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.

### PROCESS USED TO FORMULATE ALTERNATIVES

The Interdisciplinary (ID) Team developed alternatives to the project proposal, which respond to the Grasslands Plan's goals, objectives, standards and guidelines; the project's Purpose and Need; and public and agency concerns as directed by NEPA. The ID team consists of Forest Service personnel who have expertise in the grassland resources. The alternatives were fully developed through specialist input, field visits, and public comment.

### PUBLIC INVOLVEMENT

Informal meetings were held with both the Little Missouri and Medora Grazing Associations on October 10, 2006 and December 6, 2006. The intent of these meetings was to further update our information on prairie dog towns and to provide an opportunity for permittees to identify if they had a concern about encroaching prairie dogs onto their property.

Formal public involvement for this project began on March 6, 2007 with the mailing of a scoping letter to 86 organizations, individuals, Federal, State, and local government agencies. The scoping letter provided a summary and maps of the proposed action, the purpose and need for the action, tentative issues, alternatives, design criteria, and monitoring. The proposed project was also scoped within the Forest Service through an internal scoping process.

The scoping period for this project closed on April 6, 2007, a total of 38 comments were received from state and federal agencies, organizations, and individuals. The project proposal has been published in Dakota Prairie Grasslands Schedule of Proposed actions, available on the internet, since April 1, 2007. Documentation of the scoping and public involvement process is included in the Project Record available at the Medora Ranger District Office.

### DETERMINING ISSUES

An issue is generally a concern the public or the Forest Service may have about a proposal. The Forest Service uses a public involvement process to determine issues the public may have about

a proposal and a project team process to determine which issues need to be addressed in this analysis.

Identified issues were classified into three groups as defined below:

***Key Issues*** – These represent concerns from the public or Forest Service that warrant developing an alternative method of accomplishing the purpose and need other than the proposed action. Each alternative is then analyzed and compared to determine how well it addresses the key issue and how well it achieves the purpose and need for the project.

In some cases, a key issue may not result in the creation of an alternative, however, it is carried through the analysis because of the degree of concern associated with the issue.

***Other Issues*** – These represent concerns that may be reduced or eliminated through the project’s design criteria. “Design Criteria” explain what specific actions will be taken to mitigate the “other issues”.

***Issues Dropped From Analysis*** – These are issues that were raised by the public or the Forest Service but were dropped from analysis because they were:

- Not relevant to what is proposed.
- There is no feasible means of addressing the issue.
- The concern falls under the jurisdiction of another Federal or State regulatory agency.
- Specialist reports indicate that the proposal will have no significant adverse effect on the relevant resource.

### **Key Issues**

The following were identified as Key issues:

- The effect of the proposed action on the Black-tailed prairie dog, which is a Forest Service Management Indicators Species (MIS) and Northern Region Sensitive species.
- Impacts to primary and secondary nontarget species from treatment activities.

### **Other Issues**

There were no “Other” issues.

### **Issues Dropped from Analysis**

***Disease*** – Prairie dogs are most commonly identified as a risk to public health due to the prairie dogs’ susceptibility to sylvatic plague. The concern is that fleas from infected prairie dogs might vector the disease to humans. The risk of such transmittal, however, is very low because humans rarely handle infected prairie dogs directly, and because the fleas that inhabit prairie dogs are highly host-specific (Barnes 1982), and therefore will normally not bite humans. Humans are at greater risk from the more host-generalist fleas that inhabit ground squirrels, mice, cats, and dogs.

Prairie dogs can actually benefit public health by acting as “the canary in the mine”. This is because prairie dogs are highly susceptible to plague. Any sudden loss of prairie dogs in an area could signal that a plague outbreak is occurring, and thus alert public health officials to the danger. In areas lacking prairie dogs, plague outbreaks are much harder to detect, both due to the fact that other wildlife species are less susceptible to plague, and because plague deaths in secretive species such as pocket gophers are much less visible.

There are no recorded outbreaks of plague on the Medora Ranger District. The only known plague outbreaks occurred in the North Unit Theodore Roosevelt National Park in 1986 which resulted in the die off of a 40 acre colony and in the South Unit of the Park in 1993. The colony in the South Unit contained fleas that carried the plague, however, there was no die off. There are no recorded cases of plague in humans tied to either of these situations. Due to the low risk of disease transmittal and lack of plague activity on the Medora Ranger District this issue was dropped from detailed analysis.

**Archeology** – The DPG archeologist reviewed the proposed project and determined that it would have no effect on heritage resources. This finding falls within the guidelines found in the North Dakota Programmatic Agreement for Cultural Resource Management entered into between the North Dakota State Historic Preservation Office (SHPO) and the Dakota Prairie Grasslands. The archeologist’s determination is located in the Project Record.

**Botany** - The district botanist, determined that the primary affect of the proposed treatments on botanical resources would involve a release of vegetative growth upon removal of prairie dog browsing. The proposed action would primarily involve a removal of current prairie dog browsing disturbances. There would be very little new disturbance associated with the actions of poisoning or constructing barbwire fence corridors and these would have no adverse affect on sensitive plant species or other botanical resources. The botanist did note that some leafy spurge, Canada thistle, and invasive grass species are located in or near some of the colonies and that it may increase in the absence of foraging or clipping by prairie dogs. He indicated that the colonies should be monitored for new or expanding populations and that treatment be initiated if needed. The botanist report is located in the Project Record.

**Threatened and Endangered (T&E) Species** – The Wildlife Report and Biological Assessment (BA) state that there are no T&E species or critical habitat on the Little Missouri National Grassland. There are no known occurrences of T&E species on the Medora Ranger District.

**Raptors** – The project will not impact raptors during the breeding season as treatment will occur from October through December which is outside nesting timeframes. Secondary poisoning related to zinc phosphide baiting poses little risks to secondary non-target wildlife such as raptors (Appendix P, Animal Damage Control FEIS, 1994). This is because zinc phosphide breaks down rapidly in the digestive tract of affected animals, so predators and scavengers are generally not exposed to the compound. Most prairie dogs die in their burrows, further reducing the potential (p. 4-73, Animal Damage Control FEIS, 1994) for secondary poisoning. The Wildlife Report concludes that zinc phosphide applied according to label guidelines will not pose significant risks to raptors.

**Migratory Birds** - Due to the timing of the proposed project (October-December), most migratory birds will have migrated out of the area. However, some species winter in the area. Given the timing (Oct-December) of bait application, the duration (2-4 days) the bait is available, and the amount of bait placed at each burrow (1 teaspoon /4 grams), the Wildlife Report concludes that there will be insignificant impacts to migratory birds.

**Burrowing Owl** – The burrowing owl is closely associated with colonial burrowing animals, particularly prairie dogs. They utilize abandoned prairie dog burrows as nesting and rearing sites. Prairie dogs are not a prey species for the owls. The owls have sharply declined in recent decades. The most dramatic declines have been noted in the Northern Great Plains. They are now listed as endangered in Canada. In North Dakota, burrowing owl range has contracted by approximately 33% since 1980 (Murphy et al. 2001).

This issue was dropped because according to burrowing owl surveys conducted from 2001 through 2006 by Restani there are no known burrowing owls inhabiting any of the prairie dog colonies proposed for treatment. If burrowing owls should be discovered during or prior to control activities, the colony will be withdrawn from treatment and treatment options reevaluated.

**Black Footed Ferret** -The black-footed ferret is the most endangered mammal in North America. It is completely reliant on prairie dogs for survival. Black-footed ferrets do not currently occur on the Medora Ranger District.

During development of the Grasslands Plan, black-footed ferret recovery was an important topic. In 1999, a team of U.S. Fish and Wildlife Service and Forest Service biologists reviewed several sites on the Dakota Prairie Grasslands to assess the potential for black-footed ferret reintroduction (McCarthy 1999). Four sites, including: 1) Horse Creek area (McKenzie Ranger District), 2) vicinity of South Unit Theodore National Park, 3) Indian and Boyce Creek drainages, and 4) the southern one-half of the Grand River Ranger District, were identified as viable locations. All of these sites, however, lacked sufficient prairie dog acreage.

The area specifically identified in the Grassland Plan for ferret recovery is a 28,000-acre portion of the Horse Creek site, located on the McKenzie Ranger District, which is designated as Management Area 3.63 (Black-footed Ferret Recovery Area). The intent of management in this area is to reach sufficient acreage of prairie dog colonies (1,500 acres) to allow initial release of black-footed ferrets. The remaining three sites are to be managed, where possible, for prairie dog expansion.

The Medora Ranger District is not expected to support black-footed ferret recovery within the life of the current Grasslands Plan, but the district is expected to increase active prairie dog acreage and to contribute to the Little Missouri National Grassland's objective of establishing four prairie dog complexes in the next 10 years. A complex is defined as a group of at least ten prairie dog colonies with the nearest neighbor intercolony distances not exceeding six miles and with a total colony complex acreage of at least 1,000 acres (Grasslands Plan, p. G-38). Currently the district has two prairie dog complexes, i.e. the South Unit of Theodore Roosevelt National Park (SUTRNP) at 2,532 acres and the Boyce/Indian Creek complex at 1,247 acres. This project

proposal would treat 113 and 111 acres, respectively in the two complexes. Both complexes would remain over 1,000 acres in size. Eight years of survey information on the Medora Ranger District (See Table 2.1) indicates that natural expansion will likely replace the treatment acreage in two to three years as the complexes continue to expand.

**ALTERNATIVES**

**Alternatives Considered But Dropped**

The following alternatives were considered but eliminated from detailed analysis for reasons explained below.

- Rather than poison the prairie dogs trap and relocate them to contiguous NFS lands, where prairie dog expansion will pose no threat to private property.

