

APPENDIX I COMMENTS AND RESPONSES

Introduction

The Draft Environmental Impact Statement (DEIS) was released for a 45-day comment period on June 8, 2007. Sixty-seven thousand six hundred and sixty-nine electronic comments, 191 hard copy letter, and 128 postcards were received. Thirty thousand electronic comments were printed initially. Evaluation of these showed a preponderance originating from one of six petition web sites. The Forest managed the remaining e-mail comments electronically. Comments received after the 45-day comment period are on file; however, the authors of these comments do not have eligibility to appeal the decision. All comment letters/e-mail received are on file in the administrative record (Public Involvement and Content Analysis section) and are available for review at the Nebraska National Forest Supervisor's office in Chadron, NE.

A team was assembled and trained to properly identify and code substantive comments in the comment letters. Original comments were entered verbatim into a database (spreadsheet) along with a unique letter number, and other information. Letters from the petition websites were separated into two categories: letters copied verbatim from the petition sites and letters from the petition web sites with additional verbiage. Verbatim comments from the petition websites were coded and entered into the database once. Letters with additional commentary were reviewed to determine if there were comments that could be coded. Nearly 1,823 original comments were extracted from the letters and coded. The database was reviewed by interdisciplinary team members and line officers, comments were grouped by subject, and responses were prepared for review by the Deciding Officer.

Comments and Responses

General (G)

This section includes many comments that were deemed general value statements or provided opposition to the process in general.

Comment G1 *Many responders expressed an opinion about black-footed ferret recovery on a global scale.*

These comments are general value statements which would not change the analysis in the Final Environmental Impact Statement (FEIS). Thank you for your interest and response.

Comment G2 *Many responders expressed an opinion about favoring livestock or the general amount of money being returned to the treasury from permitted livestock grazing.*

These comments are general value statements and opinion and would not change the analysis in the FEIS. Thank you for you interest and response.

Comment G3 *Many responders provided estimates of costs and benefits without explanation how they were derived or reference to published data or made general reference to economic values without specific references.*

These comments were reviewed and are considered general value statements which would not change the analysis in the FEIS. Thank you for your interest and response.

Comment G4 *Many comments expressed a general opinion including preference or opposition to this analysis and the decision to be made.*

One of the reasons for the National Environmental Policy Act (NEPA) process is to provide a means for the public to express opinions on the direction of management of our public lands. Although not a voting process, all comments are considered in the analysis and decision process.

These comments are general opinion and would not change the analysis in the FEIS. Thank you for your interest and response.

Comment G5 *Many responders expressed an opinion about opposing taxpayer's dollars being used to remove prairie dogs.*

These comments are general value statements and would not change the analysis in the FEIS. Thank you for your interest and response.

Comment G6 *Many responders expressed an opinion or concern that was outside the scope of this analysis.*

Thank you for your interest and response.

Comment G7 *Many responders expressed a general concern about the money generated in Conata Basin and the risk to ferrets based on the lack of money returned to the Treasury.*

The FEIS provides analysis that includes projections of money returned to the U.S. Treasury (Chapter 3, Social and Economic Factors). These comments were general in nature and would not change the analysis in the FEIS. Thank you for your interest and response.

Comment G8 *Many responders expressed a belief that some of the alternatives fail to meet applicable laws, science or a multiple use objective.*

Alternatives are designed to provide an analysis of a broad range of actions. This analysis provides the necessary information and disclosure of effects that gives the Deciding Officer background for making an informed decision consistent with applicable laws and regulations. We believe that the alternatives analyzed provide a broad range of actions that respond to the diversity of public opinion.

These comments were general opinion and would not change the analysis in the FEIS. Thank you for your interest and response.

Ecosystem Integrity (EI)

This section includes comments that dealt with other wildlife species associated with prairie dog colonies, rodenticide use, shooting, disease, black-footed ferret recovery, and black-tailed prairie dog ecology and behavior.

Comment E11 *Many responders commented that prairie dog colonies provide habitat for a diversity of other species of wildlife that are dependent upon their burrows or the short vegetative structure found on the colony.*

Species associated with prairie dog colonies and/or short vegetation structure may be negatively affected by reductions in prairie dog density and occupied area. There have been a number of studies that compare wildlife use on and off prairie dog colonies. Generally, species diversity is higher on a colony versus off, and some species utilize the edge of the colony at greater rates (Agnew et al. 1983, 1986; Sharps and Uresk 1990).

Species habitat requirements on the grassland vary. Some prefer tall vegetation structure; some prefer short structure like that found on prairie dog colonies. The 2001 Forest Plan states that the Nebraska National Forest will provide short, medium, and tall vegetative structure, as well as early, mid, and late seral stage distributed across geographic areas (USDA Forest Service 2001c). Prairie dog colonies are just part of the overall strategy used to manage habitat on the Forest.

Effects to Species at Risk (e.g., black-footed ferret, burrowing owl, and mountain plover) and Management Indicator Species (e.g., prairie dog, greater prairie chicken, sage grouse and sharp-tailed grouse) are analyzed by alternative in Chapter 3 of the FEIS and in more detail in Appendix O – Biological Effects Analysis for Black-tailed Prairie Dog Management on the Nebraska National Forest, Buffalo Gap and Fort Pierre National Grasslands, South Dakota Oglala National Grassland, Nebraska (Biological Effects Analysis) and Appendix N – Final Biological Evaluation for the Nebraska and South Dakota Black-tailed Prairie Dog Management (Biological Evaluation).

Comment E12 *Please clarify how much bare dirt the plovers need. Please clarify what you have done to search for mountain plovers. What is the status of the petition to have the Mountain Plover listed under the ESA and what is the state of SD position on plover reintroduction?*

The mountain plover nests in bare ground or very sparsely vegetated areas, and the limited literature on the mountain plover suggests up to 60 percent bare ground. Dinsmore (2003) suggests the bare ground component for mountain plover nesting is typically greater than 30 percent for nesting. At prairie dog colonies where plovers have nested, the percentage of bare ground is likely higher.

The Forest Service has carried out systematic random searches for mountain plover. The mountain plover is no longer a candidate for listing under the Endangered Species Act (ESA) but remains a Forest Service Region 2 sensitive species. This information has been added to the Biological Evaluation.

South Dakota's position on mountain plover is outside of the scope of this document.

Comment E13 *Many responders expressed the opinion that we should give priority consideration to native species over domestic livestock, when considering the new management plan. Ferrets should take precedence.*

The 2001 Forest Plan assigns MA 3.63 Black-footed Ferret Reintroduction Habitat to two areas on the Buffalo Gap National Grassland: Conata Basin and Smithwick. Within these areas black-footed ferrets and many other native species associated with prairie dog colonies take precedence over domestic livestock (USDA Forest Service 2001c).

In Chapter 1 of the FEIS for this decision, black-footed ferrets are emphasized in the second of two statements as follows: “The purpose of the project is to manage prairie dog colonies in an adaptive fashion through the following:

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

Comment E14 *Many responders expressed the opinion that the plan should emphasize natural control methods such as attracting predators to balance the ecosystem, which could be a viable solution for the entire animal population.*

Chapter 2 of the FEIS describes the management tools available to all alternatives (Table 2-11). The management tools include predator attraction to help manage prairie dog colonies.

Comment E15 *Many comments objected to any alternative that increases the amount of poisoning occurring on the National Grasslands affected by this decision. Many indicated rodenticide is a concern because of environmental contamination and risks to people and non-target wildlife species (e.g., poisoning could kill ferrets or any of the species that use the prairie dog colonies either directly or by eliminating their habitat).*

The Forest Service is also concerned about animal welfare and recognizes that lethal animal damage control methods such as shooting and rodenticide are controversial. However, responding to encroachment issues in an effective and timely manner usually requires the use of lethal measures, primarily rodenticide. Non-lethal measures, such as vegetation management, provide long-term, not short-term or immediate results, and by proposing concurrent use of non-lethal management tools, the Forest Service will reduce the amount of lethal measures needed in the future.

The use of rodenticide and their effects on threatened, endangered and Forest Service sensitive species are analyzed in Chapter 3 of the FEIS and in the Biological Effects Analysis and Biological Evaluation. The Forest Service will closely monitor rodenticide application to help ensure that the toxicant is applied according to label specifications including the restriction that no rodenticide can be applied before October 1, which helps to prevent migratory birds from being poisoned.

Comment EI6 *Poisoning of prairie dogs within colonies would result in unoccupied habitat with burrow systems that is likely to draw prairie dogs from nearby uncontrolled areas. The effect of repeated poisoning would be a population "sink" that could have unintended impacts on prairie dog populations and prairie dog-dependent species such as ferrets that rely on areas of high prairie dog density (Jachowski 2007).*

There is no doubt that poisoning a portion of a prairie dog colony invites dispersing animals into the vacated burrows. After three years of treatments in the boundary management zone (BMZ), we have learned that if an entire isolated colony is treated, it is virtually eliminated except for a few individuals and there is little immigration into that colony. However, if only a portion of a colony is treated, there is immigration into the treated zone and only after repeated treatments on a yearly basis, are densities reduced in those zones. The primary purpose of treating in the interior-colony management zone (IMZ) is to reduce the density and slow down encroachment onto private land and/or provide some relief for vegetation establishment. We are aware that nearby prairie dogs may disperse into the treated area but the overall goal of reducing the density should be achieved. Before any actions are taken, a wildlife biologist will conduct an analysis of the proposed treatment area and weigh the concerns of threatened, endangered, and sensitive (TES) species with the purpose for treating the site (USDA Forest Service 2008). Close coordination will be made with the U.S. Fish and Wildlife Service in regards to colonies or portions of colonies selected for treatment. Black-footed ferret surveys will be conducted according to established protocol and ferrets will be trapped and relocated if found in these particular areas (see FEIS Appendix H – Implementation Plan).

Comment EI7 *Use only the minimum amount of control necessary to solve the problem"...use pesticides only where other measures are impractical"...etc.)*

Chapter 2, Table 2-11, lists the management tools that can be used while managing prairie dogs on the Nebraska National Forest (NNF). It also states in this section that “this is not an exhaustive list of tools; new tools may be added as they become available through future research and development.” The individual land manager (District Ranger) will have authority to decide which tools will be used and the timing of that use.

Comment EI8 *The most successful way to control the expansion of the existing prairie dog town is through selective poisoning.*

The Forest Service recognizes the use of rodenticide as a potential tool in the management of prairie dogs. Expanded use of rodenticides within the IMZ is included in all of the action alternatives analyzed in Chapter 2 of the FEIS.

Comment E19 *The state of South Dakota is now committed to poisoning prairie dogs on private lands adjoining federal lands on an ongoing basis rather than on a one-time basis. With this increase in subsidized poisoning on private lands, federal prairie dog acres will become even more important to meet South Dakota's share of prairie dog acres as outlined in both the state and multi-state prairie dog conservation plans.*

The control completed by the state of South Dakota is summarized in the cumulative effects analysis in Chapter 3 of the FEIS. This section also states, "They (ranchers) view prairie dog colonies as an economic hardship to their operations and will only tolerate prairie dogs in small numbers on their private land. Therefore, most prairie dogs on private land will be subject to periodic control."

Because of this general dislike of prairie dog colonies by most private land owners, we agree that prairie dogs on federal lands are very important to the survival of the species and have taken this into account in our decision.

Comment E110 *The contention that killing the prairie dogs is in their best interest because it will allow some areas to recover is spurious. Prairie dogs have occurred in North America for approximately 10,000 years and have managed to maintain their populations through numerous drought cycles more significant than the current one (see, e.g. Forrest 2005) without management intervention.*

The Forest Service agrees that prairie dogs if left alone would survive any drought conditions. Current conditions (prairie dogs competing with livestock for forage, the dislike of prairie dogs by most landowners, land ownership patterns, etc.) have warranted an active management scheme as identified in the Purpose and Need found in Chapter 1 of the FEIS.

Comment E111 *Many comments indicated the opinion that prairie dogs are a keystone species and doing anything to them will have effects on the entire prairie ecosystem.*

The Forest Service acknowledges that prairie dogs are an important species and part of the prairie ecosystem and presumes the facts presented are correct. In fact, they are considered a Management Indicator Species (MIS) on portions of the Nebraska National Forest. By definition, 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 a MIS species is that its status and trend provide insights to the integrity of the larger ecological system to which it belongs. Prairie dogs are considered a keystone species because of their role in ecosystem function and biological diversity. Black-footed ferrets are an obligate species, which means that they are almost totally dependent on prairie dogs for survival while species such as the burrowing owl and mountain plover are facultative species (i.e., use some feature of prairie dog colonies and would probably decline if prairie dog populations also declined) (Kotliar et al. 1999). The species just mentioned are either federally listed (e.g., black-footed ferret) or are considered Region 2 sensitive species and analyzed in detail in the Biological Effects Analysis and Biological Evaluation by alternative.

Comment E112 *Adopting management strategies aimed at confining black-tailed prairie dog populations to widely scattered, low density complexes prevents the prairie dogs from performing their functions in the prairie ecosystem. Relegating prairie dogs to zoo exhibit status renders them functionally extinct on the grassland.*

In the planning area, the colonies function as habitat for the prairie dogs, and for associated species such as burrowing owls. They also provide productive foraging areas for raptors and other predators. The inhabitants of the colonies are free-ranging wildlife that can move to interact with other individuals. Under the proposed management policy, wildlife inhabiting prairie dog colonies will be part of genetically viable populations. The introduction of plague into the area, of course, makes it more difficult to retain prairie dog colonies to serve as functional wildlife habitat.

Comment E113 *Under the final SD BTPD C&M plan, the "triggers" provide that SD won't really do much of anything to halt downward fall of prairie dog acres until the total acres remaining on tribal and non-tribal lands falls to 145,000 totals in the state. Which means that SD could eradicate the BTPD on all non-tribal land before, any brakes to poisoning are applied. By time SD limits/restricts poisoning, the remaining prairie dogs may all be on tribal land, however the State and Federal government has no authority to force Native Americans to preserve prairie dogs.*

Control of prairie dogs on private, state, and tribal lands is summarized in the cumulative effects analysis in Chapter 3 of the FEIS. The information was considered in the decision process.

Comment E114 *Based on historic occupancy maps, WWF would argue that encroachment should be described more logically in terms of "reoccupancy," as prairie dogs over the last two documented expansion cycles occupy substantially the same colony boundaries that they formerly occupied.*

This analysis is concerned with managing for desired vegetation cover, for topsoil protection, to prevent the establishment of noxious and invasive species, and to provide habitat for associated species as stated in the Purpose and Need found in Chapter 1 of the FEIS. Toward these ends, it does not matter whether prairie dog colonies represent the initial occupation of an area or a re-occupancy.

Comment E115 *Given the intense interest the public has shown in this amendment and the potential impacts to ferrets, the DEIS should have disclosed the methodologies to be followed to ensure ferrets are not killed when or if toxicants are used within the Conata Basin MA 3.63 Area. Absent that information, the public is unable to have confidence that USFS will be able to avoid killing large number of one of the rarest animals in North America listed on State and Federal Endangered Species Acts.*

Secondary risks associated with zinc phosphide treated bait to black-footed ferrets are minimal (FEIS Chapter 3, beginning on page 3-35). Ninety percent of the zinc phosphide ingested by rodents is detoxified and 99 percent of the residue occurs in the digestive tract while none occurs in the muscle tissue. Matschke et al. (1992) fed domestic ferrets zinc phosphide poisoned prairie dogs resulting in no poisoning symptoms or emesis (nausea); they concluded that "the secondary risk of poisoning from zinc phosphide is unlikely." Areas designated for treatment will be identified and surveyed using Global Positioning Satellite (GPS) technology by the Forest Service. Either Forest Service personnel or a private contractor will apply the poison; private contractors will be accompanied by a Forest Service representative when zinc phosphide bait is applied to an area. Anyone applying poison will follow all zinc phosphide prairie dog bait (EPA REG # 13808-6) label instructions as required by law. The Forest

Service will coordinate with the U.S. Fish and Wildlife Service on which proposed colonies designated for treatment need surveyed for black-footed ferrets. Standard spotlight surveys conducted at night over a 3-day period will be done; any ferrets located in the designated colonies will be trapped and relocated.

Comment E116 *There is no conclusive historical evidence of large populations of prairie dogs so introduction of black-footed ferrets on the ONG is unnecessary.*

At the present time, the Oglala National Grassland is not designated as MA 3.63 black-footed ferret reintroduction habitat.

Comment E117 *Please discuss any inexplicable die off in or near Oglala National Grasslands. If inexplicable die offs are happening, should shooting be restricted or dusting for fleas occur?*

At the present time we know of no inexplicable die offs on the Oglala National Grassland.

Comment E118 *The USFS should seriously consider the use of recreation hunting to help with the cost of reducing densities in all GA's including Conata Basin.*

Recreational hunting is already allowed on areas outside of the Conata Basin black-footed ferret restriction zone in accordance with state regulations. However, for this project, shooting is considered a management tool for all the action alternatives. FEIS Chapter 2, Table 2-11 states “when done in close cooperation with the states, permit recreational shooting of specified numbers of prairie dogs within specified colonies and at specified times, where efforts are needed to reduce populations or to limit colony expansion.”

Comment E119 *Nothing in the DEIS justifies the assumption of continued prairie dog colony expansion. Thus, it is wrong to determine that the poisoning and shooting will not compromise the viability of prairie dog populations on these grasslands. Given the continuing unregulated shooting across most of these grasslands, this DEIS for increased poisoning and especially the recent presence of plague, expansion certainly cannot be guaranteed.*

We disagree – historical data consistently shows prairie dog colony expansion without the use of rodenticides. FEIS Chapter, Table 1-1, outlines the historical prairie dog acreage and response to expansion (i.e., prairie dog colonies expanded without the use of rodenticides). The Biological Effects Analysis and Biological Evaluation provide details on acres and acres poisoned since 1978. Plague is certainly a concern but if it does enter an area, it is nearly 99 percent lethal to all prairie dogs regardless of density or size of colony (see Appendix N, Biological Evaluation, Cumulative Effects for Sensitive Species section).

Comment E120 *Prairie dog shooting remains unregulated except for the Conata Basin 3.63 area. Shooting should be closed in any areas where prairie dog increases are desired. Additional shooting closures should be considered, especially to make up for new losses due to the increased poisoning since 2004. Please list shooting closures (additional closures as well as an increase in the size of the existing closure) as another method to increase prairie dog populations.*

Prairie dog shooting outside of the Conata Basin is regulated by state game and fish agencies. We are aware of the threat to non-target species such as burrowing owls and ferruginous hawks from shooting;

refer to the Biological Effects Analysis and Biological Evaluation for more details and analysis on shooting and effects to other R2 sensitive species (see Appendix N, Biological Evaluation - Cumulative Effects, Prairie dog shooting). Part of the Purpose and Need for this project is to provide adaptive management techniques that incorporate a full suite of tools. A list of management tools is provided in FEIS Chapter 2, Table 2-11. If prairie dog populations fall below a certain desirable level, additional shooting restrictions are a tool the Forest Service may consider.

Comment EI21 *Chapter 3 Pages 3-41, 3-44: The statements on the importance of prairie dogs to ferruginous hawks are misleading. For example, it seems problematic to conclude that "...it is impossible to determine which range of prairie dog acreages could either be advantageous or detrimental to ferruginous hawk populations." Ferruginous hawks may be less dependent on prairie dogs than are ferrets, but their welfare seems highly linked to prairie dogs in some regions.*

Several studies have characterized prairie dogs as the most important prey of ferruginous hawks (e.g., Plumpton and Anderson, 1997; Stalmaster, 1986). The FEIS needs to identify whether there is information that counters these research implications.

We agree that prairie dogs are an important species to ferruginous hawks and serve as a key food source. After further review of the literature identified by the science review team, the ferruginous hawk discussion in Chapter 3 was re-written to incorporate these concerns. Basically, Alternative 1, 2, 4, and 5 may negatively affect the species but enough prairie dogs should remain on the landscape as to not threaten viability across the planning area. However, Alternative 3 removes up to 92 percent of desirable habitat in the Conata Basin alone and would result in a loss of viability across the planning area.

Comment EI22 *I believe the Forest Service underestimated the threat of indirect mortality to many species, especially resident grouse. Prairie dog colonies are often used as leks by breeding sharp-tailed grouse and prairie chicken. These upland game birds often congregate on their leks during the fall months, apparently triggered by a similar photoperiod as the breeding season. Male grouse can be observed defending territories that were used the previous spring or that will be used the following spring. Prairie dog poisoning using zinc phosphide treated oats on a large scale may have deleterious effects to game birds.*

Sharp-tailed grouse and greater prairie chickens usually do place their courtship display grounds on grassland with short-structure vegetation, so prairie dog colonies are the type of areas where leks would likely occur (see Appendix N, Biological Evaluation – Greater Prairie Chicken). The birds are also noted for showing up on these grounds in the fall. Grouse often choose much taller vegetation for other activities, however, such as roosting. In fall, when the vegetation on the colonies is cured and brown, grouse may consistently feed on range with more green vegetation, or on private land where they find waste grain. There is potential for grouse to eat poisoned grain, but the window for ingesting lethal bait may be short after application, since rain, snow, or even heavy dew can render the chemical less effective. Also, these large birds may not ingest enough grain to be killed. A high percent of the grouse in an area are not likely to be adversely affected, either. After prairie dogs are poisoned on productive range sites, the area may become potential grouse nesting and brood-rearing habitat if not heavily grazed. For example, several decades ago, many acres of prairie dog colony were poisoned in Conata Basin. A few years later, a noticeably higher sharp-tailed grouse population occurred in that area after taller residual cover developed with rainfall and improved cattle management. Anecdotal observations showed that in the Conata Basin after many acres of prairie dog colony were poisoned, a noticeably

higher sharp-tailed grouse population occurred in that area after taller residual cover developed with rainfall and improved cattle management, a few years later.

Comment E123 *Chapter 3, Pages 3-55 and 3-56: The DEIS summary statement compares the effects of the alternatives on ferrets and burrowing owls, but it seems to downplay the effects of these actions on non-obligate species. The focus on ferrets and burrowing owls is not inappropriate; however, we suggest that consideration be given in the FEIS to other relationships regarding other species.*

We have determined that ferruginous hawks will be affected more than originally believed and a more detailed description of the effects to ferruginous hawks has been added to the Chapter 3 of the FEIS and to the Biological Evaluation (see Appendix N, Biological Evaluation – Ferruginous Hawk). The effects to non-obligate species are discussed in detail in the Biological Effects Analysis and Biological Evaluation and summarized in Chapter 3 of the FEIS. In the summary section (FEIS Chapter 3 - Relative Effects Summarized) referred to, the intent is not to downplay the effects to other species but to bring to the forefront the species we believe will be impacted the most by this action.

Comment E124 *We point out to you that the sturgeon chub (a forest service sensitive species and a state listed threatened species) needs turbidity in the water to survive. If you clean up the water you lose them. Thus sturgeon chub may be a species that is at least associated with prairie dogs, if prairie dogs have any significant effect on turbidity of downstream waters. What other aquatic species in prairie streams need or are adapted to turbidity?*

The Forest Service does not believe the prairie dog colony acre objectives proposed in any of the alternatives will have a significant effect on turbidity of downstream waters in the study area. In the Cumulative Effects section of Soil and Water Resource section in Chapter 3 of the FEIS (P 3-8) a statement reads as follows “The effects on the watersheds from prairie dogs colonies are minor when compared to the other land uses in the watersheds. As stated in the *Black-tailed Prairie Dog Conservation and Management on the Nebraska National Forest and Associated Units - Final Environmental Impact Statement* (USDA Forest Service 2005c), prairie dogs colonies range from 0 to 1.2 percent of the watershed (4th order). In the majority of these watersheds, badlands landforms are more dominant, with slopes that are steeper and will be producing more sediment than the prairie dog colonies.” The habitat for the sturgeon chub or any other species that prefer turbid waters will not be affected by this decision. For this and other reasons (see the Biological Effects Analysis and Biological Evaluation) none of the aquatic species were brought forward in the analysis.

Comment E125 *Page 3-24, Table 3-8: This table presents listed species in each geographic area of the Grasslands. The following corrections should be made to this table:*

- *Black-footed ferrets are known to exist in the Wall Southwest Geographic Area.*
- *Please note that a notice was published in the Federal Register to remove the bald eagle from the Federal list of threatened species on July 9, 2007, and becomes effective August 8, 2007.*

The error in Table 3-8 is noted and has been changed in the FEIS.

We acknowledge the change in the status of the bald eagle. The bald eagle will move from the Threatened and Endangered list to Region 2 sensitive species list. The species description and effect analysis have been moved from the Biological Effects Analysis to the Biological Evaluation, and the proper determinations have been made.

Comment E126 *What is the current average cost to the state to poison neighboring land? What is the Forest Service cost to poison/acre? Is the figure given in the DEIS, the FS cost or the state or private cost poison cost/acre? Does the FS have any idea what the state of SD is now spending to poison? The State is a cooperating agency, so please discuss*

A description of the potential costs related to this analysis has been included in FEIS Chapter 3 in the Social and Economic Factors section. The Forest Service estimates the cost per acre of prairie dog control to be around \$13.50 per acre. In order to determine the total cost of poisoning, many aspects need to be considered: contractors, administration, overhead, supplies, travel, etc. The state and the federal government have different ways of doing business and comparing the total cost to control prairie dogs between the two entities would require a time consuming detailed analysis which is out of the scope of this document. That being said, in 2006, the Forest Service entered into an agreement with the state of South Dakota in which the state will administer the contracts to control prairie dogs on both the private and federal land. So contractor cost to complete prairie dog control work is exactly the same for both the state and federal government. The number of acres the state of South Dakota has controlled in 2004 – 2006 is presented in the Cumulative Effects section of the Species at Risk section of Chapter 3 of the DEIS and FEIS.

Comment E127 *Buffalo have special cultural significance to Tribes. The continual failure of the FS to list buffalo as a wildlife species and failure to reintroduce them to the Grasslands is an impact to tribes. When you act on rules that will apportion resources between livestock and wildlife (prairie dogs) without including buffalo in the mix, this problem is once again perpetuated.*

The Forest Service neither promotes nor discourages discourage bison grazing on the National Grasslands and in that regard, is irrelevant to the decision to be made. Reintroduction of wild bison onto the National Grasslands is not in the scope of this document. Bison grazing is currently taking place on the Buffalo Gap National Grassland and is administered under the livestock use permit system.

Comment E128 *Another unique and unknown possible effect on the human environment as a result of the non-management of the prairie dog population in the interior of the National Grasslands is the adverse impacts of expanding prairie dog habitat on the sage grouse habitat; both are management indicator species in the western portion of the Buffalo Gap National Grasslands.*

Fall River County believes that Sage Grouse habitat and prairie dog habitat should be viewed as mutually exclusive for purposes of management, as the scientific literature finds that the prairie dog population may very well harm the habitat of the sage grouse.

The Forest Service acknowledges that prairie dogs could move into the sagebrush areas of the Fall River West GA which could negatively affect sagebrush habitat used by the greater sage grouse but we do not believe that sage grouse habitat and prairie dog habitat is mutually exclusive. The effects of this decision on sage grouse are discussed in the Biological Evaluation (Appendix N – Biological Evaluation, Sage Grouse).

There are 119,749 acres in the Fall River West GA. Within this geographic area, the 2001 Forest Plan identifies a 45,760 acre area as 3.64 Special Plant and Wildlife Habitat: Sage Grouse (Sage Grouse Area SGA) (USDA Forest Service 2001c). Of the action alternatives considered in this decision, Alternative 5 could have the greatest number of prairie dogs – 24,000 acres (see FEIS Chapter 2). If necessary, all 24,000 acres could be maintained out of the SGA. Additionally, a study was conducted in 2003-4 that determined approximately 65 percent of the SGA had less than 1 percent sagebrush coverage (Hodorff

2005). The final conclusion of the above study was that the limiting factor for sage grouse productivity in the SGA is the amount of sagebrush habitat present. So, within the SGA there is 31,000 acres that have virtually no sagebrush. Therefore, these acres could be inhabited by prairie dogs with little impact to the sage grouse in the area.

Another important factor that affects the productivity of sage grouse in an area is the amount of high structure cover present. A 2001 Forest Plan objective for the Fall River West GA is to maintain 10 - 30 percent of the GA in high structure habitat (USDA Forest Service 2001c). Prairie dog colonies clip tall vegetation in the vicinity of their colonies and create low structure. Alternative 5 could have the greatest number of prairie dogs (24,000 acres) which is only 20 percent of the GA. There is ample area without prairie dogs to meet the high structure objective.