This alternative was dropped for the following reasons:

- The district would need to complete a NEPA analysis to identify and reveal the effects of artificially established and/or enlarging an existing prairie dog population. The timeframe needed to accomplish this is likely to be extensive due to the complexity of the issue and would not be a timely response to the “good neighbor” policy.
- Trapping and relocating prairie dogs is expensive and its effectiveness as a total control method is questionable. Although one commenter indicated that in at least one case trapping was 90 percent effective. However, prairie dogs are able to re-establish their colonies with as little as ten percent of the original colony population (Knowles, 1994).
- Currently population augmentation through translocation efforts is not warranted due to naturally occurring population growth. Prairie dog survey data from the Medora Ranger District indicates that prairie dog acreage, under a variety of climatic conditions and hunter activity, has grown overall by about 56 percent from 1997 to 2005. Table 2.1 shows that growth, by individual focus areas, ranges from 26 to 99 percent with average annual growth rates ranging from approximately 5 to 9 percent. Based on this information it is highly likely that natural expansion will overcome the loss of proposed treatment acres in two to three years while continuing to expand the two identified prairie dog complexes on the district.

Table 2.1 Surveyed prairie dog acreage on the Medora Ranger District.

<b>Focal Areas</b>	<b>1997 Acres</b>	<b>2002 Acres</b>	<b>2005 Acres</b>	<b>Percentage Growth 1997-2005</b>	<b>Ave. % Annual Growth</b>
South Unit of Theodore Roosevelt National Park (SUTRNP)	908	1,088	1,148 + 1,384*	26	5.3
Northeast Slope	89	122	170	91	8.5
Southwest Slope	625	953	1,246	99	9.0

Miscellaneous	215	283	310	44	4.7
Total Acres	1,837	2,446	4,258	56	6.4

\*These acres are located in the Theodore Roosevelt National Park but they are part of the SUTRNP prairie dog complex.

- Knowles (2000), states that a 1,000 acre complex, without plague, is sufficient to maintain population viability for prairie dogs. On the Medora Ranger District there are two complexes (SUTRNP and the Boyce/Indian Creek area) that are currently in excess of a 1,000 acres in size and there is a third complex on the adjoining McKenzie Ranger District. The complexes will continue to be in excess of 1,000 acres after treatment is completed.
  - Concern was expressed that prairie dog expansion can not be relied upon to guarantee replacement of treated acreage. We agree that it is impossible to guarantee population growth, however, if none of the treatment acres were replaced there would still be two complexes on the Medora Ranger District, and a viable population of prairie dogs maintained.
- An alternative that identifies management plans for expanding prairie dog populations in addition to the proposed treatment of encroaching colonies.

Scoping comment pointed out that the Grasslands Plan speaks to expanding prairie dogs populations. This is correct, however, the Grasslands Plan (p.1-18) also identifies when it is appropriate to control prairie dogs. It states the following: Limit the use of rodenticides (grain baits) for reducing prairie dog populations to the following situations:

- Damage to private and public infrastructure or facilities, such as cemeteries and
- Public health and safety risks occur in the immediate area residences.
- To respond to unwanted prairie dog colonization on land adjoining the national grasslands when consistent with state-wide prairie dog conservation strategies.

**Standard**

As previously identified, in the alternative above, this project will not threaten the viability of prairies dogs and treatment acres will likely be recovered in a short time. Expanding prairie dog populations is a legitimate concern, however, it is beyond the scope of the proposed project and is inconsistent with the purpose and need of this proposed project.

- Eradicate all encroaching colonies through the use of a rodenticide.

This alternative was dropped because it is not consistent with the Grasslands Plan and it doesn't meet the purpose and need of the project. Further this alternative would remove a total of 741 acres of the 2,874 (about 26 percent) of the prairie dogs located on the Medora Ranger District. Given the acreage of prairie dogs on the Little Missouri National Grassland as a whole, reducing the existing population by 26 percent on the Medora Ranger District is not a prudent course of action.

- Erect a barrier to prevent prairie dogs from moving onto adjacent private lands.

There is little literature available on the effectiveness of constructed barriers, however, the literature we have located (Hygnstrom and Virchow, 1994) and (Hygnstrom, 1995) indicates that artificial barriers are expensive to build and difficult to maintain due to wind and rubbing by livestock making them impractical in most pastures grazed by livestock. Prairie dogs are also capable of tunneling to depths of four meters making it impractical to place subsurface barriers. Erected barriers at best appear to be only partially effective at stopping prairie dog expansion. Therefore, this alternative was dropped from further consideration.

- Use hunters to control prairie dog encroachment.

While hunting prairie dogs can have an effect on the population dynamics of a colony there is no information available that identifies it as an effective control method where complete removal of prairie dogs is needed. The logistics of coordinating sufficient hunters at the proper time, place, and in sufficient numbers to terminate a colony would be difficult. Also the inhabitants of heavily shot colonies develop a learned escape behavior that makes it highly unlikely that a colony could be completely controlled by shooting. Hunting, however, is allowed in the colonies identified for treatment.

## **ALTERNATIVES CONSIDERED IN DETAIL**

The alternative descriptions explain the activities that would occur if an alternative were selected. Design criteria were developed to achieve the intent of the action alternative. A detailed description of the environmental effects of implementing the alternatives is given in Chapter 3.

### **Alternative 1 – Proposed Action**

This alternative incorporates three separate approaches to controlling encroachment of unwanted prairie dogs from NFS lands onto adjacent private lands. Table 2.2 provides additional details about the proposed management for the 26 colonies included in this proposed project.

- The first method involves partial poisoning a portion of four colonies (53 acres total) with the registered rodenticide (zinc phosphide) and the establishment of high structure vegetative buffer strips. The high structure strips would serve to discourage future expansion of prairie dogs back onto the private lands. Prairie dogs do not like high vegetation because it blocks their view and hides predators. Establishing the vegetative strips is a two phase process. The first phase would involve treating a portion of the prairie dog colonies, where the vegetative barrier is to be established, with zinc phosphide coated oats. The poisoned area of the colony would include the vegetative strip plus an additional area to provide time for the vegetative strips to establish high structure before the prairie dogs re-populate the area. The buffer strips would be approximately 300 feet wide and of varying lengths. The poisoned area would generally be twice the width of the vegetative buffer strip or about 600 feet. The second phase would consist of fencing the buffer strips with a permanent three wire range fence in

accordance with Appendix B of the Grasslands Plan. No livestock grazing will be allowed in the fenced in areas. However, if vegetation becomes rank and begins to decline, stimulation (grazing) may be needed to maintain the buffer strip.

If vegetation in the vegetative buffer areas is progressing but the prairie dogs are re-colonizing the treated area sooner than anticipated, additional treatment may be needed to allow the high structure to become fully established. The determination to retreat an area would be based on monitoring of the site.

- Two colonies will be partially controlled through the use of zinc phosphide treated oats, in an effort to establish a vegetative buffer strip, however, a fence will not be installed. Total treated acreage is 21 acres.
- Four colonies which lay primarily on state or private lands, would be treated if the adjacent landowner first initiates control actions. Treated acreage on NFS lands would be 21 acres.
- The remaining 16 colonies would be totally controlled using zinc phosphide treated oats. This treatment would affect approximately 216 acres of prairie dogs.
- If total control is not achieved in the first round of treatment, follow-up treatment will be implemented. The determination to retreat an area would be based on monitoring of the colony.

Table 2.2. Proposed management for selected prairie dog colonies on the Medora Ranger District.

Colony Number	Focal Area <sup>1</sup>	Location	Colony Size <sup>2</sup> (Acres)	Treatment Acres	Proposed Management
505	SW Slope	Sec. 12 T134N,R105W	26	26	Poison the entire colony
511	SW Slope	Sec.10 T134N,R106W	21	21	Poison the entire colony
513	SW Slope	Sec. 14 T133N,R106W	8	8	Poison the entire colony
514	SW Slope	Sec. 8, 17 T134N,R106W	17	17	Most of this colony lies on ND state lands. FS will poison if the state controls prairie dogs (PD) on their lands
514a	SW Slope	Sec. 8, 17 T134N,R106W	1	1	Most of this colony lies on ND state lands. FS will poison if the state controls prairie dogs on their lands
525	SW Slope	SW1/4SW1/4 Sec. 26 T133N,R105W	<1	<1	Most of this colony is located on private property. FS will treat PDs on federal lands if private land owner treats their land.
667	SW Slope	Sec. 5 T134N,R104W	69	9	Create vegetative buffer/partial poison to aid in establishing buffer.
13410519a	SW Slope	Sec. 19	61	9	Create vegetative buffer/partial poison

<b>Colony Number</b>	<b>Focal Area<sup>1</sup></b>	<b>Location</b>	<b>Colony Size<sup>2</sup> (Acres)</b>	<b>Treatment Acres</b>	<b>Proposed Management</b>
		T134N,R105W			to aid in establishing buffer.
502	SW Slope	Sec. 31 T135N, R104W	182	2	Encroachment is of this colony onto private property is imminent. Partially poison and monitor
690A	SW Slope	Sec. 27 T135N, R105W	17	17	Encroachment is of this colony onto private property is imminent. Poison the entire colony.
492	NE Slope	Sec. 33 T136N,R99W	2	2	Most of this colony is located on private property. FS will treat PDs on federal lands if private land owner treats their land.
615	SUTRNP	Sec. 33 T142N,R100W Sec 4 T141N,R100W	76	16	Create vegetative buffer/partial poison to aid in establishing buffer.
632	SUTRNP	Sec. 33,34 T142N,R101W	47	19	Partially poison and monitor
632a	SUTRNP	Sec. 34 T142N,R101W	7	7	Poison the entire colony
670	SUTRNP	Sec 28 T140N,R102W	9	9	Poison the entire colony
678	SUTRNP	Sec. 30 T142N,R102W	3	3	Poison the entire colony
680	SUTRNP	Sec. 8 T141N,R100W	51	51	Poison the entire colony
686	SUTRNP	Sec21 T140N, R100W	2	2	Poison the entire colony
14210135a NC	SUTRNP	Sec. 35 T142,R101	4	4	Poison the entire colony
14010225a NC	SUTRNP	Sec. 25 T140,R102W	2	2	Poison the entire colony
499	MISC	Sec. 1 T136N,R103W	31	31	Poison the entire colony
642	MISC	Sec. 13 T138N,R100W	9	9	Poison the entire colony
642a	MISC	Sec. 13 T138N,R100W	2	2	Poison the entire colony
14310208a	MISC	Sec. 8 T143N,R102W	1	1	Poison the entire colony
13410218 NC	MISC	Sec. 18 T134N,R102W	24	23	Poison the entire colony

<b>Colony Number</b>	<b>Focal Area<sup>1</sup></b>	<b>Location</b>	<b>Colony Size<sup>2</sup> (Acres)</b>	<b>Treatment Acres</b>	<b>Proposed Management</b>
13610204a	MISC	Sec. 4 T136N, R102W	68	19	Create vegetative buffer/partial poison to aid in establishing buffer.

<sup>1</sup> Focal areas are loose groups of prairie dog colonies, there are three focal areas on the district (see Appendix A – Maps).

<sup>2</sup> Acres are for National Forest System lands. Acreage is from prairie dog surveys conducted in 2002 and 2005. New colonies, identified by NC at the end of the colony number are 2007 estimated acres.

Prairie dog hunting is allowed on the Dakota Prairie Grasslands. As part of the proposed action, hunters would be encouraged to hunt the colonies proposed for treatment.

The proposed action also includes treating up to 140 acres of future prairie dog encroachment over the next five years. This part of the proposed action addresses two scenarios that are likely to occur. The first is unwanted expansion of existing towns onto private property or situations where encroachment is imminent. The second scenario is the establishment of new colonies on federal lands which have encroached onto private property. When either of these situations occurs, and the adjacent landowner desires control action, an interdisciplinary team will assess the situation and provide recommendations to the deciding official. Management options include conservation easements, possible land purchase or treatment. If treatment is selected then a selected course of action will be prescribed. Courses of action include partial treatment and establishment of a vegetative barrier, total control, and/or adjustment in grazing systems. If treatment involves the use of poison, the non-federal land owner must also be willing to treat their land, if not, no action will occur.

**Design Criteria**

The following design criteria are included in the proposed action:

- Prior to any poisoning activities, the adjacent landowner will be contacted in person to verify that they want the encroaching prairie dogs to be controlled, and to discuss with them the possibility of land adjustments (such as an easement) to address their concerns with the prairie dogs.
- In all situations where treatment is proposed the Forest Service will not implement control activities on National Forest System (NFS) lands unless control activities are also carried out by the adjacent land owner in more or less the same timeframe.
- Following poisoning activities, any carcasses or bait remaining on the surface would be collected and placed in burrows.
- Application of the poisoned bait would be accomplished by a certified applicator.
- Prebait with untreated rolled oats will be used to identify active burrows.
- Baiting time would be minimized (2-4 days) to reduce the threat of accidental poisoning of nontarget species.

- Poisoned bait would only be applied from October through December to minimize effects on granivorous (seed eating) birds and animals.

### **Monitoring**

The project areas would be monitored annually to determine the effectiveness of the poisoning activities, the creation of the high structure strips and the effectiveness of the vegetative strips in deterring the spread of prairie dogs onto the adjacent private property.

Monitoring will consist of the following:

- A Robel transect(s) will be done in each of the fenced vegetative strip areas to establish the height and density of existing vegetation. The transects will be conducted annually.
- Photo points will be established at each colony and photos taken annually.
- Evaluate each treated colony to determine if retreatment is needed.
- Controlled colonies will be monitored for the occurrence of noxious weeds and other invasives.

### **Alternative 2 – No Action**

The National Environmental Policy Act (NEPA) and National Forest Management Act (NFMA) require the No Action Alternative. It serves as a baseline against which the proposed action can be compared.

Under this alternative no action would be taken to control prairie dog colonization. All the proposed treatment colonies would likely continue to encroach onto the adjacent private lands. Contraction or expansion of the colonies would depend on climate, grazing patterns and intensities, and hunting.

## **COMPARISON OF ALTERNATIVES**

The comparison of alternatives, along with environmental consequences discussed in Chapter 3, provides the information necessary for the public and the decision maker to understand the effects of the alternatives, and provides a basis for an informed decision. Table 2.3 provides a comparison of the alternatives by key issue and fulfillment of the purpose and need for this project.

Table 2.3. Comparison of alternatives by key issues and the purpose and need.

	ALTERNATIVE 1	ALTERNATIVE 2
Effect on Black-tailed prairie dog populations.	Would result in complete control of twenty colonies (237 acres) and partial control in six colonies (74 acres). The two prairie dog complexes on the Medora Ranger District would lose a total of 224 acres but would remain above the 1,000 acre size needed to maintain population viability. Reproductive potential would likely replace lost prairie dog acreage in two to three years. The wildlife determination for this project is “May impact individuals or habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species”	Would likely result in an increase in the prairie dog populations on both private and NFS lands. Prairie dog hunting would continue.
Effects on Non-Target Species	There may be a loss of some non-target species. The Wildlife Report concluded any losses would be of a minor nature and would not threaten the viability of any nontarget species. Additionally implementation of the design criteria would minimize exposure of nontarget species to the poisoned bait.	No Effect
Purpose and Need	Addresses the Grasslands Plan standard for treating encroaching prairie dogs and the “good neighbor” direction identified in the Plans Record of Decision (ROD). Is consistent with the North Dakota Black-tailed Prairie Dog State Management Plan. Meets Deputy Under Secretary of Agriculture Tenny’s and USDA Under Secretary Rey’s direction related to prairie dogs.	Continued uncontrolled expansion on to private lands does not meet the Grasslands Plan, ROD, or Deputy Under Secretary Tenny’s or Under Secretary Rey’s direction.

# Chapter 3

## Affected Environment and Environmental Consequences

### Introduction

Chapter 3 summarizes the physical and biological environments of the project area and the effects of implementing each alternative on that environment. It also presents the scientific and analytical basis for the comparison of alternatives presented in the alternatives chapter.

The effects analysis considers direct, indirect, and cumulative effects to the resources in the project. **Direct environmental effects** are those that occur at the same time and place as the initial action. An example would be on-site soil compaction from rubber-tired skidders harvesting timber. **Indirect environmental effects** are caused by the action, but occur later in time or are spatially removed from the action. An example would be downwind effects of a power plant on air quality.

**Cumulative effects** are a combination of direct and indirect effects of an alternative combined with the effects of past, present, and foreseeable future activities undertaken by either the Forest Service or other parties. Unless a different time period is defined, reasonably foreseeable future actions are considered for the expected life of the project. The following table lists the past, present, and reasonably foreseeable actions considered in the cumulative effects analysis. Only those actions with relevant impacts to the specific issues were analyzed and discussed.

**Table 3.1. Past, present, and reasonably foreseeable future actions considered in the cumulative effects analysis.**

Project/Activity	Location	Effects
<b>Past and Concurrent Actions</b>		
Drought	Entire Project Area	Drought results in reduced plant productivity and accelerated expansion and establishment of prairie dog colonies, which, in turn has elevated rancher and farmer concerns over prairie dogs in the project area.
Rodenticide use	Entire Project Area	Rodenticides were used in the project area up until 1993. A moratorium was placed on poisoning in 1999, except under special circumstances. In February 2004, the moratorium was rescinded. In November, 2006 three prairie dog colonies were partially treated with a rodenticide to aid in the creation of vegetative strips to deter the spread of colonies onto adjacent private property. Approximately 89 acres of prairie dogs were treated. Prairie dogs have likely been treated with rodenticides on the DPG from at least the 1930's. There are no known surviving records to indicate the amount of acres treated. However, a study on the Medora Ranger District, by Bishop and Culbertson (1976) indicated a 93% decline in prairie dog acreage between 1939 and 1972.

<b>Project/Activity</b>	<b>Location</b>	<b>Effects</b>
Livestock grazing management practices	Entire project area.	Livestock grazing has taken place in the project area since the late 1800s and continues today. Federal management of the project area began in the late 1930s, and livestock grazing management changed as a result. The first forest plan for the Custer National Forest (The DPG was part of the Custer N.F. until 1998) was issued in the 1987; adjustments were made in the management of livestock grazing and reduced stocking rates.
Plague	Entire project area	There is no record of plague occurring on the Medora Ranger District. In 1986 there is a case of plague in the North Unit of the TRNP. In the South Unit of the Park in 1993 sampled fleas were found to be carrying the plague, however, no die off occurred.
Range allotment management planning	Entire project area	The district is currently engaged in NEPA analysis in preparation to update existing AMPs. Prescribed actions will implement Grassland Plan rangeland vegetation and associated goals and objectives. Livestock and prairie dogs may compete for available forage depending on management.
Oil & gas exploration	Entire Project Area	About 75 to 80 percent of the federal minerals on the Medora District are currently leased. There are about 350 producing wells on the district.
Recreational prairie dog shooting	Entire Project area	There is the potential for collateral damage to other species from recreational prairie dog shooting (e.g. burrowing owls, predators/scavengers ingesting lead from the bullets used to kill the prairie dogs). Current levels of recreational shooting are unknown.
<b>Reasonably Foreseeable Actions</b>		
Drought	Entire project area	Drought results in reduced plant productivity and accelerated expansion and establishment of prairie dog colonies, which, in turn would likely elevate rancher and farmer concerns over prairie dogs in the project area.
Rodenticide use	Entire project area	Use will likely continue on state and private lands. The Forest Service will continue to use rodenticide as one tool to treat encroaching prairie dogs. This is contingent upon the private landowner simultaneously treating their unwanted prairie dogs.
Plague	Currently, not in project area.	Plague is a major factor that can influence black-tailed prairie dog populations and distribution across much of the range of the species. However, there is no record of plague on the Medora Ranger District. If affected, recent data suggests prairie dog populations affected by plague can recover to near pre-plague population levels within a few years.
Livestock grazing management, Range allotment planning	Entire project area	NEPA will be completed and specific livestock management actions will be implemented. The actions will be implemented to meet Grasslands Plan rangeland vegetation and associated goals and objectives at that time. To a limited degree livestock and prairie dogs may compete for available forage depending on management objectives.