Comment EI29 *By allowing the prairie dog towns to get larger than fifty acres in size, the NFS exacerbates its problem of unwanted colonization of new prairie dog towns on adjacent landowners, especially in the ONG.*

We acknowledge that the more prairie dogs in an area the greater the chance is for of unwanted colonization of new prairie dog towns on adjacent landowners. The potential social and economic effects of unwanted encroachment onto adjacent landowners are discussed in the FEIS, Chapter 3, Social and Economic Factors.

Comment EI30 *If the NNF sets arbitrary, non-biologically derived caps for any of the alternatives, there will be little opportunity to adaptively manage prairie dogs or the ferret population if inadequate acreage exists to support ferret viability. Further, there will be no incentive for: 1) land consolidation to enhance the ferret population, because no benefit will be derived from adding additional land or trading for additional public land within the Conata Basin; or b) private conservation, because efforts to secure protection will result in no net gain for ferrets or prairie dogs. Adaptive management presumes that the system will be managed to achieve the desired outcome of a viable ferret population, which may not be possible if the upper range of prairie dog acreage is arbitrarily truncated.*

The FEIS Chapter 3 provides analysis of effects for each alternative to black-footed ferrets. These disclosures will be used by the Deciding Officer to arrive at a decision that is consistent with the purpose and need for the analysis.

Black-footed Ferret (BFF)

Comment BFF1 *The endangered black-footed ferret depends on prairie dog colonies for their existence. Conata Basin contains a large plague free black-tailed prairie dog complex on public land that is home to the world's most successful black-footed ferret restoration effort. It is imperative to protect Conata Basin's prairie dog towns and crucial habitat for the ferret. Any plan to reduce the Conata Basin population of prairie dogs would imperil the survival and recovery of the black footed ferret. The final environmental impact statement (FEIS) should describe the importance of this area in light of extremely low occupancy rate (i.e., 0.6 percent) for ferrets on the National Grasslands.*

The Forest Service acknowledges the importance of prairie dogs to black-footed ferrets and the importance of the Conata Basin as a ferret reintroduction site. The Purpose and Need found in Chapter 1 includes the need for “Managing black-tailed prairie dog habitat designated as a black-footed ferret management area (MA 3.63) in the 2001 Forest Plan to sustain populations of black-footed ferrets and associated species.” The effects of objectives for range of acres are discussed in the Biological Effects Analysis.

Comment BFF2 *The Conata Basin population produces a surplus of wild-born kits for translocation to other sites. This is the only area sufficiently viable to do this and this is clearly one of the most important products of this area from a national perspective.*

The Forest Service acknowledges the importance of the Conata Basin as production site for wild born kits to aide in the reintroduction effort across the range of the black-footed ferret.

Comment BFF3 *We are opposed to any alternative that reduces Conata below viability levels. We also want you to clarify if the goal of 125 adult ferrets to provide 90% chance of 100 years of viability is plague proof, i.e., will 125 ferrets have a 90% chance of viability for 100 years if plague is in the colony complex. Modeling by CBSG 2004 and Miller 2005 (discussed on page 3-38), indicates that a minimum of 120 breeding adults are needed to maintain adequate persistence probabilities. The maximum acres of prairie dogs to support 100 ferrets would be 24,800 to 26,700 to manage for 100 adult ferrets during the dry years. Table 2-2 should also include a minimum threshold for black-footed ferret numbers. It is obvious that maintaining viable populations of black-footed ferrets is one of 2 primary criteria governing development of this plan (page 1-3), making the estimate of black-footed ferret numbers more important than measuring factors such as SI.*

The Forest Service describes the methods and models used to predict how many ferrets could be expected in each alternative in the black-footed ferret specialist report found in the project record. The Conservation Breeding Specialist Group (CBSG) report (Conservation Breeding Specialist Group 2004) in combination with information collected and reported by Liveri in Conata Basin (Livieri 2005, 2006) was used to predict the how many acres are needed to sustain different population levels of black-footed ferrets and the probability of survival of that population. CBSG (2004) estimates that 120 breeding adults are needed to sustain a black-footed ferret population with >90 percent probability of persistence over 100 years. Typically, PVA tools recommend at least a 95 percent probability of persistence over 100 years and this would require from 125-130 breeding adults. The U.S. Fish and Wildlife Service et al. (1994) recognized the need for >100 breeding adult black-footed ferrets in Conata Basin, a population projection now estimated by CBSG (2004). The literature during the past 20 years has consistently recommended >100 breeding adult black-footed ferrets, although there is new literature

(Mills 2007) that would suggest higher numbers may be needed to ensure long-term maintenance of genetic variation.

The U.S. Fish and Wildlife Service and others have worked to reduce the potential for the occurrence of plague in Conata Basin by efforts to control fleas which carry plague. We recognize that plague can have a serious impact and FEIS Appendix H recognizes this fact in Section A.

Comment BFF4 *Prairie dog colonies should be allowed to thrive within the designated ferret recovery areas far above a minimum threshold that just barely meets requirements for viability. The USFS should consider how to maximize the utility of these important sites for ferret recovery rather than considering how much habitat is sufficient to reduce the risk of local extinction to some stated level. We believe a more defensible position would be to conserve sufficient prairie dog acreage in the Conata Basin MA 3.63 Area at levels believed adequate to support a self sustaining ferret population in the driest precipitation years. Black-footed ferret ought to be protected based upon sound peer-reviewed scientific research without regard for the economic influences that they may impact.*

The Forest Service desires to manage for a 95 percent or greater probability that the black-footed ferret population would persist under demographic and environmental variability for a minimum of 100 years (30 generations). This is consistent with the recovery plan for the black-footed ferret. We considered the CBSG report (Conservation Breeding Specialist Group 2004), and we think that 125-130 breeding adult black-footed ferrets will provide such persistence but we are mindful of the deficiencies of the CBSG modeling.

CBSG (2004) estimates that 120 breeding adults are needed to sustain a black-footed ferret population with >90 percent probability of persistence over 100 years. Typically, PVA tools recommend at least a 95 percent probability of persistence over 100 years and this would require from 125-130 breeding adults. In U.S. Fish and Wildlife Service et al. (1994), the door was left open to the need for >100 breeding adult black-footed ferrets in Conata Basin, a population projection now estimated by CBSG (2004). Indeed, the literature during the past 20 years has consistently recommended >100 breeding adult black-footed ferrets.

Comment BFF5 *What are you planning to do at Smithwick 3.63? You are quick to poison there but how are you enhancing the site for ferrets? If Wind Cave National Park can have ferrets with a small prairie dog population, we could too. We already have way too many prairie dogs.*

The Smithwick area will remain a 3.63 Black-footed Ferret Reintroduction site as was the objective in the 2001 Forest Plan. Acreage objectives in the alternatives are designed to move this management area toward prairie dog colony acreage that will support potential reintroduction. There has been boundary management control carried out in the area (Approximately 18 acres fall of 2004, 70 acres fall of 2005, 20 acres fall of 2006). The existence of plague in the area complicates the issue and will be factored into any final discussions with the U.S. Fish and Wildlife Service to re-introduce ferrets.

Comment BFF6 *We are opposed to reductions at the Conata site, especially with the threat of plague. However if reductions happen, despite our best efforts, they should at least be offset with equal increases in ferret habitat elsewhere on the grasslands. The FEIS also should explain whatever actions the USFS will undertake to relocate ferrets displaced if the Conata Basin prairie dog acreage reduction is undertaken.*

We agree that plague could reduce acreage but in conjunction with the U.S. Fish and Wildlife Service, the affected area will be surveyed for black-footed ferrets and the animals will be removed and relocated elsewhere. We will dust black-tailed prairie dog colonies inhabited by black-footed ferrets to curtail the loss of prairie dogs and black-footed ferrets.

Comment BFF7 *Should their numbers decline, black-footed ferrets exist in ample numbers to supplement the Conata Basin population from other locations in South Dakota, from populations in other states, and from a highly successful captive breeding program.*

The Forest Service would utilize all tools available (Chapter 2, Table 2-11 and FEIS Appendix H, Table H-1) to maintain a viable population of black-footed ferrets in Conata Basin, and if needed, would work with the U.S. Fish and Wildlife Service to supplement from other successful populations.

Comment BFF8 *In some or all of the Alternatives the area north of the Park in the 3.63 Management Area (Steer Pasture) is proposed for removal from 3.63 MA. Please discuss the value of this area as a place to put ferrets, if plague appears at Conata or other nearby land or at Wind Cave, Lower Brule, Cheyenne River and/or Rosebud. We believe it is very important as a disjunct place to put ferrets during any ongoing plague events, especially those at or near Conata Basin site.*

New information indicates that this area is being used by black-footed ferrets and could serve as a secondary site for the purposes identified by the commentor. This new information will be considered in the decision.

Comment BFF9 *The draft EIS does not reflect current understanding of prairie dog colony dynamics: Even without management, conditions in the Conata Basin can be expected to change as a result of natural processes because prairie dog colonies are dynamic when viewed over long time scales (Jachowski 2007). The current reduction of vegetative cover on the interior of colonies appears to be accompanied by lower prairie dog densities that, over time, might allow vegetation to regenerate without management intervention.*

The work of Jachowski (2007) and Jachowski et al (2008) is reflected in the Biological Effects Analysis. We recognize that prairie dog colonies are dynamic and that prairie dog densities change considerably over time and that a mere tally of prairie dog colony acreage does not reflect the true status of prairie dogs. There can be large areas of mapped colonies containing few to zero prairie dogs per acre. Jachowski examined resource selection by black-footed ferrets in relation to the spatial distribution of prairie dogs in Conata Basin and Montana. Within prairie dog colonies, areas with high densities of active and inactive prairie dog burrows form patches and the distribution of these patches change in size, shape and connectivity over time, often a short amount of time. The ability of an area to support a black-footed ferret population may be influenced by the size, availability, and density of high-density patches of prairie dogs (Biggins et al. 2006). Prairie dog distribution shifts likely in response to changes in vegetation species composition and productivity (Coppock et al. 1983, Detling and Whicker 1987). Prairie dog distribution moves to the perimeter of colonies but also back to the interior over time.

Comment BFF10 *The FEIS should recognize that the boundary zone decision (USFS 2005) already has had an impact on the amount of ferret habitat. The half-mile zone at Smithwick and Conata Basin has removed a substantial proportion (about 30 percent) of the potential habitat. (See summary in the Specialist Report produced by the USFS 2007.)*

We agree that the boundary management zone decision of 2005 eliminated suitable ferret habitat. Tables and text in the Biological Effects Analysis discuss these changes. The amount of control that has occurred in the BMZ is summarized in Chapter 3 Table 3-10. The 2005 forest plan amendment established a 0.5-mile wide boundary management zone (BMZ) between federal and non-federal land. Prairie dogs are controlled in this area. The BMZ represents a net loss of the MA 3.63 for prairie dog and black-footed ferret habitat. The extent of the MA 3.63 was only changed for the North Unit of Conata Basin MA 3.63 from 5,130 acres to 3,911 acres. The amendment changed suitable habitat for prairie dog colonies from 68,183 acres to 49,688 acres, a 29 percent reduction. The 2005 BMZ decision changed suitable habitat for prairie dogs in the Smithwick 3.63 from 24,187 acres to 17,010 acres, a 30 percent reduction. There are currently about 26,000 acres of prairie dog colonies in Conata Basin 3.63, leaving another 23,200 acres for potential expansion or colonization as prairie dog colony extent shifts from current locations. There are about 500 acres in Smithwick 3.63, leaving over 16,000 acres for prairie dog colony expansion.

Comment BFF11 *The FEIS also should analyze the cumulative impacts to ferrets of habitat losses due to poisoning, cropland conversion, and other causes, which are responsible for bringing the ferret to its current state of endangerment (Biggins et al., 2006d; Miller et al., 1996).*

The Biological Effects Analysis (Appendix O) discusses the extent of poisoning and the extent of prairie dog colonies on non-federal lands.

Comment BFF12 *What is the cost of all the ferret reintroductions? Specifically what is the cost to create and maintain the captive breeding program and the reintroduction to the wild at 11 locations? Of that total cost, what percent has been spent at Conata? What percent of the cost has been born by federal government, state governments, tribes and NGOs? Can you assign a tax payer expense per each ferret on the ground?*

Anecdotal estimates from groups and others are that recovery efforts for the black-footed ferret have surpassed \$25 million but a detailed breakdown of costs is not available. There was significant time and federal dollars spent by the Forest Service and non governmental organizations (NGOs) associated with the reintroduction as there is with any intensive wildlife management for a species that has been extirpated from the wild. We do not have a breakdown on what percent of the cost has been born by the entities noted by the commenter.

Up to 25 wild born black-footed ferret kits have been removed annually from Conata Basin since 2001 and translocated to other black-footed ferret sites. It is assumed that removal of kits is compensatory rather than additive to mortality. Although there is an unknown risk factor to the Conata Basin/Badlands population associated with translocation, the risk is ameliorated by the ability to import captive-born black-footed ferrets should the need arise. Furthermore, translocated wild born black-footed ferrets have significantly higher survival rates than their captive-born counterparts (CBSG 2004).

Black-footed ferret kits are very valuable when considering the costs to produce them in captivity at the Black-footed Ferret Conservation Center. The Center has an annual operating cost, including 30-year amortized facility cost, of \$760,000. Captive-breeding has been successful (Howard et al. 2006), and

the facility produces 133 kits per year at a current cost of \$5,714 per kit. The survival rate of translocated wild born kits is more than double the survival rate of captive-born kits. A wild born kit is thus worth \$11,428. An annual export of 25 wild born kits, for example, is worth \$285,700. Wild born female black-footed ferrets produce 3 kits per year, same as captive females. Given a 2:1 sex ratio in wild black-footed ferrets, 65 wild female black-footed ferrets would be worth \$2.2 million ((3 kits X \$11,428) X 65) to agencies and organizations responsible for black-footed ferret recovery. Therefore, the prairie dog habitat is also extremely valuable because it is the very foundation of current black-footed ferret recovery success.