<b>Project/Activity</b>	<b>Location</b>	<b>Effects</b>
Oil & gas exploration	Entire project area	Oil and gas exploration is a very active industry on the Medora Ranger District and it is believed this will continue into the foreseeable future.
Travel management	Entire project area	Travel management will be completed on all units of the DPG by 2009. Changes in motorized access may decrease opportunities for prairie dog recreational shooting, which in turn may result in increased prairie dog colonies and subsequent change in vegetation conditions.
Recreational prairie dog shooting	Entire project area	There is potential for collateral damage to other species from recreational prairie dog shooting. If Grassland Plan objectives for prairie dogs are not met by 2010 the black-tail Prairie Dog Conservation Assessment and Strategy recommends implementing shooting restrictions.

## **General Setting**

The analysis areas (i.e. focal areas) cover both badlands and rolling prairie habitats. This combination provides a variety of available habitats and a diverse suite of wildlife species who occupy those habitats. Wildlife characteristic of the LMNG include big game, small mammals, various raptors, prairie dogs, sharp-tailed grouse, grassland and forest birds, reptiles and amphibians, etc.

Vegetation is highly variable and includes perhaps all habitat types found on the Little Missouri National Grassland. Of particular importance to this project, however, are the prairie dog colonies themselves. Prairie dog colonies provide important habitat for many wildlife species in and of themselves.

Many wildlife species utilize prairie dog colonies to some degree. Knowles (1994) cited literature which lists 134 or more species that have been reported on prairie dog colonies. There are several on this list that are strongly associated with prairie dog colonies including burrowing owls, mountain plover, ferruginous hawks, badgers, and the black-footed ferret.

In this multiple-use landscape are other activities such as oil and gas; recreation; and livestock grazing. Also, the highly fragmented ownership pattern creates situations where prairie dogs create unwanted encroachments across ownership boundaries. As noted previously, opinions about prairie dog management are as fragmented and diverse as the ownership pattern.

## **Regulator Framework**

The following table identifies the relevant prairie dog management direction from the Grasslands Plan.

Table 3-2: Grasslands Plan relevant direction for prairie dogs.

<b>LRMP Chapter</b>	<b>Goal, Objective, Standard, or Guideline</b>
<b>GW</b>	<b>Goal 1.b:</b> Provide ecological conditions to sustain viable populations of native and desired non-native species and to achieve objectives for Management Indicator Species (MIS).
<b>GW</b>	2. Within 15 years, for threatened, endangered, sensitive, and MIS, demonstrate positive trends in population viability, habitat availability, habitat quality, and population distribution within the planning area. <b>Objective</b>
<b>GW</b>	46. Manage for active prairie dog colonies that are larger than 80 acres. <b>Guideline</b>
<b>GW</b>	51. Manage for high vegetative structure around prairie dog towns where prairie dog expansion is not desired. Emphasize maintaining high structure between existing prairie dog colonies and private land. <b>Guideline</b>
<b>GW</b>	2. Limit the use of rodenticides (grain baits) for reducing prairie dog populations to the following situations: <b>a.</b> Public health and safety risks occur in the immediate area; <b>b.</b> Damage to private and public infrastructure or facilities, such as cemeteries and residences; and <b>c.</b> To respond to unwanted prairie dog colonization on land adjoining the national grasslands when consistent with state-wide prairie dog conservation strategies. <b>Standard</b>
<b>GW</b>	3. Reduce conflicts with adjacent landowners over prairie dog management through an active landownership adjustment program. <b>Guideline</b>
<b>GW</b>	4. Restrict the use of rodenticides (above-ground grain baits) for reducing prairie dog populations outside the period October 1 to December 31 to reduce risks to migratory birds. <b>Guideline</b>
<b>GW</b>	5. Do not use burrow fumigants in prairie dog colonies. <b>Standard</b>
<b>GA</b>	1. Emphasize establishment and expansion of prairie dog complexes in the Indian Creek and Boyce Creek drainages. <b>Guideline</b>
<b>GA</b>	1. Emphasize establishment and expansion of prairie dog complexes in the vicinity of Theodore Roosevelt National Park, South Unit. <b>Guideline</b>

## Methodology for Analysis

A combination of monitoring data, the Medora Black-tailed Prairie Dog Conservation Assessment and Strategy (hereafter MPDCA), field review, and existing literature on prairie dogs form the basis for the analysis of this proposal.

Prairie dog colonies on the Little Missouri National Grassland (LMNG) were surveyed in 1997, 2002, and 2005. These surveys are summarized in the Medora Ranger District Black-tailed Prairie Dog Assessment (MPDCA; Svingen 2006). This assessment was consulted for the survey information, suggested management recommendations for each colony, and potential number of acres impacted. All of the colonies included in the PDCA were visited in the field by the assessment team. Recommendations for each colony, in the assessment, were based on field visits. Literature and personal communications were also utilized as part of this assessment. Copies of utilized information are located in the Project Record.

## Existing Condition

The Forest Service (FS) has a responsibility to sustain viable populations of desired species, including prairie dogs. Yet, the FS needs to be responsive to situations where prairie dog colonies extend between National Forest System (NFS) lands and adjacent non-NFS lands. This project is being proposed to address situations where unwanted prairie dog colonies have spread from NFS lands to adjacent non-NFS lands or their expansion onto non-federal lands is imminent.

### Population Viability

The Grasslands Plan (p.1-3) identifies that one of the objectives for the DPG is to demonstrate positive trends in population viability and population distribution for Management Indicator Species (MIS), sensitive, threatened, and endangered species within the DPG. The black-tailed prairie dog is both a MIS and a sensitive species for the Medora RD.

Numerous researchers have attempted to define viable population levels for the black-tailed prairie dog. These efforts have focused on the species' viability throughout its range. However, it appears that little, if any, effort has been made to define what constitutes a viable population at a geographic scale comparable to the Medora Ranger District.

Knowles (2000) estimated the number of prairie dogs that would be required to maintain a viable, isolated population in North Dakota at various levels of viability concern. He then converted these population levels into an estimate of the corresponding number of active prairie dog colony acres (Table 3.3). He defined five levels of viability concern as follows:

- **Short-term viability:** the minimum number of prairie dogs required to prevent a small isolated prairie dog colony from going extinct due to random demographic effects of environmental variation within 1-50 years.
- **Genetic viability:** the minimum number of prairie dogs required to prevent an isolated prairie dog population from losing genetic heterozygosity over the long-term (51-100 years).
- **Long-term viability without plague:** the minimum number of prairie dogs required to assure that an isolated prairie dog population will persist over the long-term (51-100 years).
- **Long-term viability with plague:** the minimum number of prairie dogs required to assure that an isolated prairie dog population will persist over the long-term (51-100 years) in the presence of sylvatic plague.
- **Associated species viability:** the minimum number of prairie dogs required to assure that an isolated prairie dog population and associated wildlife species will persist over the long-term (51-100 years).

The level of viability concern that is most appropriate to this assessment is the “long-term viability without plague” (Svingen 2006), which requires 1,000 acres of active prairie dog colonies with a nearest neighboring colony no more than five miles away (Knowles 2000). The South Unit of Theodore Roosevelt National Park (SUTRNP) focal area met the viability requirements in all survey years (1997,2002,2005). The Boyce Creek/Indian Creek (BCIC) focal

area met the objective in 2005. Therefore, the viability of the prairie dog itself is not seen as a driving management issue. Concern for local prairie dog viability is further moderated by the fact that the District's prairie dogs are not an isolated population (i.e. there are additional prairie dog colonies on adjacent private lands).

**Table 3.3. Acres of active prairie dog colonies needed to ensure prairie dog population viability (Knowles 2000, pp. iv, 46, 47).**

<b>VIABILITY CONCERN</b>	<b>NECESSARY ACRES OF PRAIRIE DOG COLONY</b>
Short-term viability	10
Genetic viability	100
Long-term viability – no plague	1,000
Long-term viability – plague	10,000

The prairie dog population on the Medora Ranger District has increased from a low point in the early 1970's to a point where there are two areas meeting Grasslands Plan requirements for complexes and viability needs on the Medora Ranger District.

According to the 2005 prairie dog surveys there are 4,261 acres of prairie dog colonies if the South Unit of the Theodore Roosevelt National Park (SUTRNP) is included.

### **Population Trend**

The Grassland Plan (pgs. 1-2; 1-16; 2-14) has a goal of demonstrating positive population trends for MIS and sensitive species. Colony acreage on the Medora District has expanded from approximately 1,837 acres in 1997 to 2,874 acres in 2005 – a 60 percent increase over eight years. The NGP FEIS predicts prairie dog colony acreage will be between 5,400 and 9,400 acres by 2012 on the LMNG (Appendix H, NGP FEIS). Currently, the total prairie dog colony area for the LMNG is approximately 4,900 acres whereas in 1997 the total was approximately 2,860 acres.

### **Conservation Strategy**

The intermingled nature of federal, private, and state lands on the Medora district, unwanted prairie dog expansion, Grasslands Plan direction for prairie dog management, and direction from both the Under Secretary and Deputy Under Secretary of the USDA signaled the need for an assessment of prairie dog management. In 2006 the Medora Ranger District completed a Black-tailed Prairie Dog Conservation Assessment and Strategy (PDCA; Svingen 2006). The purpose of the assessment “is to develop management strategies for increasing black-tailed prairie dogs (*Cynomys ludovicianus*) on National Forest System (NFS) land administered by the Medora Ranger District, while reducing resource conflicts and minimizing impacts to adjacent landowners (ibid.)” The assessment looked at all of the known prairie dog colonies on the district and provided a recommendation for their future management on a case by case basis. Most of the proposed action was derived from this assessment.

### ***Focal Areas***

A “focal area” in this document refers to an area where a loose grouping of somewhat interconnected prairie dog colonies occurs. There are four of these on the Medora Ranger District. The three primary focal areas on the Medora RD include SUTRNP (South Unit Theodore Roosevelt National Park), Southwest Slope County and Northeast Slope County. The fourth focal area is labeled Miscellaneous and contains all of the colonies not located in the other three focal areas.

Focal areas are not to be confused with a prairie dog “Complex” which refers to an interconnected array of individual prairie dog colonies. However, in one case, the naming of the focal area is identical to the prairie dog complex contained within the focal area. The South Unit Theodore Roosevelt National Park (SUTRNP) contains a prairie dog complex which has the same name as the focal area.