Comment BFF13 *The discussion in the 2007 DEIS text is very confusing about how each alternative will contribute to ferret viability. The percent of viability goal that each alternative meets, should be clearly stated. As should the Forest Service Planning regulation requirement to provide for viable populations. The FEIS should describe how each alternative will meet the 'FS required viable population benchmark.*

Chapter 3 of the FEIS displays how each alternative contributes to the viability of black-footed ferrets. More detail of how they affect black-footed ferrets has been added.

Comment BFF14 *The Forest Service must consider landscape-level prairie dog colony patterns throughout these grasslands. cursory or geographically limited discussion of cumulative impacts is insufficient. The analysis must specifically and adequately address the cumulative impacts on future recovery needs of the black-footed ferret. To maintain all required ferret habitat components, the Forest Service must analyze impacts of historical ferret habitat disturbance. Such analysis includes consideration of population connectivity between geographical areas. The Forest Service must thus analyze the potential for loss of ferret habitat and habitat connectivity. The consideration of cumulative impacts of the proposal does not meet this standard. To mention just one example, the proposal does not discuss the impacts of additional poisoning on the ferret population in the adjacent Badlands National Park.*

The Biological Effects Analysis (Appendix O) and the FEIS discuss the effects of Forest Service actions on Badlands National Park and the effect of losing Conata Basin on overall black-footed ferret recovery. In the Biological Effects Analysis, we discuss the extent of poisoning and colonies on non-federal lands and many other factors related to cumulative effects. We discuss the implications for black-footed ferrets of establishing the various ranges of prairie dog colony acres under the alternatives.

Comment BFF15 *The draft EIS discusses prairie dog acreage but does not address the direct impact of management on prairie dog populations. Recent work in the Conata Basin shows that the technique of estimating prairie dog abundance through coarse-scale acreage measurements yields a poor representation of true population size and distribution. New literature indicates that prairie dogs occur in distinct high-density patches, and that availability of these patches is important to black-footed ferrets (Jachowski 2007). Given that the draft EIS identifies impacts of management alternatives on ferret populations as a major issue (page I-5), it will be important to address prairie dog population dynamics in evaluating management alternatives.*

The Forest Service agrees that prairie dog density varies considerably within a colony. Jachowski (2007) examined resource selection by black-footed ferrets in relation to the spatial distribution of prairie dogs in Conata Basin and Montana. Although we have long mapped the boundaries of prairie dog colonies, the density of prairie dogs can vary considerably within a colony. We feel current Forest

Service efforts using on ground GPS measurements of colony size gives the most accurate estimate of population and distribution. Within prairie dog colonies, areas with high densities of active and inactive prairie dog burrows form patches and the distribution of these patches change in size, shape, and connectivity over time, often a short amount of time (Jachowski 2007). The ability of an area to support a black-footed ferret population may be influenced by the size, availability, and density of high-density patches of prairie dogs (Biggins et al. 2006). Prairie dog distribution shifts are likely in response to changes in vegetation species composition and productivity (Coppock et al. 1983, Detling and Whicker 1987). Prairie dog distribution moves to the perimeter of colonies but also back to the interior over time. Jachowski (2007) hypothesized that the relationship between vegetative cover and prairie dog occupancy is likely a dynamic process, where activity areas of prairie dogs shift spatially within colonies over time to enable long-term occupancy of a defined area or burrow system. Thus the inactive portion of prairie dog colonies should not be viewed as low in habitat value over the long term because these sites might again become populated. Effects on prairie dogs by alternative are included in the FEIS, Chapter 3 and in the Biological Evaluation.

Comment BFF16 *The DEIS does not make reference to research that could provide second-level inputs to an adaptive management strategy in the sense of improving monitoring methods. We suggest that the FEIS consider including these efforts to allow for long-term research that might lead to corrective adjustments to management plans for ferret recovery. The following excerpt from Miller and Lacey (2005, p. 119) seems germane and the FEIS should consider including it:*

“In adaptive management, the lack of knowledge adequate to predict with certainty the best course of action is recognized, management actions are designed in such a way that monitoring will allow testing of the adequacy of our model and understanding, and corrective adjustments to management plans are made whenever the accumulating data suggest that the present course is inadequate to achieve the goals and that a better strategy exists” (Holling 1978).

Finally, an adaptive management approach is admirable but requires a long-term commitment of considerable resources. We recommend that the FEIS address the availability of staff, funding and additional resources by the USFS required to implement a sound adaptive management approach as is outlined under these alternatives

We agree there is a need for monitoring, including scientific research, of the black-footed ferrets. There are uncertainties surrounding the future of the black-footed ferret which impacts estimating the extinction probability for any species (Lebreton and Clobert 1991, Boyce 1992). We simply do not know how many individuals are necessary to prevent population extinction, and there is insufficient empirical and theoretical basis on which to make such extrapolations (Boyce 1997). Small populations may or may not remain viable over quite long periods of time.

Fine tuning the number of acres of prairie dog colonies for a specific number of black-footed ferrets is problematic. Boyce (1997) states: Assigning a hard number to a minimum viable population is not possible (Thomas 1990). If the model is sufficiently complex to be realistic, we typically do not have enough data to do a conscientious job of estimating all of the population parameters. When these sampling errors are propagated by stochastic population projection, the confidence intervals surrounding some future probability of extinction are so large that the entire process becomes questionable (Lebreton and Clobert 1991). These problems are particularly severe for threatened and endangered species where the entire living population may be insufficient to yield acceptable levels of precision in estimates of such demographic parameters as survival. For many threatened and endangered species, the most

fundamental management programs will entail habitat management. Details of demographic structure for these species may be of little value.

Although population viability assessment models are weak, “when combined with an iterative process of model improvement and validation, the model can provide a progressively more robust understanding of the dynamics of a species and its habitat; and a model developed in such a way can be a powerful tool for management” (Boyce 1997). Such adaptive management requires robust research and information collection and is suited for the reality of maintaining a black-footed ferret population over time in the midst of socio-political matters, drought, disease, and so forth. Some research has followed the reintroduction of black-footed ferrets into Conata Basin/Badlands (Livieri 2007c). In general, the reintroduction appears to have been successful but we do not know the effects of existing and proposed management actions such as prairie dog control.

Appendix O discusses the need for a monitoring effort as part of an adaptive management approach.

Comment BFF17 *Chapter 2, Tables 2-1, 2-4, 2-5, 2-7, 2-9: The proposed method for monitoring prairie dogs by creating maps of acres occupied by their colonies does not provide important information needed for adaptive management decisions. If assessing the quality of habitat for ferrets is considered important (as it should be in the Conata Basin MA 3.63 Area), the FEIS also should consider monitoring the density of prairie dogs. Visual counts can provide such data, but these are time consuming and expensive. Active burrow counts, sampled by transects, may result in reasonable indices to prairie dog density, and the FEIS should consider this approach based on the modeling effort proposed by Biggins et al (1993).*

The Forest Service agrees that monitoring prairie dog density and acres is important to managing quality specifically in black-footed ferret habitat but not in areas outside of the two MA 3.63 areas (Conata Basin and Smithwick). Jachowski (2007) indicates that from a conservation perspective, spatial distribution of patches of high prairie dog density is a major determinant of the ability of reintroduction sites to maintain ferret populations. As the commenter noted, density measurements are expensive. Recent Conata Basin specific research (Livieri, 2007c) would indicate that ferrets do have home range acreage requirements. We feel acres are an efficient and useful tool to provide for habitat needs based on the cited data. Ferret home ranges do vary considerably and our home range data derives from Livieri and Jachowski. Although the current data set is not as robust as we would like, it does provide a perspective on ferret use of Conata Basin. The information during drought and wet years allows some understanding of how ferrets use space, especially the substantial increase in the use of space during drought and the need to provide an extensive area of prairie dog colonies. This is information that was not known at the time of reintroduction. Under adaptive management and future scientific research, we need will improve and augment our knowledge substantially especially given the controversy that surrounds the factors affecting ferret habitat and management in Conata Basin.

Comment BFF18 *The draft EIS repeatedly attempts to predict potential ferret population size. It is stated frequently in the plan that 5,000 acres of prairie dogs could maintain between 30-40 ferrets (e.g. pages 3.42, 3.45, 3.49). Several ferret reintroductions on prairie dog complexes of approximately 5,000 acres (e.g. UL Bend National Wildlife Refuge, Montana) have failed to attain this population size. Table 3-12 in the draft EIS lists several sites within the range of the black-tailed prairie dog with long histories of ferret reintroduction on complexes of approximately 5,000 acres that have failed to achieve populations of between 30-40 ferrets, in contrast to what would be predicted by models used in the draft EIS.*

The Forest Services agrees that there are deficiencies associated with CBSG (2004) and those deficiencies are listed in CBSG (2004) and discussed by the Region 2 Scientific Review. Plague is the principal reason why many black-footed ferret reintroduction sites are failing to achieve 30-40 breeding adult black-footed ferrets.

Although Conata Basin sustains many thousands of acres of prairie dog colonies, reintroduction of black-footed ferrets has been approved for small areas such as the 2,100 acres of colonies at Wind Cave National Park, South Dakota (National Park Service 2006a, 2006b). Even National Grasslands with plague such as Thunder Basin National Grassland, Wyoming are currently planning ferret re-introduction. U.S. Fish and Wildlife Service and others (Proctor et al. 2006a, 2006b) have identified over 92 focal areas for the conservation of black-footed ferrets and some are relatively small. This is by no means contradictory to the above discussion on the black-footed ferret's requirements for large complexes of prairie dog colonies. The pursuit of small reintroduction sites arises from the necessity to find more and more sites for a species that remains functionally extinct in the wild. It is crucial to establish and maintain as many black-footed ferret populations as possible in native habitats that are plague-free, even if such sites are less than ideal. In cases where the habitat base is small or subject to periodic effects of plague for example, more ongoing human intervention and management (releases of captive-reared black-footed ferrets) may be required to maintain populations. These populations may also play an important role in establishing nursery stocks which could be exchanged between reintroduction areas to maximize genetic diversity and improve overall survival and health of wild ferret populations (CBSG 2004).

Comment *The use of home range size to estimate ferret habitat needs is at odds with our current understanding of ferret ecology. A robust and intensive data set collected in the Conata Basin shows that ferrets do not defend well-defined territories, and that home range size is highly variable due to a variety of factors (Jachowski 2007). Such data show that ferret home range metrics are not a suitable basis for setting acreage goals for prairie dog colonies. If home range metrics are to be used, it should be noted that the draft EIS references a report (page 3.39) that poorly estimates home range size. The referenced data set cannot be used to construct statistically reliable home range estimates because it has an inadequate number of re-sightings over irregularly distributed time intervals.*

We believe that an evolving data set on black-footed ferrets under an adaptive management approach will gradually reveal more about black-footed ferrets and their relationship to black-tailed prairie dog colonies. Ferret home ranges do vary considerably and our home range data derives from Livieri and Jachowski. Although the current data set is not as robust as we would like it does provide a perspective on ferret use of Conata Basin. The information during drought and wet years allows some understanding of how ferrets use space, especially the substantial increase in the use of space during drought and the need to provide an extensive area of prairie dog colonies. This is information that was not known at the time of reintroduction. For this analysis, we utilized the best information available to us and we plan to augment that information through results of monitoring and future scientific research.

Comment BFF20 *The draft EIS contains an error in calculations related to wet and dry year ferret home ranges (page 3.39). It states that home range size for "Females in wet years averaged 79.3 acres, whereas females in dry years used 144.3 acres (45 percent increase)." The percentage was erroneously calculated; the cited values show an 82% increase in home range size from wet to dry years. Subsequent calculations based on the 45% value in the draft EIS must be adjusted. Using the mean home range size of 193 acres based on data for eleven females in the draft EIS, adjusting by 82% rather than 45% results in 351.2 acres during dry years. Adding the 6% adjustment "for incomplete occupancy" of habitat by ferrets, the acreage increases to 371.3. The final adjustment by 67% for sex distribution used in the draft EIS produces a corrected value of 249.5 acres. This is 50.5 acres more than the draft EIS value of 199 acres. Because the erroneous value of 199 acres per ferret is used in sections of the draft EIS identifying acreage goals during wet and dry years, these estimates also must be revised. For example, on page 3.42, a goal of 120 breeding adults is identified. The estimated prairie dog acreage needed is listed as "from 16,366 to 23,744 during wet and dry years, respectively." The dry year acreage estimate should be revised from 23,744 to 29,940, an increase of 6,196 acres during dry years.*

We agree with the comment and did err in the calculation of average home ranges during drought. The 45 percent increase in home range size during drought must be changed to 82 percent increase. The FEIS and associated documents have been changed to reflect the change.

The Biological Effects Analysis (Appendix O) discusses the acreages of prairie dog colonies required to support various black-footed ferret population sizes, including 125-130 breeding adult ferrets. The Forest Service's calculations for ferret habitat are based upon ferret home ranges. Livieri (2007a, 2007c) estimated the mean home range of female black-footed ferrets on one colony in Conata Basin at 79.3 acres during wet years (1998-2000) and 144.3 acres during a drought (2005), an 82 percent increase in home range size. Across Conata Basin, the mean home range of 11 females was 193 acres and 351.2 acres for the wet and dry years, respectively. Black-footed ferrets are territorial but there is approximately 15 percent overlap of female home ranges and typically 21.1 percent of a colony may not be occupied by black-footed ferrets, a difference of 6 percent over home range overlap. Livieri (2007c) excluded home range overlap area and included unused areas of a colony. That is, it is too simplistic to restrict black-footed ferret spatial requirements to the specific acres of a home range. A 500-acre prairie dog colony containing three black-footed ferrets is not likely to use every acre of that colony but as indicated by Jachowski (2007) over the long and short term the black-footed ferrets will use most of the area. Males may overlap two female black-footed ferret home ranges. Therefore, and mindful of the pitfalls of using home range values, 120 breeding black-footed ferrets, the viable number estimated by CBSG (2004) for >90 percent population persistence, would require from 16,366 to 29,704 acres during wet and dry years, respectively (80 female black-footed ferrets X 193 acres + 6 percent = 16,336 acres; 80 female black-footed ferrets X 351.2 acres + 6 percent = 29,704 acres). For >95 percent population persistence 125 breeding adult black-footed ferrets would require from 16,878 to 31,189 acres of prairie dog colonies during wet and dry years, respectively. One-hundred thirty breeding adult black-footed ferrets would require from 17,798 to 32,400 acres of prairie dog colonies.