*South Unit Theodore Roosevelt National Park:* This focal area encompasses approximately 152,000 acres (See Figure 2, Appendix A) of NFS land surrounding the South Unit of the Theodore Roosevelt National Park (SUTRNP). Currently, in the SUTRNP focal area there are approximately 1,154 acres of prairie dogs on National Forest System (NFS) lands and another approximately 1,381 acres within the SUTRNP (Oehler per. comm.). Additional unknown colony acreage exists on non-federal lands. Potential prairie dog dispersal barriers that exist inside this focal area include the Little Missouri River and Interstate 94. These barriers potentially reduce the interconnectedness between colonies. The eastern portion of this focal area contains a high concentration of burrowing owls.

*Southwest Slope County:* This is the same as the Southwest Slope County Focal Area discussed in Svingen (2006). This focal area exists in far western Slope County, located about five miles north of Marmarth, ND. It straddles the Little Missouri River. Within this focal area is the Boyce Creek/Indian Creek prairie (BCIC) dog complex which encompasses approximately 1,246 acres of prairie dog colonies on 44,000 acres of federal land (See Figure 3, Appendix A). An unknown number of colonies exist on non-federal lands within this focal area. Almost all of the colonies on NFS lands exist to the east of the Little Missouri River and north of Highway 12.

*Northeast Slope County:* This focal area is located in northeastern Slope County, ND (See Figure 4, Appendix A) and is centered just east of Highway 85 and north of Highway 21. This focal area encompasses approximately 13,000 acres of NFS land and approximately 170 acres of prairie dog colonies. There are additional colonies on other ownerships. This focal area has the highest degree of an intermingled ownership pattern. This area also contains a high concentration of burrowing owls.

*Miscellaneous:* This focal area consists of isolated prairie dog colonies scattered across the remainder of the Medora Ranger District (See Figure 5, Appendix A) totaling about 310 acres.

Table 3.4 identifies prairie dog acreage by focal area across the Medora Ranger District. Currently prairie dogs occupy approximately 2,880 acres of NFS lands which accounts for approximately 0.5% of the Medora Ranger District land base.

Table 3.4: Acres of prairie dogs by Focal Area on NFS and NPS lands.

	FOCAL AREAS			
	So. Unit TRNP	NE Slope	Boyce Ck/Indian Ck (SW Slope)	Miscellaneous
<b>Prairie Dog Colony Acre</b>	1,154 1,381*	170	1,246	310

\* Acres of SUTRNP focal area contained in the south unit of the Theodore Roosevelt National park.

**Prairie Dog Complexes**

One of the objectives in the Grasslands Plan concerning the prairie dog ecosystem is the development of two or more prairie dog complexes in the rolling prairie and badlands geographic area across the Little Missouri National Grassland (LMNG). Currently, on the LMNG, there are two prairie dog complexes located in the badlands (Medora Ranger District) and one in the rolling prairie (McKenzie Ranger District).

The purposes of a complex are generally to help support prairie dog species viability and help provide sufficient habitat for associated species. A complex is defined as “a group of at least ten prairie dog colonies with nearest-neighbor, inter-colony distances not exceeding 6 miles and with a total colony complex acreage of at least 1,000 acres (Grasslands Plan, Appendix G).” Two areas on the Medora Ranger District (MRD) are specifically named within the Grasslands Plan as potential complex sites: the NFS lands around and including the SUTRNP (Grasslands Plan, pg. 2-22) and the Boyce Creek and Indian Creek (BCIC) areas in western Slope County (Grasslands Plan, pg. 2-15,). A third complex, Horse Creek is located in the rolling prairie geographic area of the McKenzie Ranger District. Table 3.5 identifies the areas on the LMNG currently meeting the Grasslands Plan objective for a complex.

Table 3.5 Prairie dog complexes and acreage on the LMNG.

Prairie Dog Complex	Grasslands Plan Objective (acres.)	Size as of 2005 (acres)
SUTRNP	1,000	2,308
Boyce Ck/Indian Ck	1,000	1,246
Horse Creek	1,000	1,103

**Desired Condition**

- The Grasslands Plan (pgs. 2-14, 22) identifies a desired goal of two or more prairie dog complexes in the rolling prairie and badlands geographic areas of the LMNG. A second complex is needed in the rolling prairie geographical to meet this objective.
- The DPG will continue to implement the “Good Neighbor” policy as well as the 2007 direction from Mark Rey, Under Secretary for Natural Resources Environment, USDA and the 2004 direction from David Tenny, Deputy Under Secretary for Natural Resources and Environment, USDA in regards to unwanted prairie dogs encroaching from federal lands onto private or state lands.

- The NGP FEIS predicts prairie dog colony acreage on the LMNG will be between 5,400 and 9,400 acres by approximately 2012 (NGP FEIS, Appendix H.). According to prairie dog surveys conducted between 1997 and 2005, the prairie dog population on the Medora Ranger District has increased from 1,837 to 4,900 acres.

## Environmental Effects Relative to Key Issues

### ***ISSUE 1 – The effect of the proposed action on the Black-tailed Prairie Dog, which is a Forest Service Northern Region Sensitive species and Dakota Prairie Grasslands Management Indicator Species (MIS).***

#### **Introduction**

The Grasslands Plan identifies prairie dogs as both a Forest Service Management Indicator Species (MIS) and a sensitive species. As such, any proposed action that has the potential to negatively effect prairie dog populations is a concern that needs to be analyzed and addressed. MIS are plant or animal species selected because their status is believed to (1) be indicative of the status of a larger functional group of species, (2) be reflective of the status of a key habitat type, or (3) act as an early warning of an anticipated stressor to ecological integrity. The key characteristic of an MIS is that its status and trend provide insights to the integrity of the larger ecological system to which it belongs. Sensitive species are plant and animal species identified by the Regional Forester for which population viability is a concern.

#### **Alternative 1 - No Action Alternative**

##### ***Direct and Indirect Effects***

Under this alternative no actions would be taken to control unwanted prairie dogs encroaching from federal onto state or private lands resulting in the following effects:

- Climate cycles and significant changes in livestock management could influence expansion or contraction rates. However, the low occupancy rate of suitable habitat (approximately 1%) in combination with no expected short-term changes in livestock grazing and likely drought cycles makes continued prairie dog expansion highly likely.
- An increase in size of an unknown number of existing colonies accompanied by dispersal and creation of new colonies.
- As prairie dog colonies increase in size and number there is increased potential habitat for species associated with prairie dog colonies.
- Recreational prairie dog hunting may increase as colonies expand or new colonies are created.
- Under this alternative direction from Under Secretary Mark Rey and Deputy Under Secretary David Tenny and adherence to the Good Neighbor policy would be forgone.
- An unknown amount of forage for livestock or other wildlife would be foregone.
- Plant communities in colonies would be altered to favor prairie dog habitation.

*Cumulative Effects*

Cumulatively the effect of the no action alternative would be the continued expansion of prairie dog acreage, creation of new colonies and ultimately new or enlarged complexes. The Forest Service would likely continue to receive requests for control of prairie dogs to stem unwanted encroachment. Poisoning activities on private and state lands may increase as might recreational shooting of prairie dogs. There would likely be continuing political interest as prairie dog populations expand.

Given the assumed expansion under this alternative, the Forest Service would continue to meet objectives for population growth, viability, providing habitat for associated species, and may achieve the four prairie dog complex objective for the LMNG.

**Alternative 2 – Proposed Action**

*Direct and Indirect Effects*

*Population Viability*

With the implementation of this alternative there would be a short term decrease of approximately 311 acres of prairie dog colonies on the Medora Ranger District. This would affect approximately 10.8 percent of the 2,880 acres of prairie dog colonies on the district. If the TRNP colony acreage is added, total acreage increases to 4,261 acres and affected acres drop to 7.3 percent. Table 3.6 identifies proposed treatment acres and the percentage of treated acres by focal area.

Table 3.6 Proposed treatment acreage and percentage by focal area.

	FOCAL AREA			
	SUTRNP	NE Slope	SW Slope	Miscellaneous
<b>Approximate Prairie Dog Colony Acres</b>	2,535	170	1,246	310
<b>Acres Proposed for Treatment</b>	113	2	111	85
<b>Percentage of Colony acres to be Treated</b>	4	1	9	27

After treatment, the SUTRNP and SW Slope focal areas would consist of 2,422 and 1,135 acres, respectively. The remaining acreages are sufficient to maintain a viable population of prairie dogs in each focal area, according to 0(2001) criteria. Colony juxtaposition, though affected, is still sufficient to sustain the prairie dog complexes located within each of the focal areas.

Treatment in the Northeast Slope County focal area would impact approximately 1 percent of the colony acreage in this focal area. This focal area does not and will not meet the “long term viability without plague” criteria from Knowles (2000) because it is less than 1,000 acres in size and will not be managed to achieve that acreage level due to ownership patterns. The importance of this focal area is the maintenance of prairie dog habitat for burrowing owls.

The Miscellaneous focal area is made up of the colonies that didn't fit into one of the other focal areas. The colonies in this focal area are scattered across the district. This group of colonies does not meet the viability definition under Knowles (2000) because the distance between colonies is greater than five miles and there are substantially less than 1,000 acres of prairie dogs.

*Potential Growth*

Prairie dog colony expansion rates vary considerably site to site, and year to year. In general, expansion rates are driven by control (poisoning and shooting) impacts, climate, and grazing-related changes in vegetative cover (Milne 2004). The prairie dog expansion model used in the Grasslands Plan FEIS assumed that plague was not present and that existing colonies would grow at 5-10 percent annually. This method estimated that implementation of the Grasslands Plan would result in 5,400 to 9,400 acres of active prairie dog colonies on the entire Little Missouri National Grassland by 2012.

Survey data of prairie dog colonies on the Medora District from 1997 to 2005 indicates that growth rates, within the various focal areas, varied from slightly more five percent to 44 percent (See Table 3-7). Over that time, there were likely fluctuations in individual colony size, however, there is a demonstrated upward trend in growth.

In the foreseeable future, it is assumed that there will be an upward trend in prairie dog populations on the Medora District. Factors supporting continued overall expansion include: continued livestock grazing management, extensive acreage of unoccupied habitat (approximately 1% is currently occupied), and recurrent drought cycles. If expansion in the focal areas continues at the rates exhibited from 1997 to 2005 the 311 acres of treatment would be replaced in two to three years.

Table 3.7. Surveyed acreage of prairie dog colonies.

<b>FOCAL AREA</b>	<b>1997 Acres</b>	<b>2002 Acres</b>	<b>2005 Acres</b>	<b>Annual Expansion Rate (%)</b>
<b>SUTRNP (NFSL)*</b>	2581	N/A** (1088)	3680	5.3
<b>NE SLOPE</b>	89	122	170	8.5
<b>SW SLOPE</b>	625	953	1246	9
<b>MISC</b>	215	283	310	4.7

\*\*Acreage figures for prairie dogs in TRNP were not available for 2002

*Complexes*

There are currently two prairie dog complexes, SUTRNP and Indian Creek/ Boyce Creek, located on the Medora District. Under the proposed action, 113 and 111 acres will be treated in the complexes, respectively. While this will result in a temporary reduction in complex acreage the complex acreage will not drop below 1,000 acres. Although 9 and 10 colonies, respectively, will be totally controlled, the juxtaposition of the remaining colonies is such that the integrity of the complexes will be maintained.

### *Cumulative Effects*

Current, on-going activities, as well as reasonably foreseeable activities, are essentially a continuation of previous activities such as livestock grazing; oil and gas activities along with associated road development; recreational prairie dog shooting; and continued control activities on NFS lands and other ownerships.

Currently, the McKenzie Ranger District is also proposing prairie dog control activities. The district is proposing to control up to 308 acres of prairie dogs, or approximately 15 percent of their 2005 colony acreage. When combined with the Medora District's treatment actions, there would be approximately 619 acres of prairie dog colonies controlled out of 4,968 acres of prairie dogs (2005), or approximately 12 percent of the LMNG prairie dog acreage. If the TRNP acreage is added about 10 percent of total prairie dog acreage would be affected.

Both the McKenzie and Medora Ranger Districts project the possibility of additional treatment acres totally about 211 over the next five years. If this acreage is added to proposed treatment acres affected acreage would be roughly 830 or about 17 percent of LMNG prairie dog acreage would be affected. If the TRNP acreage is added the affected percentage drops to about 13 percent.

In addition to the treatment of federal lands under the proposed actions of the two districts, it's estimated that approximately 95 acres and 440 acres of prairie dogs would be treated on state and private lands adjacent to the McKenzie and Medora Ranger Districts. The cumulative effect of this action is unknown, however, the three complexes on the LMNG (Horse Creek, Boyce Creek/Indian Creek, and SUTRNP) will be maintained as complexes and will support viable populations of prairie dogs. This is true whether or not treated acreage is replaced through expansion or dispersal.

### *Conclusion*

#### *Sensitive Species*

The black-tailed prairie dog is a Region 1 sensitive species. Although the proposed action would treat 311 acres of prairie dogs across the district, the action is thought to be temporary in nature with the lost acreage being replaced through expansion of remaining colonies in about two years. In the event that this does not happen, the remaining acreage of prairie dogs is sufficient to maintain population viability, according to Knowles (2000) criteria. The proposed action would remove some colonies from the two complexes, however, the remaining colonies would be of sufficient size and location so that the complexes are retained. Therefore, the Forest Service Biologist has determined that the proposed action "May impact individuals or habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species".

#### *MIS Species*

The key characteristic of an MIS is that its status and trend provide insights to the integrity of the larger ecological system to which it belongs. Surveys between 1997 and 2005 show a consistent upward trend, in prairie dog acreage. The analysis reveals that the proposed treatment of 311 acres will not threaten the prairie dog population viability nor the existing prairie dog complexes. The proposed project will have a short term effect on prairie dog and potentially associated

species. However, based on demonstrated expansion rate the lost treatment acreage should be replaced in two to three years. Therefore, there will ultimately be little impact to the prairie dog, associated species, or the larger ecological system.

***ISSUE 2 – Impacts to primary and secondary nontarget species from treatment activities.***

**Introduction**

The proposed action includes the use of rolled oats coated with zinc phosphide, a certified rodenticide. A small amount (approximately a teaspoon) of the poisoned grain is spread on the ground near the active prairie dog burrows, therefore, it may be directly or indirectly available to non-target species.

There are two groups of non-target wildlife that are at risk from the poisoned grain. Primary non-target species include granivorous (seed eating) birds and mammals such as horned larks, deer mice, and thirteen-lined ground squirrels, which may directly consume the poisoned bait. Secondary nontarget species are predators and scavengers that may feed on carcasses of the granivorous species or poisoned prairie dogs and may indirectly be poisoned.

**Alternative 1 - No Action Alternative**

***Direct and Indirect Effects***

Under this alternative no control efforts would be initiated. There would be no direct or indirect effects to nontarget species on federal lands. Control activities may occur on private or state lands with potential adverse effects to no-target species, however, the amount, time, and location of these activities is unknown.

***Cumulative Effects***

Because there are no known direct or indirect effects under this alternative there are no cumulative effects.

**Alternative 2 – Proposed Action**

**Direct and Indirect Effects**

Uresk et al (1988) found that the effects of poisoning prairie dogs included short-term changes in non-target species populations (deer mice, cottontail rabbits, and jack rabbits) but that these short-term impacts essentially dissipated eight months after treatment. Further, Deisch et al (1990) found that zinc phosphide resulted in decreased densities of deer mice in treated prairie dog colonies. Indirect (long-term) effects to deer mice habitat came about as a result of the increased vegetation from a lack of prairie dog clipping. The same conclusion can likely be deduced for many of the small mammal species that reside in or around the Medora Ranger District prairie dog colonies.

Apa et al (1991) found that zinc phosphide caused no measurable reduction in horned larks; no long-term direct impacts to horned larks; and no short-term or long-term effects to the granivorous avian guild. Like deer mice, indirect negative effects were associated with habitat changes from reduced prairie dog activity in treated areas.

Overall, primary (i.e. granivorous) species that may occur in the control areas may be impacted by zinc phosphide treatments. The approved application dates under the zinc phosphide label are July through February. The more restrictive time frame identified in the Grasslands Plan (October to December) further reduces the potential for direct effects, especially to granivorous avian species. Most avian species will have migrated through by October and will not be significantly affected by project activities. Based on the above studies, there are not expected to be any significant short-term or long-term effects from the use of zinc phosphide.

Secondary (i.e. predators and scavengers) species are generally not exposed to zinc phosphide (App. P, Animal Damage Control FEIS, 1994). Zinc phosphide breaks down rapidly in the digestive tract of affected animals, thus minimizing the exposure to predators or scavengers. Laboratory tests show that species such as coyotes, bald eagles, and golden eagles were apparently not affected by poisoned animals (ibid.). However, the impacts of zinc phosphide on domestic pets are more variable, especially if they consume the digestive tract of affected animals (i.e. primary species).

Recreational prairie dog hunting may result in the loss, through accidental or intentional shooting, of other species such as burrowing owls, coyotes, badgers, and raptors. There is some indication that lead, contained in prairie dogs carcasses and ingested by predators or scavengers, may have a collateral effect on non-target species (Pauli, 2007). The current amounts of recreational prairie dog shooting and possible collateral losses are unknown.

### **Cumulative Effects**

Because the direct and indirect effects to non-target species are expected to be negligible the cumulative effects to populations of these species, if any, would be minor.

### **Future Encroachments**

Given the dynamic nature of prairie dog colonies it is reasonable to assume that within the next five years some existing colonies will expand onto private or state lands or new colonies will be established which will transgress ownership boundaries.

Based on a review of existing colonies that have a potential to expand onto non-federal lands and the rate of new colony establishment, between 1997 and 2005, it's estimated that in the next five years, approximately 140 acres of prairie dogs may require treatment.

If control activities are required then the question of how many colony acres could be controlled in the foreseeable future and yet maintain viability of the prairie dog and meet LRMP objectives by 2012 must be answered.

Currently, in the SUTRNP Focal Area, the Wildlife Report indicates that approximately 660 acres of prairie dogs could be controlled and prairie dog viability would be maintained. The juxtaposition and size requirements for the SUTRNP complex would also remain in place; and habitat for associated species would be retained. Under the Proposed Action 113 acres would be controlled. Currently, within the SUTRNP, the risk of colonies creating encroachment issues in the foreseeable future appears to be limited. Estimated future treatment acreage for this focal area is less than 10 acres.