Comment BFF21 *The problem with using population viability models, such as those on which this plan relies heavily, is that "minimum critical sizes are sensitive to small errors in demographic data, and models are not accurate enough to make such precise predictions" (Reed et al. 2002).*

The Forest Service used the best science available and this matter is discussed in the Biological Effects Analysis (FEIS Appendix O).

Comment BFF22 *Use of the CBSG (2004) model to predict ferret population viability is problematic. The draft EIS bases estimates of minimum population size on the population viability analysis accomplished in 2004 by CBSG (page 3.38). Demographic rates used in the analysis are highly controversial and their validity has been debated by scientists (US Fish and Wildlife Service 2006). Major concerns are the source and analysis of the original demographic estimates incorporated in the VORTEX analysis used by CBSG, and the time period on which these estimates were based. Estimates were based on data for a span of a few years when the population was increasing after ferrets were first introduced at the Conata Basin. Since 2000, the Conata Basin ferret population reached a consistent annual population level estimated at between 200-300 ferrets (Livieri 2006). This suggests that demographic rates have changed and stabilized around values that differ from those used in the CBSG analysis. Lower survival rates translate into higher minimum population size estimates than the 100 or 120 adult ferrets needed to maintain a greater than 90% probability of persistence over 100 years (page 3.38).*

The CBSG model was used as the best available information for this effort and its application is discussed in the Biological Effects Analysis (FEIS Appendix O).

Comment BFF23 *The draft EIS proposes the use of adaptive management to control prairie dogs at a relatively fine scale using an interior management zone theory, yet it does not provide for identification and protection of areas within colonies that are vital to ferrets. Identification of these areas is critical to sustaining ferrets and should be addressed.*

Any control of prairie dogs will be closely monitored as described in FEIS Appendix H – Implementation Plan. We agree that, should any control of colonies be required in the IMZ, there will be an assessment of active and inactive areas (prairie dog densities) within the colony boundary per findings and recommendations by Jachowski (2007) and Jachowski et al. (2008).

Comment BFF24 *The FEIS needs to explain the USFS's obligations under ESA section 7(a)(1) and how significant reductions in prairie dog and ferret populations at the Conata Basin MA 3.63 Area, as suggested by three of the alternatives, will affect the USFS's ability to further the purposes of and maintain compliance with the ESA.*

The Forest Service's obligations under ESA Section 7(a)(1) is to consult with USFWS to carrying out programs for the conservation of endangered and threatened species. The Record of Decision will discuss consultation with USFWS, as required, to ensure the intent of ESA Section 7(a)(1) is met. Details of the effects analysis for the black-footed ferret are documented in the Biological Effects Analysis.

Comment BFF25 *We suggest that the FEIS assess the scientific basis as to whether ferret reintroductions (and their attendant prairie dog habitat) can be proportionately allocated to the 12 States of their original range because of plague and site availability, and whether they can be proportionately allocated among the GAs of National Grasslands for the same reasons. Because there appear to be only four or five sites today that have the potential to support viable ferret populations, the majority of which will likely be in plague-free complexes in South Dakota (Lockhart et al., 2006), it seems unlikely that habitat can be proportionally allocated among the GAs of the national grasslands.*

The Forest Service agrees that it is not possible for each state to share equitably the number of black-footed ferret reintroduction sites because of plague and lack of extensive prairie dog colony complexes. It is beyond the scope of this effort to analyze. South Dakota is largely east of the plague line and because there are extensive prairie dog colony complexes on federal and tribal lands, it is reasonable that South Dakota will host more black-footed ferret reintroduction sites than Kansas, for example.

Comment BFF26 *Below in Table 2, we have presented a more conservative estimate for adult ferret habitat requirements in drought years. Data taken from the Conata Basin ferret population as a whole (Livieri 2006) from years 2004-2006 supports recalculation of the aforementioned estimates of adult ferret habitat requirements. The years 2004-2006 were all drought years.*

Table 2. Adult ferret habitat requirements during drought years (Livieri 2006).

	2004	2005	2006
PRAIRIE DOG ACRES	21,500	29,051	25,935
CONATA BASIN ADULT FERRETS	104	89	97
ACRES/ADULT	207 ac	326 ac	267 ac

It is difficult to specify the precise acreage required by black-footed ferrets in Conata Basin. Moreover, frequent removal of juvenile and adult black-footed ferrets from Conata Basin by USFWS for translocation elsewhere complicates our understanding of black-footed ferret habitat needs. One of the reasons for the 78,000-acre Conata Basin Management Area 3.63 was to allow for a large area where black-footed ferrets could be reintroduced, allowed to grow in population, and studied for many years without interference with a view to learning about their habitat needs during wet and dry years and the effects of other factors. We agree that the required acreage of black-footed ferret habitat during drought should be changed and this is reflected in the FEIS and associated documents.

Comment BFF27 *Thus a total population of 100 black-footed ferrets would translate to approximately 33 genetically effective animals. This is below the estimate of 50 genetically effective animals necessary for short-term genetic maintenance recommended by Frankel and Soule (1988).*

U.S. Fish and Wildlife Service et al. (1994) started with a black-footed ferret population of zero in Conata Basin/Badlands and small releases of captive-reared animals with a view to establishing a population of at least 100 or more breeding adult black-footed ferrets. As discussed above, reducing uncertainty surrounding the number of breeding adult black-footed ferrets that could be supported at the site and their habitat associations hopefully would come with new information gathered in Conata Basin/Badlands in the years following reintroduction. New information would inform the continued management of the population and national recovery efforts. Our goal in Conata Basin is to achieve a genetically effective number of black-footed ferrets.

Comment BFF28 *Additionally, on Page 1-5, we note, regarding the monitoring of ferrets, the “indicator” for recovery of ferrets seems to be vaguely defined. “Biological determination” does not explicitly describe any monitoring or measurable attributes indicating whether or not the ferret populations are healthy. The FEIS needs to consider how a “biological determination” for the ferret can help with recurring adaptive management decisions. Consideration should be given to more explicit methods, such as those proposed in the 2006 ferret proceedings, which seem to be more appropriate and mostly rely on systematic spotlight searches (Biggins et al., 2006a).*

Although the monitoring of black-footed ferret populations following reintroductions has not been haphazard, several ferret recovery groups since 1994 have recommended development of uniform standards prescribing minimum methods, intensities, and frequencies of monitoring that would provide data on population size, mortality rates, and recruitment. Such standards would promote comparability of data among sites, document expectations for those who will attempt to establish new populations, and allow the U.S. Fish and Wildlife Service and other responsible groups to better assess progress made toward achieving recovery objectives. The Forest Service will work with the U.S. Fish and Wildlife Service and ferret recovery groups in such efforts if they choose to implement them. The Biological Effects Analysis displays determination of impacts to black footed ferrets by alternative along with the rationale in arriving at the determination.

Comment BFF29 *The NNF has nowhere looked to the impact of its decision on the black-footed ferret in the context of the national recovery effort. Some of the alternatives proposed will reduce ferret habitat on the NNF by as much as 89% (Alternative 3), 27% (Alternative 1), and 57% (Alternative 4).*

The Biological Effects Analysis (Appendix O) includes an extensive discussion on cumulative effects starting on page O-61.

Comment BFF30 *The United States Fish and Wildlife Service has recently released ferrets on less than 2,500 acres of prairie dog habitat in Wind Cave National Park and their NEPA EIS, FONSI and FWS Biological Opinion state that they can maintain 30 animals on 3,000 or less acres. In fact, FWS states that "[at Heck Table ferret litters have been produced for 7 years on approximately 1,400 acres of prairie dog colonies. Other peripheral acreage does exist, but the primary areas where litter production has occurred remains well under 2,000 acres." July 3, 2007, letter from FWS Regional Director to Fall River County State's Attorney Lance Russell. This data appears to have been omitted from the full and fair discussion of Alternative 3 in the DEIS. The DEIS also raises the specter that there is a "possibility of extirpation of prairie dogs" from individual GAs under Alternative 3. The suggested possibility forgets that since 1915 the Federal Government has been sponsoring prairie dog poisoning programs in an effort to eradicate prairie dogs without success. A full and fair discussion should allude to the fact that the LRMP, managed in conjunction with any of the DEIS alternatives, will provide adequate habitat for the prairie dogs and will not extirpate prairie dogs from any GA on the National Grasslands.*

There is connectivity between Heck Table and the rest of Conata Basin/Badlands black-footed ferret area. Although ferret litters have been produced on less than 2,000 acres in Conata basin, without the interaction of ferrets in the greater Conata Basin, the ferret population would be lost. If all that were needed to sustain black-footed ferrets were 1,400 acres then there would be many sites throughout the Great Plains supporting ferrets and the species would not have reached so critically close to being extirpated.

Although Conata Basin sustains many thousands of acres of prairie dog colonies, reintroduction of black-footed ferrets has been approved for small areas such as the 2,100 acres of colonies at Wind Cave National Park, South Dakota (National Park Service 2006a, 2006b). Even National Grasslands with plague such as Thunder Basin National Grassland, Wyoming are currently planning ferret re-introduction. U.S. Fish and Wildlife Service and others (Proctor et al. 2006a, 2006b) have identified over 92 focal areas for the conservation of black-footed ferrets and some are relatively small. This is by no means contradictory to the above discussion on the black-footed ferret's requirements for large complexes of prairie dog colonies. The pursuit of small reintroduction sites arises from the necessity to

find more and more sites for a species that remains functionally extinct in the wild. It is crucial to establish and maintain as many black-footed ferret populations as possible in native habitats that are plague-free, even if such sites are less than ideal. In cases where the habitat base is small, or subject to periodic effects of plague for example, more on-going human intervention and management (releases of captive-reared black-footed ferrets) may be required to maintain populations. These populations may also play an important role in establishing nursery stocks which could be exchanged between reintroduction areas to maximize genetic diversity and improve overall survival and health of wild ferret populations (CBSG 2004).

Comment BFF31 *The SDTWS believes information presented in the DEIS did not sufficiently support the concept that toxicant availability is needed for interior prairie dog management on the majority of Buffalo Gap National Grasslands and all of Ft. Pierre and Oglala National Grasslands due to the extremely low occupancy rates and lack of documented impacts. On the Conata Basin MA 3.63 Area, we believe there is little compelling scientific information that resource impacts in this area warrant compromising the viability of ferrets as some of the alternatives appear to do. The SDTWS believe some deference should be allowed for conservation of a self sustaining ferret population in the Conata Basin MA 3.63 Area.*

Most non-363 areas currently contain small acreages of prairie dog colonies and are generally not in need of toxicants for the foreseeable future. The focus of management will be on increasing prairie dog colony acres in the non-3.63 geographic areas. Toxicants will be used as a last resort should prairie dog colony areas exceed the maximum range of acres or if vegetation conditions are not being met. If implemented, Alternatives 1, 3, and 4 could impact the viability of the black-footed ferret because of the reductions in prairie dog colonies. The deference to conservation of a self sustaining ferret population in Conata Basin MA 3.63 area is provided for in Appendix H.

Comment BFF32 *Many responders commented about the cost of ferret introductions by referencing the Black-footed Ferret Conservation Center costs for raising captive ferrets.*

The costs associated with captive bred ferrets are shown in Chapter 3, Social and Economic Impacts. These costs are for producing a ferret kit capable of being translocated to a re-introduction site for initial re-introduction or supplementation of existing ferret populations.

Comment BFF33 *Table 2-2 should also include a minimum threshold for black-footed ferret numbers. It is obvious that maintaining viable populations of black-footed ferrets is one of 2 primary criteria governing development of this plan (page 1-3), making the estimate of black-footed ferret numbers more important than measuring factors such as SI. A healthy black-footed ferret population should be the indicator of a healthy grassland community. Thus, Alternative 1 and associated occupied acreage figures are biologically unsound and will not insure a long-term viable ferret population.*

The Biological Effects Analysis (FEIS Appendix O under section titled Black-footed Ferret Reintroduction into Conata Basin/Badlands) and the FEIS Chapter 3, Species at Risk, discuss black-footed ferret population levels needed for viable populations using the best available science. There remains uncertainty in the scientific community about adequate population levels of black-footed ferrets at any given reintroduction site. However, there is certainty that larger prairie dog colonies are required for viable ferret populations.

Comment BFF34 *A grave concern to the Tribe is that only two alternatives use the best available science and provide enough prairie dogs to sustain a black-footed ferret population with a greater than 90% probability of persistence over 100 years. The Tribe is currently working to establish a viable population of ferrets on tribal land and has received wild-born ferrets from the Conata Basin to assist in our efforts. Research has documented that translocated wild-born ferrets have significantly higher survival rates than ferrets born in captivity. The Tribe is concerned that under three of the proposed alternatives wild-born ferrets may no longer be available from the Conata Basin, which may adversely affect our ability to establish a viable ferret population on our reservation.*

The Forest Service acknowledges the importance of the Conata Basin as production site for wild born kits to aide in the reintroduction effort across the range of the black-footed ferret.

The FEIS is not a decision document and alternatives are designed to frame an analysis of a broad range of alternative actions which represent the relevant input from the scoping process. This analysis provides the necessary information with regard to effects that gives the Deciding Officer background for making an informed decision consistent with applicable laws and regulations and the FEIS disclosure of effects from the broad range of alternatives. Chapter 3 provides an analysis of how each alternative would affect black-footed ferrets. The FEIS incorporates the current science in conducting that analysis and indicates impacts to these species as they are anticipated by alternative. It is this disclosure that assists the Deciding Officer in making an informed decision.

Comment BFF35 *Alternatives 1 and 3 would preclude GAs such as the Oglala from being able to support such a population, this despite the fact that the Oglala has more than adequate suitable habitat and potential for prairie dog colonies of sufficient size. The Oglala has been identified by a number of sources as a potential site for BFF reintroduction.*

Alternatives 1, 2, and 5 support a minimum of 1,000 acres to meet the definition of a colony complex. This complex was direction from the 2001 Forest Plan to provide potential habitat for black-footed ferret. However, the intermingled ownership pattern and the size of federal blocks of land pose a challenge to successful black-footed ferret reintroduction efforts. A recent priority list of potential black-footed ferret reintroductions sites determined by the USFWS did not list the Oglala as a priority reintroduction site.

The FEIS is not a decision document and alternatives are designed to frame an analysis of a broad range of alternative actions which represent the relevant input from the scoping process. This analysis provides the necessary information with regard to effects that gives the Deciding Officer background for making an informed decision consistent with applicable laws and regulations and the FEIS disclosure of effects from the broad range of alternatives. Chapter 3 provides an analysis of how each alternative would affect black-footed ferrets. The FEIS incorporates the current science in conducting that analysis and indicates impacts to these species as they are anticipated by alternative. It is this disclosure that assists the Deciding Officer in making an informed decision.

Comment BFF36 *The Commission believes that it is inappropriate to ignore former management decisions such as those developed in the LRMP and Amendment 1 and not to consider the cumulative impacts on individual and multiple species that would result from the fragmentation of management and the resulting level of reduction in habitat. Because of this impact, the Commission believes that, in order to meet the needs of multiple species and to meet the objectives of multiple use management, the management and potential control of prairie dogs on Forest Service lands needs to be considered as a whole within a GA and that there needs to be coordinated management between the BMZ and the IMZ. The Commission recommends that the target for prairie dog habitat and early successional range conditions be based on the total suitable habitat on the GA both in the BMZ and the IMZ. As identified in the LRMP and Final EIS for Amendment 1, the desired condition is 10 to 30 percent of prairie dog habitat for the Oglala GA. The Commission believes that 10 percent is the minimum acreage that is needed to provide habitat for representative populations of prairie dogs and species associated with prairie dog habitat. The Commission believes that 30 percent for the upper objective is appropriate in that it reflects the higher percentage of this grassland stage that would have occurred in the GA historically, as noted in our April 4 comments. This larger area also will support larger populations of species associated with prairie dog habitat as would have occurred historically. It is recognized that due to the emphasis and priority for control in the BMZ, in many instances this may shift most of the habitat into the IMZ. This approach will provide for the coordinated management of habitat between the IMZ and the BMZ when conditions do not necessitate complete control in the BMZ. Within the Oglala GA it has been identified that not all areas, whether in the BMZ or IMZ, may require control at the same time. By coordinating management and control practices, the distribution of occupied habitat can be shifted within the area of total suitable habitat to meet the objective of 10 to 30 percent of prairie dog habitat across the GA.*

Note: Amendment 1 referenced by the Commission should be Amendment 2 (USDA Forest Service, 2005e. Record of Decision for Black-Tailed Prairie Dog Conservation and Management on the Nebraska National Forest and associated Units, Including Land and Resource Management Plan Amendment 2).

The Commission discusses a desired condition referenced in the 2001 Forest Plan and Amendment 2 as 10 to 30 percent of prairie dog habitat for the Oglala GA. These percentages come from the 2001 Forest Plan in Chapter 2, page 2-77. The intent of the 10 to 30 percent is for low vegetative conditions across the Oglala GA and that prairie dogs could be a part of that range.

The 2001 Forest Plan direction is not to provide 10 to 30 percent prairie dog acres across the Oglala GA. With that said, the Commission's suggestion to provide 10 to 30 percent suitable prairie dog habitat would equate to approximately 1,900 to 5,600 acres of prairie dogs on the Oglala GA. Alternatives 1, 2, and 5 provide a range of acres that would fall between the Commission's recommended 10 to 30 percent suitable prairie dog habitat.

Comment BFF37 *The discussion of sylvatic plague also ignores that this was anthropogenically introduced in the late nineteenth century. DEIS glosses over the potential for toxicity to these non-target species by implying that zinc-phosphide breaks down quickly and is not a significant risk for scavengers. It is true that the toxic by-product of zinc-phosphide is not stored in the muscle tissue of animals that ingest it; however, it is not out of the question that animals that may ingest the digestive tract will be at a reasonably high risk for nerve toxicity.*

Regardless of when plague was introduced it has specific potential to impact prairie dogs and black footed ferrets so we believe the analysis is not lacking because of a lack of discussing when it was introduced. Impacts to non-target species are addressed in Chapter 3 of the FEIS.

Comment BFF38 *We also agree with NGPC (2007) that some of the alternatives--particularly 3 and 4--use an estimator of rangeland species composition (NRCS similarity index) that is biased toward the needs of livestock, and that they arbitrarily set quotas for seral stages. This appears to give undue priority to late seral stages without regard to the historically complex and heterogeneous landscape that would have allowed for large expanses of early seral-stage habitats in suitable areas, maintained by large prairie-dog colonies and inhabited by their many commensal species, several of which are rare and declining (including not only black-footed ferrets, but also swift foxes, *Vulpes velox*).*

The desired range of seral stages was set in the 2001 Forest Plan. It provides for a range of habitat requirements for all species. Seral stages are framed around the NRCS's ecological site descriptions, and are not based on livestock production. Similarity index is but one measurement tool for assessing vegetation condition objectives and a variety of measurement metrics could be used.

Comment BFF41 *Page 3-33, Table 3-10: This table describes prairie dog control on various grassland units. Since many other tables in the DEIS separated impacts by geographic area and Conata Basin MA 3.63 Area areas, we recommend this table be revised using similar separations.*

A revised table of prairie dog control on various grassland units has been included in Appendix B of the FEIS.

Comment BFF39 *In order for the Nebraska National Forest to have an accurate count of prairie dog acres, all prairie dog acreages including the Buffer Management Zones, the Interior Management Zones, whether controlled or uncontrolled must be included in the survey results. These more accurate counts of prairie dog infested acres will allow for a better understanding of the impacts of each of the alternatives. Prairie Dog acreage maximum acres under each Alternative: Current Acreage, 33,310; Alternative 1, 41,700; Alternative 2, 115,200; Alternative 3, 21,900; Alternative 4, 12,000 in Conata Basin, no control outside; Alternative 5, 202,110. Buffer Management Zone acres must be added to the acres listed above. Under current management, prairie dog numbers are increasing. See figures below as proof. Acres of private land controlled because of encroachment under SD Prairie Dog Management Plan: 2004-24,369; 2005-14,725; 2006-29,502. Increase over 100% from 2005 to 2006. Acres controlled on Nebraska National Forest Buffer Zones: 2004-6,733; 2005-8,111; 2006-13,027. Increasing annually. SD Dept. of Ag produced 274,500# of zinc phosphide in 2006. This is enough to treat 732,000 acres.*

Additional acreage tables have been added to Appendix B of the FEIS.

Comment BFF40 *Page 2-8, Table 2-5: The table indicates Alternative 3 would provide a maximum of 2,200 acres of prairie dog habitat in the Conata Basin MA 3.63 Area. However, Chapter 3 indicates that Alternative 3 would allow 5,800 acres in the Conata Basin MA 3.63 Area. Reconciling this discrepancy would be helpful in correctly analyzing the impacts of this alternative.*

In Chapter 3, Species at Risk, the footnote # 2 in Table 3-17 explains that 2,200 acres represents 3 percent of the 3.63 GA. However, this alternative would allow for all prairie dog acres in Pennington County (see Table 2-5) to be dedicated in the 3.63 GA equating to 5,800.

Comment BFF41 *Page 2-15, Conservation Measure #4: This measure indicates that the USFS will “coordinate” with the U.S. Fish and Wildlife Service for all activities that have a potential to affect ferrets. The Department recommends that the “coordination” terminology be changed to “consultation” as required under the ESA.*

We made this correction to Conservation Measure #4 in Chapter 2 of the FEIS.

Comment BFF42 *Why does the NNF believe that prairie dog expansion is occurring much more rapidly than previously predicted in the 2005 amendment when the data appears to indicate the actual growth is well within levels previously analyzed?*

A revised table of prairie dog expansion on various grassland units is included in Appendix B of the FEIS.

Comment BFF43 *NNF provides no data on the scope of encroachment, the mechanism by which dispersal is occurring, mitigating factors that could ameliorate encroachment problems, NNF's ongoing policy and activity in poisoning in buffer areas, analysis of the effectiveness of past buffer control efforts, comparison with non-lethal buffer controls, or other information that supports the contention that interior control will aid or assist in mitigating encroachment. Based on historic occupancy maps, we would argue that encroachment should be described more logically in terms of "reoccupancy", as prairie dogs over the last two documented expansion cycles occupy substantially the same colony boundaries that they formerly occupied.*

The purpose and need found in Chapter 1 of the FEIS does not list encroachment as part of the purpose for this analysis. That analysis was provided in the 2005 Amendment. The alternatives speak to situations where consideration could be given to expanded control where the half mile buffer provided for in the 2005 amendment would not include the entire colony. This would be a limited occurrence based on the existing colony locations.

This analysis is concerned with managing for desired vegetation cover, for topsoil protection, to contend with undesirable plant reduction, and to provide habitat for associated species. Toward these ends, it does not matter whether prairie dog colonies represent the initial occupation of an area or a re-occupancy.

Comment BFF44 *Are you prepared to invest sizable resources to study ferrets and prairie dogs in order to carry out true adaptive management? Evidently, you are financially prepared to poison but are you prepared for extensive field work on ferrets and prairie dogs? Please detail your current and planned monitoring and associated scientific research?*

Monitoring strategies have been identified in the FEIS.

Comment BFF45 *We believe it would be useful to update and republish the wildlife observation maps at the back of the 2005 FEIS in the 2007 FEIS.*

The 2005 FEIS contains the maps. The FEIS on page 1-1 has been incorporated into this effort by reference.

Comment BFF46 *The map representing Fall River Northeast Geographic Area Prairie Dog Management Zone is not accurate. This map needs to show the prairie dog towns within the 1/2 mile boundary zone.*

We recognize that there may be some prairie dog colonies existing in the BMZ. However, for analysis purposes the BMZ areas were considered prairie dog-free and thus why the maps show no prairie dog colonies.

Comment BFF47 *The fact is we have not done enough diligence and examination on the issue of the Prairie Dog. Although the Forest Service claims that prairie dogs are destroying the land, there is no science to back this claim.*

The Forest Service makes no claims that prairie dogs destroy lands. The Forest Service recognizes that prairie dog foraging, clipping and burrowing has the potential to influence higher seral rangeland vegetation and that conditions will trend toward low seral with an increase in prairie dog colony size or density.

Comment BFF48 *discussing the Smithwick complex, maintaining habitat for 30 adult ferrets would need to be adjusted using the correct calculations described in the discussion of Black-footed Ferret Home Range on page 3-39 (See comment and recalculations below for Page 3-39). Minimum prairie dog acres required for one adult ferret should range from 137 to 248 acres (wet to dry years), not 137 to 199 acres. Therefore, the Smithwick complex should fluctuate from 4,110 to 7,440 acres of prairie dogs.*

We have made adjustments in the FEIS and associated documents (please see Response to Comment BFF20 for further clarification).

Comment BFF49 *Page 3-30, Cumulative Effects: This discusses the likelihood of species that would be displaced by prairie dog activity causing grasslands to go from tall-grasses to short-grasses; this impact needs to be kept in the context of the area occupied by prairie dogs.*

The 2001 Forest Plan contains objectives for species, such as sharp-tailed grouse, that are dependent upon high structure vegetation. These objectives are found in Chapter 1 beginning on page 1-15 and in Chapters 2 and 3 under each geographic and management area direction. Any reduction in high structure that occurs from prairie dog expansion can have an impact on these species.

Plague (P)

This section deals with issues of plague and its effects on black-footed ferret viability.

Comment P1 *We request that you plan for and identify "emergency ferret relocation" areas on disjunct pieces of grasslands and discuss the "emergency ferret relocation" areas and process/protocol in this document. Please discuss the protocols of plague, prairie dog and ferret management if plague arrives at Conata Basin or another active ferret site in SD. Should the preferred alternative select some alternate area(s) in which prairie dog acres are actively promoted in a configuration that could provide a smaller reintroduction site of 50-90 ferrets to replace Smithwick?*

We refer the "emergency ferret relocation" or ferret management to the USFWS as the lead agency regarding these kinds of management actions. We will coordinate closely with USFWS in this regard.

Comment P2 *National Grasslands like the NNF that are east of the so-called "plague line" are particularly important for black-footed ferrets, because sylvatic plague is extremely lethal to both black-tailed prairie dogs and black-footed ferrets. The presence of endemic plague west and south of this line greatly increases the difficulty and complexity of maintaining sufficiently large complexes of prairie dogs to sustain a viable population of ferrets.*

The Forest Service recognizes the significance of the plague line and understands the importance of plague free prairie dog colonies for reintroduction sites. This is discussed in Appendix O of the FEIS. Plague now occurs in Conata Basin and has affected 8,000 acres of prairie dog colonies as of June 16, 2008. The epizootic continues to spread.

Comment P3 *Solutions to plague management and spread, especially recovery of Smithwick site from plague, if such solutions exist will require coordination between tribal and non-tribal entities. If you dust Smithwick, what is the point, if you don't also dust across the fence? Thus how Pine Ridge is funded to handle its plague issues is very relevant to this DEIS and availability of such funding is also an environmental justice issue, which should be discussed.*

The Forest Service recognizes the importance of coordination between other state and federal entities, the tribes and private land owners in the management of prairie dogs and the black-footed ferret. There are various agreements and Memorandums of Understanding (MOUs) in place to do this such as the Cooperating Agency Status with the State of South Dakota. It is outside the scope of this document to dictate to any agency or private individual as to how non Forest Service land is to be managed or if funding exists to accomplish any management goals on federal or non federal land.

Comment P4 *We think it is disingenuous to pretend that plague is not at Smithwick. We believe this DEIS should include a discussion as to whether Smithwick remains suitable/viable as a 3.63 area Please fully describe all monitoring for plague and inexplicable die offs that you have done on the southeast side of Fall River.*

Fall River County respectfully requests that the Forest Service make every effort to document the existence of plague in Fall River County as we believe that the plague has existed here for three years and is at epidemic proportions at this time. Documentation is necessary for proper evaluation of the current DEIS. This must be adequately disclosed in order to attain meaningful public disclosure, review and comment. More importantly, the Black-footed Ferret Recovery Plan at page 47 requires an evaluation of patterns and occurrences of plague in the geographic area of a reintroduction. The Forest Service must document the plague, and prior to issuing of an FEIS, make a determination of whether or not Smithwick should even be considered a site for ferret introduction.