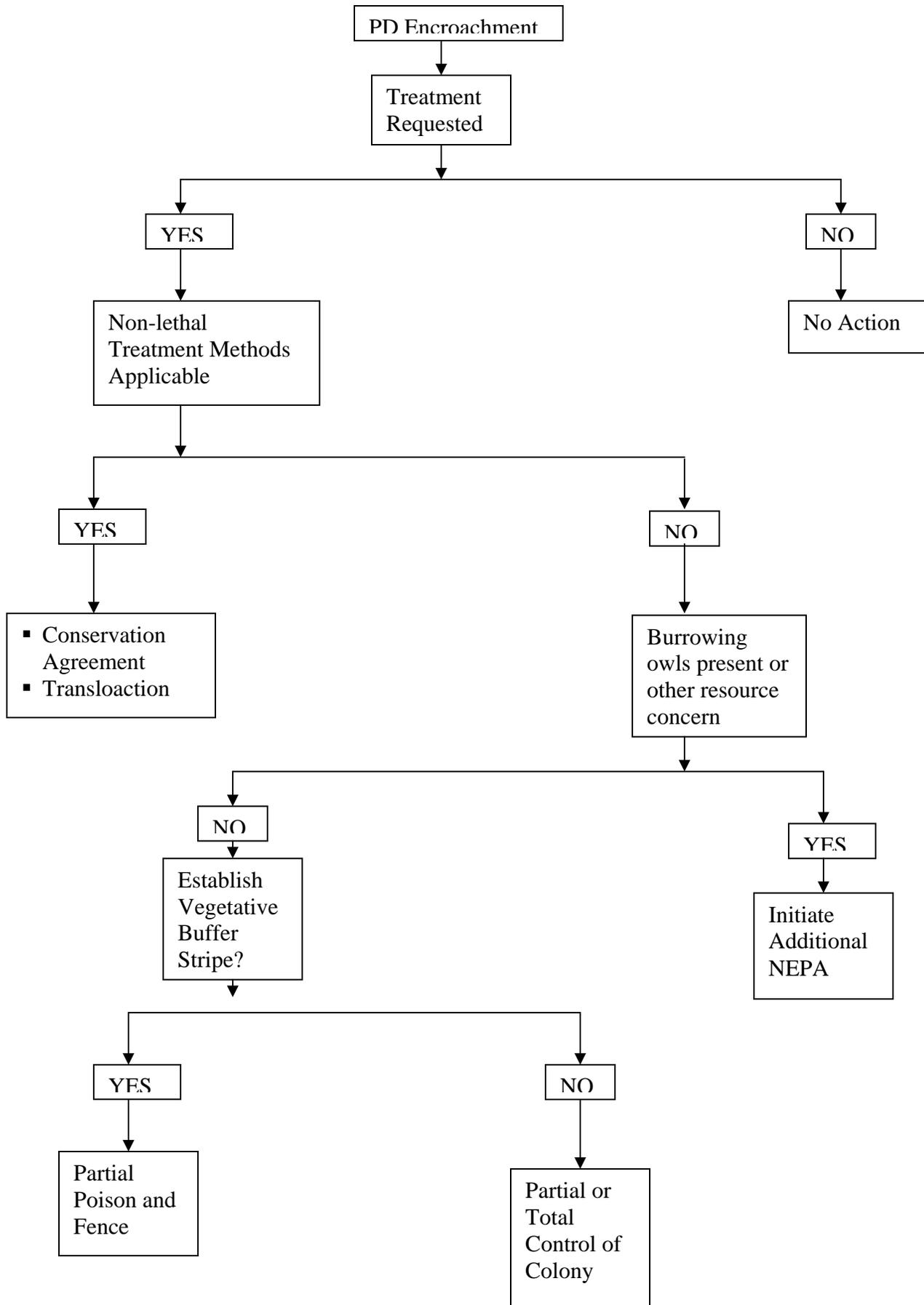
Within the BCIC Focal Area, there are approximately 1246 acres of prairie dog colonies. Of these, 111 acres are proposed for treatment leaving approximately 1135 acres after treatment. The Wildlife Report indicates that up to 135 additional acres could be treated and the BCIC Focal Area would still retain those requirements for prairie dog viability under Knowles (2000). However, as with the SUTRNP, there are only a few situations where prairie dog colony encroachment may create a future encroachment issue. Estimated future treatment acreage for this focal area is approximately 55 acres.

The NE Slope County Focal Area contains approximately 170 acres of prairie dogs with two acres proposed for treatment. Because this focal area is significantly below the 1,000 acre threshold, it doesn't currently meet population viability requirements under Knowles (2000) but it does meet the 100 acre genetic viability requirement (*ibid.*). The high value of this focal area is associated with the habitat the colonies provide for a high density burrowing owl population. Future treatment options in this focal area will be addressed in an upcoming NEPA analysis that will analyze treatment options associated with the burrowing owl.

The Miscellaneous Focal Area includes colonies that fall outside the other focal areas. There are currently 310 acres of prairie dog colonies with 85 acres proposed for treatment under this analysis. However, prairie dog viability across the Medora Ranger District is currently met by the two large complexes in the SUTRNP and SW Slope County Focal Areas. All acres in this focal group could be eradicated and the Medora Ranger District would still meet prairie dog viability via the two large complexes. Though the remaining 225 acres in this focal area could be controlled and not impinge on prairie dog viability concerns, approximately 25 acres may need treatment in the foreseeable future.

The probability that new colonies may be established over the next five years is thought to be relatively high. This also leads to the possibility that some of these colonies may encroach onto non-federal lands. The exact acreage of encroaching towns is unknown but estimated at 50 acres. Because the new colonies would be small in size, treating them would have no effect on current population viability or maintaining the existing complexes.

The following flow chart identifies the process that would be used by the District Ranger and ID team to evaluate treatment of future encroachments.



## Irreversible and Irrecoverable Commitment of Resources

Irreversible and irrecoverable commitments of resources are defined in Forest Service Handbook 1909.15 (2/21/95).

The irreversible commitment of resources means that nonrenewable resources are consumed or destroyed. Examples include mineral extraction, which consumes nonrenewable minerals, and potential destruction of such things as heritage resources by other management activities. These consumptions or destructions are only renewable over extremely long periods of time.

The irrecoverable commitment of resources are opportunities foregone. They represent trade-offs in the use and management of grassland resources. Irrecoverable commitment of resources can include the expenditure of funds, loss of production, or restrictions on resource use.

There is no irreversible commitment of resources associated with the proposed action. The loss of prairie dog acres associated with the treated colonies may represent an irrecoverable loss. However, this loss does not represent a threat to the population viability of prairie dog populations on the Medora Ranger District. Also it is believed that natural expansion of the remaining colonies will, within a short time, offset the loss of the treated acres.

## Compliance with the Grassland Plan, Regulatory, and Other Direction

**Grasslands Plan** – The Grasslands Plan identifies under what circumstances prairie dogs may be treated. The Plan states that rodenticides may be used to reduce prairie dog populations in certain situations. One of the situations identified is to respond to unwanted prairie dog colonization on land adjoining national grasslands (Grasslands Plan, p. 1-18). The proposed action was created in response to this Plan direction.

**Black-tail Prairie Dog Conservation Assessment and Strategy for the Medora Ranger District**  
The proposed action is based on recommendations identified, for the most part, in this assessment.

**The North Dakota Game and Fish Department's 2001 Black-tailed Prairie Dog Management Plan** - The North Dakota Game and Fish Department's 2001 Black-tailed Prairie Dog Management Plan focused on maintaining a viable population of the prairie dog itself (as opposed to viable populations of associated species). This plan did not set any target acreage to maintain, but concluded that prairie dog viability was currently not threatened within North Dakota. The proposed action will not adversely effect the viability of the black-tailed prairie dog on the DPG or the State of North Dakota.

**U.S. Department of Agriculture** – In May of 2004 David Tenny, Deputy Under Secretary for Natural Resources and Environment USDA directed the Forest Service to aggressively implement the spirit and intent of the good neighbor policy in dealing with encroaching prairie

dogs. In August of 2007 Mark Rey, Under Secretary for Natural Resources and Environment USDA reiterated the direction “to continue aggressive implementation of the “good neighbor” policy”. The proposed action meets the intent and direction put forth by Under Secretary Rey and Deputy Under Secretary Tenny.

*U.S. Fish and Wildlife Service (Service)* – Although the black-tailed prairie dog is not a listed threatened, endangered, or candidate species, the Service was consulted. They will monitor the status of the species and reconsider their determination if new information indicates that the magnitude and imminence of threats is considerably greater than identified in their final rule regarding listing the black-tail prairie dog under the ESA (U.S. Fish and Wildlife Service, 2004).

The following executive orders and plans have been reviewed for compliance:

**Executive Order 12898, Environmental Justice**, directs each Federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

There is no evidence that the effects attributable to prairie dog movement on federal lands, or the actions outlined in these alternatives, are disproportionately high or adverse on minority populations and low-income populations when compared with the effects upon non-minority or non-low-income populations.

**Executive Order 11990, Protection of Wetlands**, directs agencies to avoid to the extent possible the long and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Known major wetland areas (as defined in Sec. 6, (c)), have been protected or managed specifically for the protection of wetland resources in past management strategies. There is no evidence that the effects attributable to prairie dog management on national grasslands or the actions outlined in any alternative, would impact wetlands.

**Executive Order 11988, Floodplain Management**, directs agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. This proposed action or the activities prescribed in any alternative do not modify or develop floodplains.

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# Chapter 4

## Consultation and Coordination

### *Preparers and Contributors*

The following Forest Service employees contributed to this environmental assessment:

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This environmental analysis (EA) has been distributed to agencies, organizations, and individuals who provided comments during the scoping process and to individuals or organizations who specifically requested a copy of the document. A legal notice requesting comment on this EA was published in the DPG official paper of record, The Bismarck Tribune, and the EA was made available on the Internet to any interested party.