The Forest Service has never intended to hide the fact that we believe that plague has killed prairie dogs in Fall River County (both in the Fall River Southeast and West Geographic areas). We state in the Biological Effects Analysis (FEIS Appendix O at Direct, Indirect and Cumulative Effects under Plague section) and FEIS that we believe that plague is in the area but have not officially documented plague. What this means is we have not completed the required tests which officially document plague. There are two methods of officially documenting plague in an area: one being to find a fresh dead prairie dog on a colony and have it tested, the other is to capture fleas on a suspected colony and have them tested. Attempts have been made to find dead prairie dogs after a known die-off, but they have been unsuccessful. No attempts have been made to capture fleas. It is an expensive and time consuming process that will tell us what is already known; there is plague in Fall River County. Plague is now extensive in Conata Basin having affected 8,000 acres of prairie dog colonies by June 16, 2008. The epizootic continues.

Plague, by itself, does not disqualify a potential site for black-footed ferret reintroduction (FEIS Appendix O – Biological Effects Analysis at Direct, Indirect and Cumulative Effects under Plague section).

Comment P5 *If plague strikes, the best management response will be to insure that an adequate number of prairie dogs survive to quickly recolonize plagued-out colonies. This will not be accomplished by major reductions in prairie dog numbers by poisoning. What is clear is that successful ferret recovery requires adequate prairie dog colonies within close proximity. Poisoning to increase intercolony distance is at odds with ferret recovery requirements. Please discuss solutions that will increase the number of prairie dogs, in face of plague.*

One solution discussed in the FEIS (Appendix O – Biological Effects Analysis under Disease and Black-footed Ferret Habitat) is dusting for flea control in plague threatened areas. This would address the desire to maintain or increase prairie dog populations. None of the alternatives include objectives to poison for the intent of increasing intercolony distances.

Comment P6 *We don't understand your stated reasons for doing another EIS so soon (based on the issues you identified for the "Purpose and Need"). However, we are completely mystified as to why, management of the Grassland's prairie dogs and ferret reintroduction sites in face of a plague threat is not part of the "Purpose and Need".*

The purpose and need does include the management of prairie dogs to sustain black-footed ferret populations. An adaptive management approach is proposed to address threats such as plague. The FEIS provides various possible solutions to management issues regarding prairie dog and ferret management.

Comment P7 *The State Plan provides for a plague protocols and planning (see page 40 of the SD Black-tailed Prairie Dog Conservation & Management Plan), please discuss the State's plague "contingency plan", in alternative 4, the State's alternative.*

The State's prairie dog plan references the need to develop a contingency plan on page 40 as referenced, but to date has not finalized an official plan. The Forest Service will coordinate closely with the state in that effort.

Third Party (TP)

This section includes comments that deal with third party solutions.

Comment TP1 *DEIS did not include the provisions we discussed (by voluntary allotment retirements via incentives provided by 3rd parties) to resolve conflicts between persons holding grazing leases on the National Grasslands and wildlife*

The action alternatives identify different levels of mandatory prairie dog acreage caps for the Conata Basin MA 3.63 Area. The DEIS does not identify if or how those caps might be increased if conservation interests were to purchase lands or land exchanges occurred in the Conata Basin MA 3.63 Area.

The Forest Service believes that third-party conservation actions with willing landowners adjacent to the National Grasslands would greatly enhance black-footed ferret and prairie dog conservation. Third-party agreements will allow an augmentation of prairie dog colony acres for black-footed ferrets.

Solutions regarding controversial species, in this case the prairie dog habitat of the black-footed ferret, are sometimes difficult. However, some approaches have been used by the Forest Service to address the conflict between livestock and large carnivores. For example, in the Forest Plan for grizzly bear habitat conservation in 6 national forests of the Greater Yellowstone System (GYE), the Record of Decision incorporates the phasing out of livestock allotments. For example, the Plan states: cattle allotments or portions of cattle allotments with recurring conflicts that cannot be resolved through modification of grazing practices may be retired as opportunities arise with willing permittees. Opportunities have in fact arisen as third parties have compensated livestock permittees for their relinquishment of allotments. More than 500,000 acres have been retired greatly benefiting wildlife, the agencies, and the livestock permittees. All parties agreed that this approach was the preferred method for dealing with livestock-large carnivore conflicts in the GYE. (see http://www.fs.fed.us/r1/wildlife/igbc/Subcommittee/yes/YEamend/gb_internet.htm; pages A-4 and A-5)

Mindful of the above Forest Service example, there could be provision for permanent voluntary retirement of term grazing allotments as a way of resolving user conflicts. The permanent refers to term allotments; some grazing consistent with prairie dog habitat could still occur.

Comment TP2 *In the final EIS for this plan amendment, we strongly urge you to include this language in whatever alternative you end up selecting. Failure to do so can only perpetuate the conflict. It is, of course, unknown if willing sellers of these leases will be found, but in the FEIS the Forest Service should do everything it can to facilitate the process should such sellers be found.*

The Forest Service believes that third-party conservation actions with willing landowners adjacent to the national grasslands would greatly enhance black-footed ferret and prairie dog conservation. Third party agreements will allow an augmentation of prairie dog habitat for black-footed ferrets. The FEIS includes references in this regard in Chapter 2 and Appendix H.

Rangeland Ecology (RE)

This section includes comments that deal with rangeland ecology, damage to NFS lands and resources, invasive species, damage to adjoining lands, soil and water, management methods/techniques, and non-lethal control methods utilizing the agency grazing permit authorities.

Comment RE1 *The overall approach to framing the issue of range condition and prairie dogs appears to be based on range conditions as it mostly relates to livestock production. The use of SI as the overarching guideline applies a broad standard of range conditions that does not account for or is adjusted for historical wildlife use or current wildlife needs. It forces wildlife, such as prairie dogs and associated species that historically would have determined the extent of seral stages to fit into a predetermined set of seral stages that is largely livestock oriented. The appropriate approach is to determine the habitat requirements of the species that should represent the native fauna of the region and set the extent of the seral stages to maintain viable populations of these species.*

The desired range of seral stages by geographic area was set in the 2001 Forest Plan in Chapter 2 (USDA Forest Service 2001c). The desired range of seral stages provides for a range of habitat requirements for all species. Seral stages are framed around the NRCS's ecological site descriptions and are not based on livestock production.

Comment RE2 *Use of the similarity index for any of the alternatives is inappropriate for the reasons described earlier. Early seral states are a consequence of prairie dog habitat manipulation. Numerous species depend on this seral state, including burrowing owls, mountain plovers, McCown's longspurs, and others. Historically, prairie dogs occupied about 15% of the Great Plains landscape (Proctor et al. 2006) and therefore at least that amount would have been represented by early seral states over large areas. Moreover, within prairie dog colony complexes, and historically the large complexes upon which ferrets and many other species depended, the majority of vegetation would have been in an early seral state. This is a baseline condition the NNF should recognize and accommodate in their planning. The NNF should establish its seral stage targets based on these thresholds, which the existing plan has by and large done but this revision would overturn*

Similarity Index (SI) is an appropriate method to evaluate an ecological site (see June 2007 Science Consistency Review of the DEIS Appendix D found in the project record). This method compares the

present plant community to the historic climax plant community for that site or to a desired plant community that is one of the sites potential vegetation states.

The desired range of seral stages was set in the 2001 Forest Plan based upon the historical range of variability (USDA Forest Service 2001c). The desired range of seral stages provides for a range of habitat requirements for all species. This analysis further refines 2001 Forest Plan direction by describing desired vegetation conditions for prairie dog colonies. We recognize that many species rely on vegetation conditions that include short stature vegetation and we have set a desired vegetation condition for prairie dog colonies that reflects those conditions. The desired vegetation condition is described in detail in the Range Specialist Report and summarized in the FEIS Chapter 3 in the Rangeland Vegetation section.

Comment *Numerous comments were received indicating livestock grazing on the National
RE3* *Grasslands is environmentally damaging and appeases only the interests of the
grazing permittees..*

Livestock grazing is a permitted use of the National Grasslands. Livestock grazing is managed through a variety of laws, regulations, policies, and specifically the 2001 Forest Plan as implemented through allotment management plans.

Comment *Large prairie dog towns also decrease soil and water quality due to the destruction of
RE4* *the forage base within the interior of the town.*

The Forest Service recognizes that prairie dog foraging, clipping, and burrowing have the potential to influence soil and water erosion rates and that rangeland vegetation conditions trend toward low seral with an increase in prairie dog colony size or density. The effects of prairie dogs on soil, water, and rangeland vegetation are summarized in Chapter 3 of the FEIS and in the Rangeland Management, Aquatic, and Soils Specialist Reports maintained in the project record.

Comment *The NFS needs to do a water quality study to determine if they are in violation of the
RE5* *Clean Water Act by allowing uncontrolled growth of the prairie dog towns. Large
prairie dog towns decrease soil and water quality due to the destruction of the forage
base within the interior of the town.*

The state of South Dakota conducted some water quality examinations in the Conata Basin and those results are soon to be published. They will be consulted and the results adaptively utilized as appropriate.

Comment *There is no science to support the claim that prairie dogs are destroying the land.
RE6* *Prairie dogs have lived in these areas and the ecosystem has thrived for hundreds, if
not thousands of years. The reason for the recent poor growing conditions for grass
is the now 7-year long drought. The worst possible scenario for wildlife such as
black-footed ferrets during this drought is to kill more prairie dogs when the prairie
dogs are already at their lowest densities.*

The Forest Service makes no claims that prairie dogs destroy lands. The Forest Service recognizes that prairie dog foraging, clipping and burrowing have the potential to influence higher seral rangeland vegetation and that conditions will trend toward low seral with an increase in prairie dog colony size or density.

Effects of drought on rangeland vegetation are addressed in Chapter 3 of the FEIS.

Comment *Now, not only will we have PD's moving on to private land but exotic weed seeds will also spread on to private land causing problems. The USFS should be making plans on control of exotic weeds as it is only a matter of time that this will be a big issue.*
RE7

The Nebraska National Forest has an invasive species control program. Invasive species are addressed in the Cumulative Effects Section of FEIS Chapter 3.

Comment *Several commentors stated that the prairie is not suited for cattle and sheep grazing. Several commentors expressed concern that management and control of dogs needs to be integrated with grazing rates based on forage production as influenced by precipitation patterns. Provisions need to be incorporated into grazing leases for the adjustment of stocking rates based on precipitation patterns and range conditions.*
RE8

We disagree with the conclusion that the grasslands are not suited to grazers. Prairie grasslands are well adapted to ungulate grazing, including domestic livestock, and evolved under light to severe bison and other large herbivore grazing (SD Technical Guide, NRCS, Section II – ESD – 64). Forest Service permitted use indicates that the majority of the National Grassland is managed at or less than NRCS recommended stocking rates found in the South Dakota NRCS Technical Guide. Climatic conditions have not been ignored and drought management guidelines found in Chapter 1 of the 2001 Forest Plan (page 1-22) have been implemented to account for reduced annual herbage production. Short-term adjustments are currently made through annual operating instructions to permittees based upon precipitation patterns (drought). Long-term modifications of livestock grazing strategies are generally accomplished through a grazing allotment management planning process which requires further separate environmental analyses and public disclosure.

Comment *Appendix C describes the existing vegetative conditions in the project area: It is unclear in Appendix C how certain habitat types were assigned to various seral stages. For example, in the current Forest Plan, the Wall Southwest Geographic Area has its second largest habitat type classified as badlands (22 percent of the total area) (USFS 2002). Badlands are described as barren, highly eroded lands with little or no vegetation. These areas provide minimal forage if any to livestock or prairie dogs. Thus, a reasonable assumption is that the vegetation, while sparse, is the climax or late seral stage vegetation since it is being minimally altered by grazing. However, it is unclear which seral type the badlands habitat type are assigned in Appendix C since no tables in the appendix approach the amount of badlands (22 percent) in the late seral stage condition. Please clarify whether this climax vegetation on badland habitat has been assigned to an early or early intermediate seral stage and address the appropriateness of this classification.*
RE9

Badland sites do not currently have vegetation conditions inventoried and are listed as an unknown category in the referenced appendix.

Comment RE10 *Many commentors expressed their opinion that there is no need for prairie dogs on Forest Service lands while a segment of the public commented that wildlife conservation, including prairie dogs, is reasonable accommodation for these grasslands units.*

The Forest Service recognizes the importance and significance of multiple uses on the National Grassland and Forests. In fact, the Forest Service is mandated by Congress to manage for multiple uses, and in some cases, this can result in the need to make adjustments in some uses to accommodate others. The 2001 Forest Plan in Chapter 3 provides a definition of special management areas for special plant and wildlife habitats.

Comment RE11 *These are public lands, the wildlife living on them belong to the public and while the cattle are privately held. Holding a lease to an allotment shouldn't mean the go ahead for abuse of the land. Management practices such as reassessing AUM's per allotment, grass banking, etc. should be part of the on going management of the grasslands.*

Cattle are privately held; however, livestock grazing on National Forest System lands is managed through the Forest Service term grazing permit system. Long-term modifications of livestock grazing strategies are accomplished through the grazing allotment management planning process which requires a separate environmental analyses and public disclosure.

We disagree with the conclusion that the land is abused. The majority of the National Grassland is stocked at or less than NRCS recommended stocking rates (SD Technical Guide, NRCS, Section II – ESD – 64). It is also managed under approved allotment management plans which implement various grazing strategies and management practices to achieve forest plan vegetation goals.

Comment RE12 *Management flexibility is required to work with drought, including the ability to poison prairie dogs when conditions favor their expansion onto neighboring land.*

The purpose of this analysis and decision is to provide management direction during periods of drought in an adaptive fashion and with a full suite of management tools, including the use of rodenticide on prairie dog colonies in the interior-colony management zone (FEIS Chapter 2 and in Appendix H). Regardless of conditions, expansion onto neighboring lands has been addressed in the 2005 boundary management zone amendment decision (USDA Forest Service 2005e). Additional direction can be found in the 2001 Forest Plan, which provides guidelines for management during natural processes such as drought in Chapter 1 page I-21.

Comment RE13 *Many responses were received that requested non-lethal methods be considered for prairie dog control such as: Relocation or placement in sanctuaries; Vaccines to control reproduction; Sterilizing or birth control methods; vacuum prairie dog colonies and relocation; Livestock grazing modifications; Land consolidations; .*

Population and habitat manipulation tools, along with administrative tools are addressed in Chapter 2, "Managing Tools Available to All Action Alternatives" table. Several non-lethal methods are available and other non-lethal methods not mentioned are not precluded from consideration in the future.