# Appendix A

Figure 2. South Unit Theodore Roosevelt National Park Focal Area

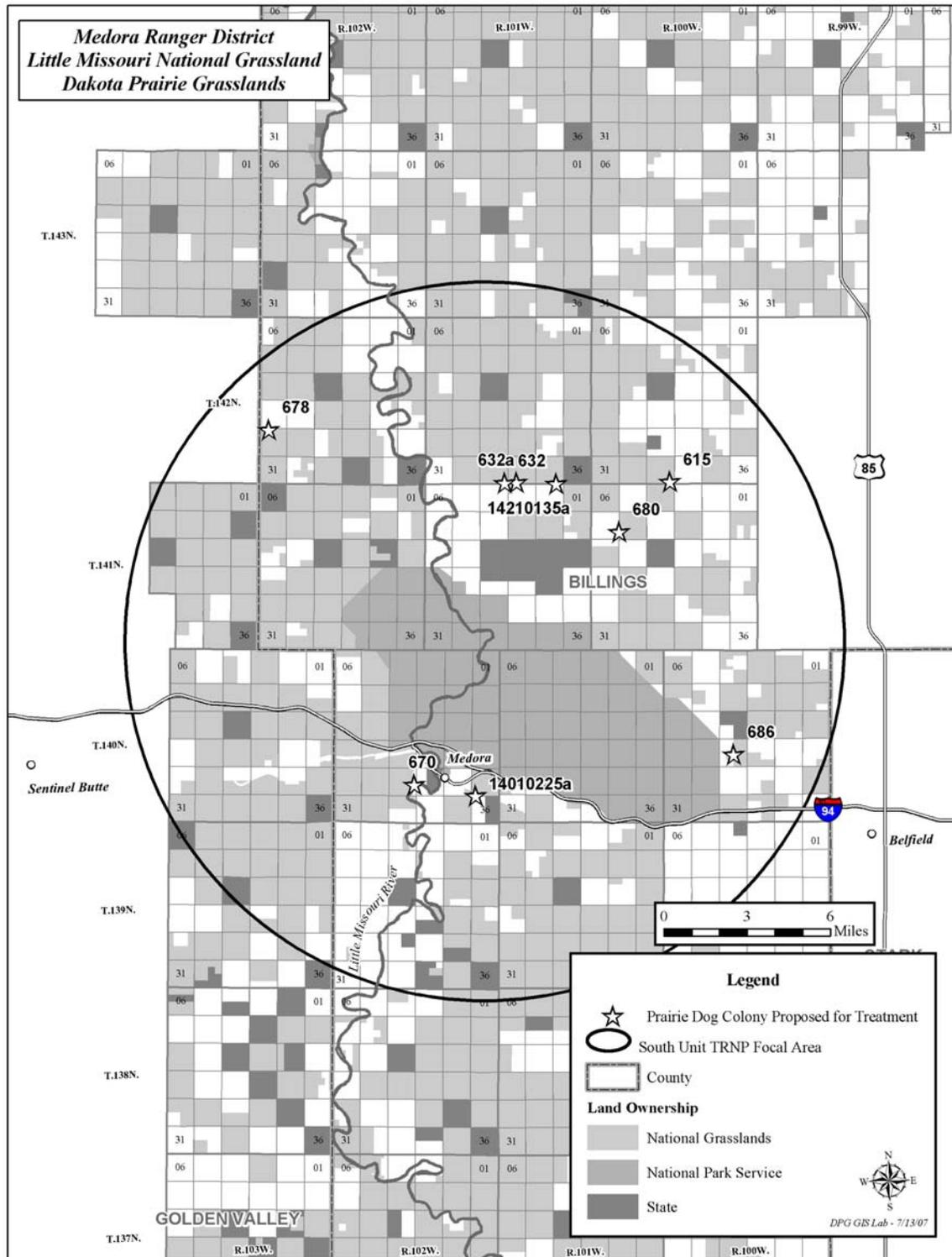


Figure 3. Southwest Slope County Focal Area

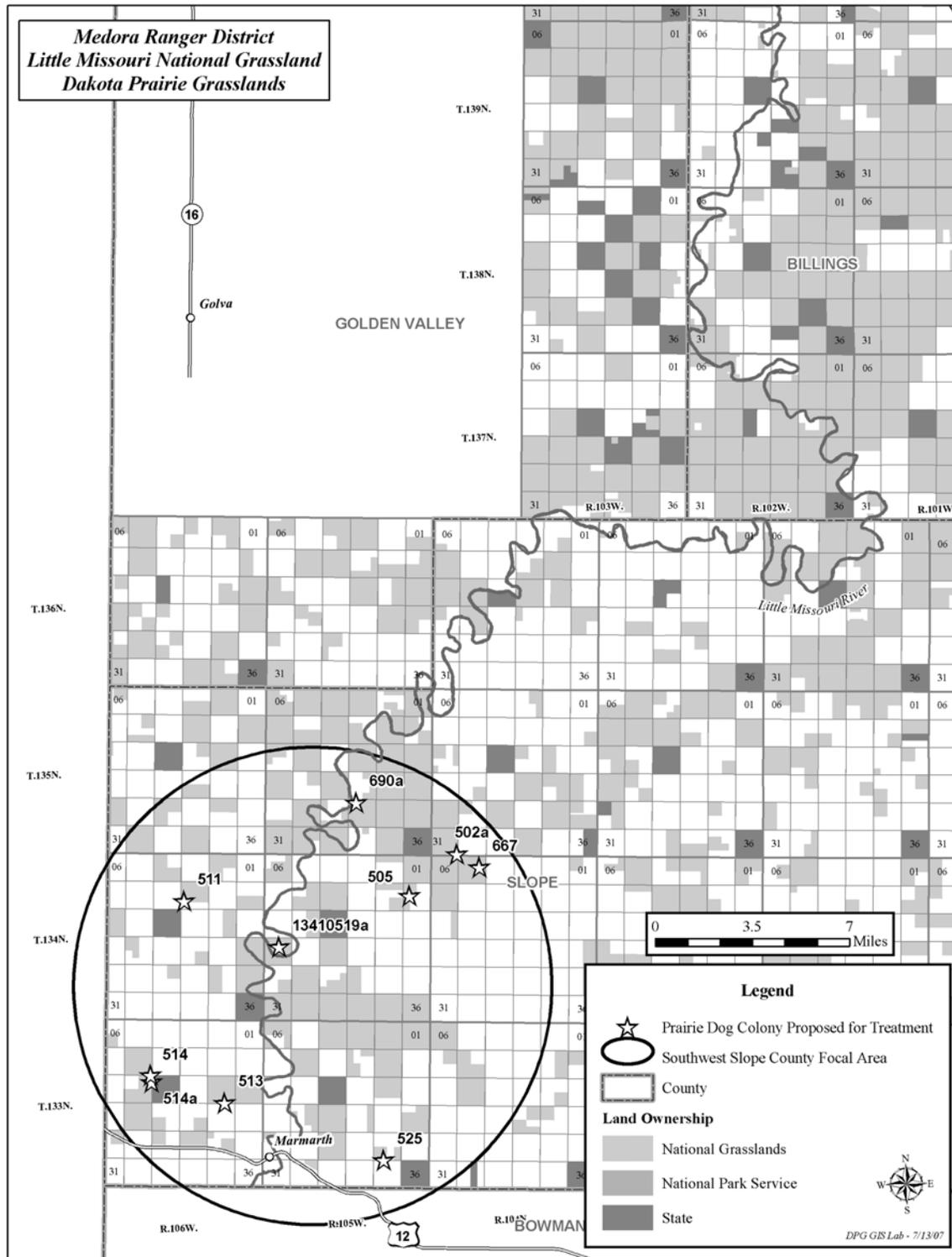


Figure 4. Northeast Slope County Focal Area

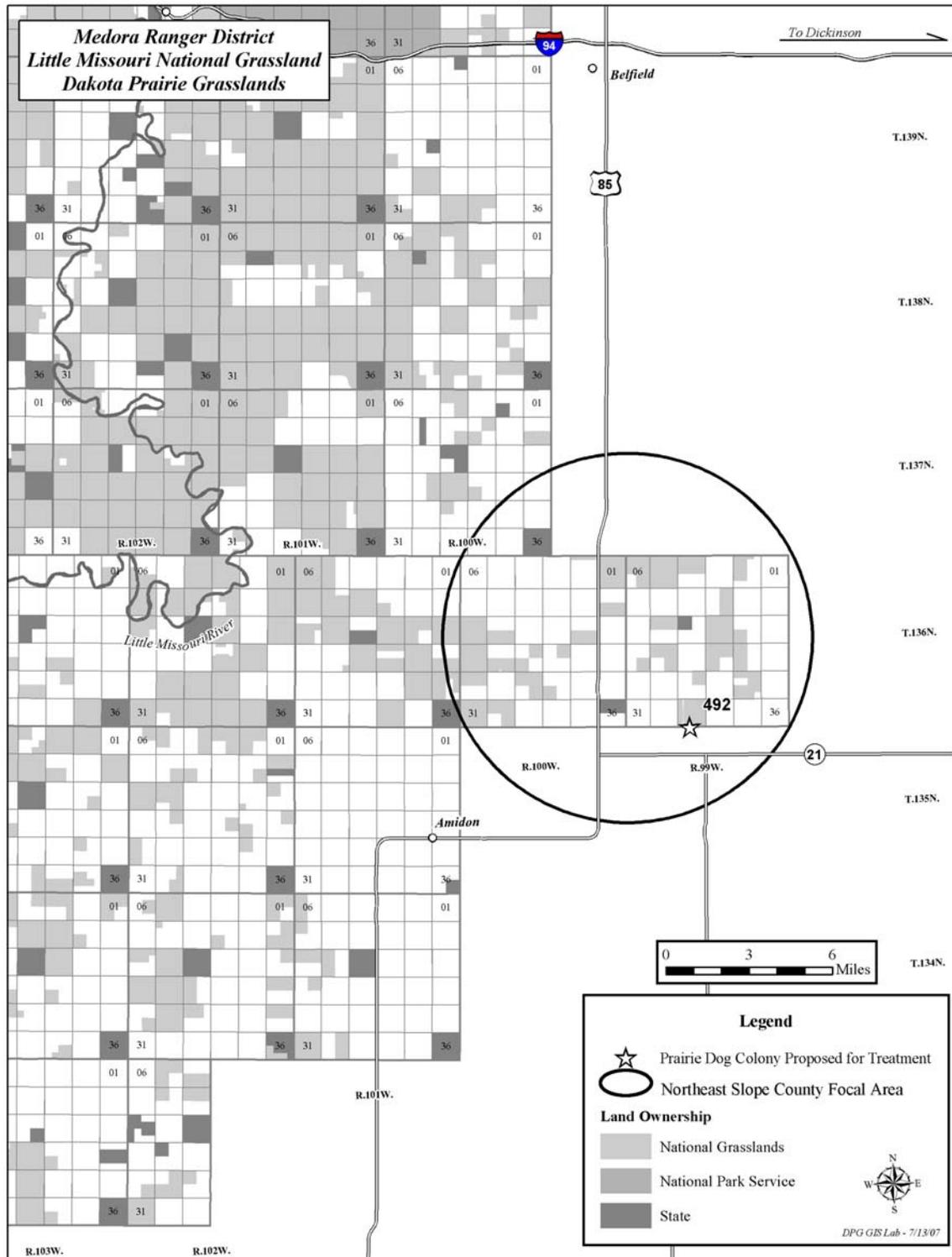


Figure 5. Miscellaneous Focal Area