Comment RE14 *Effects--General (3-14 DEIS)--Statement: "In old colonies, it may take re-seeding of native species such as western wheatgrass in order to move the plant community from annuals/bare ground to perennial mid-grasses if that is the desired objective. What research is there that shows reseeding of active prairie dog towns can or will succeed. It would seem that the prairie dogs would decimate any new or sprouting grasses.*

The statement should have included "...which have had prairie dogs controlled,..." The FS does not advocate reseeding of native grasses where we have not controlled prairie dog populations. We can utilize reseeding should it be required to move the plant community to a desired condition and is expressed as a potential tool in the NRCS Ecological Site Descriptions Plant Communities and Transitional Pathways (see Appendix A of the Range Specialist Report).

Comment RE15 *On page 3-15 you allege that "as prairie dog acres increase, herbage production decreases". You also say: "Herbage production is expressed as an Animal Unit Month (AUM)." AUMs are units to quantify forage production for consumption in livestock production. AUMs are not about herbage production. A field of loco weed or Russian thistle is produced forage, but may not be healthy for livestock. The Rangeland Vegetation section is full of this confusion of herbage with livestock forage. You repeatedly confuse creation of AUMs and livestock forage with creation of plants or herbage that can be used by other wildlife or are not used by any wildlife. Please stop doing that. Please clean up all your text and use the words AUMs or livestock forage when that is what you mean and herbage production when that is what you mean.*

We agree and have clarified this in the Range Specialist Report and in Chapter 3 of the FEIS.

Comment RE16 *(A)Can the DEIS explain about how livestock production can be benefited by prairie dogs? (B)We believe you define an old colony as 10-15 years, we have heard 15-25 years as an old colony. Please justify how you chose those ages for an old colonies.*

(A) The documents purpose is explained in the FEIS, Chapter 1, Purpose of and Need for Action. Effects, either beneficial or detrimental, were disclosed in Chapter 3. (B) This was a general statement, and specific reference to colony age has been added in the Range Specialist Report page 17 and in FEIS Chapter 3, Rangeland Vegetation section.

Comment RE17 *In discussing cumulative effects on rangeland vegetation (page 3-1), NNF provides no references or data to support these statements.*

The rangeland vegetation cumulative effects section was re-written in the FEIS.

Comment RE18 *The Nebraska National Forest was remiss in not reducing AUMs on allotments in Conata Basin immediately when the damage to the resource started to become apparent two years ago. The lack of rainfall and extreme summer temperatures in the area were no secret to the agency or the grazing permittees. At this point we believe that only the reduction of AUMs on the grazing allotments in the project area can reverse the deteriorating range condition. See: Miller, B.J., R. Readinig, D. Biggins, J. Detling, S. Forrest, J. Hoogland, J. Javersak, S. Miller, J. Proctor, J. Truett, and D. Uresk, 2007. *Prairie dogs: An ecological review and current biopolitics. In press, J. Wildlife Management.**

Adjustments in livestock grazing will be considered in conjunction with other management tools, such as rodenticide use, when addressing vegetation that is not meeting the desired condition. This direction is found in Chapter 2, Table 2-11 under Habitat Manipulation Tools.

Comment RE19 *The object of the AUM's measure is to determine the amount of grazing pressure the ecological site can tolerate and still maintain is seral stage. If grazing pressure is reduced over time the ecological site seral stage will improve. If grazing pressure increases the ecological site seral stage will decrease. C.Johnson and B. Sowell; Effects of prairie dogs on vegetation, November, 2004. See attachment one. The Forest Service recognizes this concept for cattle but refuses to recognize it for prairie dogs. Prairie dogs not only graze the ecological site(s) on which their towns have been established but they also trim vegetative regrowth and surrounding grasses as a defensive mechanism. Prairie dog town with high population densities exceed the ecological site(s) carrying capacity and soon have to expand the size of the town to satisfy both their nutritional and defensive requirements. In order for grazing management to be an affective tool for maintaining health, vigor, and seral stage of the ecological site, adjustments in stocking rates for all herbaceous is required. Removing one species and allowing another species to exceed the carrying capacity of the ecological site will result in declining seral stage to the point where the ecological site in no longer a viable component of the ecosystem.*

The Forest Service recognizes that prairie dog foraging, clipping, and burrowing has the potential to influence rangeland vegetation conditions based upon an increase or decrease in prairie dog colony size or density. The effects of the proposed actions under all alternatives on rangeland vegetation are summarized in Chapter 3 of the FEIS and in the Rangeland Specialist Report maintained in the project record.

Comment RE20 *Assumption (3-1 DEIS) - Statement; "All current prairie dog colonies are assumed to be in an early seral condition due to lack of current vegetation condition data on prairie dog colonies within the Nebraska National Forest." The question is. Why is there no data on the condition of the ecological sites within managed prairie dog town given the propensity of the Forest Service to grow prairie dogs as forage for Black-Footed Ferrets. In order to manage to the levels specified in this DEIS this data is critical and if they do not have it then how can they meet the stated objective of their plan or evaluate the plans effectiveness. To say they have no data on the seral stages of the ecological site in the grasslands or occupied by prairie dog towns is incomprehensible.*

The assumption is supported by research papers from western South Dakota (Uresk 1983, Uresk 1985, Uresk 1990). References were added to the Range Specialist Report and to Chapter 3 of the FEIS. Prairie dog colony acreages are sustained as food for the endangered black-footed ferret, such as in Conata Basin, or in other areas of the Nebraska National Forest to maintain diversity of species. Historical data about colony size exists, but acreages are not directly related to vegetation condition and production, and thus very little vegetation surveys, other than those completed for research, were performed or required in prairie dog colonies.

In response to comments, the FEIS at the cited page has been changed to define a desired vegetative condition for prairie dog colonies that does provide for topsoil protection and prevents the establishment of noxious and invasive species. Monitoring identified in FEIS Chapter 2 for each alternative is designed to address the threshold for vegetation condition that would initiate management actions.

Comment RE21 *When developing the rangeland vegetation impacts relative to the options presented in the DEIS, the DEIS needs to include analysis of prairie dog populations on the ecological sites and the shift from one seral stage to another. It also should include an analysis of condition prior to re-introduction of the Black Footed Ferret and the expansion of prairie dog densities within various management areas. Extensive ecological site (rangeland) condition and production data was collected by the Forest Service in the 1980s. This data could and should provide a baseline to gage the impact current and past prairie dog management has had on designated prairie dog management areas. Such a comparison would be critical in an EIS to show actual effects and consequences*

Shifts from one seral stage to another were included in the analysis and actual effects and consequences are documented in FEIS Chapter 3 based on prairie dog colony acres. There is little to no research to support an analysis of vegetation condition based on prairie dog densities. The Forest Service has not collected baseline rangeland vegetation condition and production data on prairie dog towns. The extensive condition and production data referred to was collected on almost all range sites across the National Grasslands, exclusive of prairie dog towns. Vegetation condition on prairie dog towns is dependent upon many disturbance factors including livestock grazing and drought. FEIS Chapter 2, Table 2-13 identifies monitoring that will assist management decisions in an adaptive fashion.

Comment RE22 *Drought: (3-19 DEIS) -- Statement: "Currently, adjustments are made to livestock grazing management to mitigate the overall effects of drought to rangeland vegetation. Therefore, there will be no cumulative long-term impacts to vegetation condition and forage production from past, present, and reasonably foreseeable drought events associated with livestock grazing." This statement ignores grazing or foraging by prairie dogs during periods of drought. If grazing units need to be reduced during periods of drought to protect the ecological site (rangeland) then the grazing units attributed to prairie dog density or population also need to be reduced and prairie dog populations needs to be considered as part of the reduction. No analysis in the DEIS is presented to account for or to explain how AUMs attributed to prairie dogs will be managed to maintain the seral stage and Similarity Index (SI) of the rangeland*

The rangeland vegetation cumulative effects section was re-written in the FEIS. Grazing or foraging by prairie dogs was not ignored, but was discussed in the next paragraph. Since 2000, poisoning has not been a tool available to the Forest Service to reduce impacts from prairie dogs during periods of drought or for any other reason except where public safety was an issue.

Comment RE23 *Chapter 3, Page 3-12: The second paragraph, first sentence states: "Long-term prairie dog colonization promotes short grass and annual plant communities (Fagerstone and Ramey 1996), which could include annual invasive species, particularly Canada thistle." This statement is not accurate. Canada thistle is not an annual species; it is a perennial species (Whitson et al., 2001). In a study investigating recovery of vegetation after Canada thistle treatment in prairie dog towns in Badlands National Park, approximately 60 percent of plant cover in areas never infested by thistle was comprised of nonnative species. Field bindweed (Convolvulus arvensis), a troublesome perennial, was one of the most abundant of these exotic species (Symstad 2007)*

We concur. The statement was changed in the FEIS in Chapter 3 as identified by the commenter.

Comment RE24 *Pages 3-14 to 15: The discussion of direct and indirect effects does not consider the effects of cattle grazing on overall vegetative response, only the clipping and grazing of prairie dogs. There is some discussion later on under Cumulative Effects beginning on page 3-18. However, we believe that there should be mention here of all animals that might be affecting changes in vegetation, both wild and domestic.*

The direct and indirect effects analysis (FEIS Chapter 3) was conducted on the proposed action which is rodenticide use to control prairie dogs. All other management actions currently available to the Forest Service, including livestock grazing, are correctly analyzed in the cumulative effects section of FEIS Chapter 3.

Comment RE25 *The dog population within the prairie dog town is too large for the amount of forage available. A range analysis should be taken to determine the health of the forage within prairie dog towns. My observation is that it is 75% to 90% dead*

Range analysis, or the similarity index rating protocol, is addressed as a monitoring tool in FEIS Chapter 2.

Comment RE26 *The FEIS should thus consider the feasibility of monitoring that vegetation over tens of thousands of acres and address issues including whether changes can be statistically detected in such patchy communities and whether a practical sampling strategy can be designed that will provide meaningful information for adaptive management decisions.*

Similarity index (SI) is an appropriate method to evaluate an ecological site (see June 2007 Science Consistency Review of the DEIS Appendix D found in the project record) and does provide meaningful information for making adaptive decisions.

Comment RE27 *Page 3-22, Table 3-7: This table presents information to indicate whether each alternative complies with the existing Forest Plan vegetative seral objectives. This table may be fundamentally flawed because it assumes all prairie dog acres are early seral vegetation type. The USFS should be aware that many prairie dog colonies are early intermediate seral vegetation. Further, most areas of recent prairie dog expansion are unlikely to have shifted to early seral vegetation. Finally, use of prairie dog annual growth rates of 25 percent to predict future levels of prairie dogs are far greater than what these grasslands have experienced in the first five years of the Forest Plan, even though drought has created ideal conditions for growth. These three factors weigh heavily in Table 3-7 predictions of non-compliance with the existing Forest Plan vegetative seral stage objectives. Accordingly, if used at all, Table 3-7 should include a footnote that explains the assumptions used to derive the table.*

We realize that expansion rates are highly variable. During long-term, low precipitation periods, our data shows expansion rates of 15 percent to 25 percent in situations with no prairie dog control efforts. In analyzing differences between alternatives, it is reasonable to use the 25 percent as a basis for analysis.

Comment RE28 *(A)How many ranch outfits graze on the original Conata area as defined in the 1994 Conata Basin Black-footed Ferret Reintroduction FEIS? How many graze in the 3.63 MA Conata Area as defined by the NNF Forest Plan in 2002? Please provide a chart showing how many AUMs they had when the prairie dog acres exceeded the 12,000 limit. Please show the AUMs they have now. Please show how much money the ranchers or State think they have "lost" and that the state thinks the ranchers need reimbursement for. To do this you have to give an appraised value for federal AUMs; what does the FS think is the true commercial value of a federal AUM offered at a mere \$1.35 per AUM, when private rates are much higher? What is the range of and mean of AUMs authorized and permitted per permittee at the Conata site.*

An analysis of social and economic effects related to alternative implementation has been documented in FEIS Chapter 3, Social and Economic Factors.

Comment RE29 *Is one of the reasons to do another EIS so soon after 2005, that you are concerned about excessive vegetation reductions in some of the drought hammered areas? If that is so, you should document what those excessive vegetation effects are, providing us with some data about vegetation conditions that concern you.*

The Purpose and Need for this analysis is found in Chapter 1 of the FEIS. Chapter 2 of the FEIS defines desired condition for vegetation and identifies thresholds that would initiate treatment. FEIS Appendix H provides a decision protocol that will guide management actions as monitoring indicates a concern.

Comment RE30 *The conservation and public use of these species on public lands may be jeopardized if the Forest Service establishes the principle--for prairie dogs--that domestic livestock have a priority for use of forage over native species on Forest Service lands. It is a huge mistake and incompatible with the obligations of federal agencies under the Section 7(a)(1) of the ESA to give cattle a priority over ferrets. This Section obliges federal agencies to utilize their authorities to further the purposes of the ESA. In contrast to this mandate, Alternative 1, 3 and 4 give a priority to private livestock grazing over the needs of endangered black-footed ferrets.*

The 2001 Forest Plan assigns 3.63 Black-footed Ferret Reintroduction Habitat to two areas on the Buffalo Gap National Grassland: Conata Basin and Smithwick. Within these areas, black-footed ferrets take precedence over livestock grazing.

The purpose statement in Chapter 1 of the FEIS also focuses on black-footed ferret needs:

“The purpose of the project is to manage prairie dog colonies in an adaptive fashion through the following:

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

Comment RE31 *If there are concerns about soil or vegetation conditions on portions of the national grasslands utilized by both prairie dogs and cattle, the NNF should use its existing authority to reduce livestock grazing. The concept of reducing native wildlife species on public lands in order to achieve outputs designed to benefit a very few ranchers with grazing leases on these lands is inconsistent with the mandate of the Bankhead-Jones Farm Tenant Act of 1937: to develop a program of land conservation and utilization, to correct maladjustments in land use, and assist in: controlling erosion; reforestation; preserving natural resources; protecting fish and wildlife; developing and protecting recreational facilities; mitigating floods' preventing impairment of dams and reservoirs; developing energy resources; conserving surface and subsurface moisture; protecting the watersheds of navigable streams; protecting the public lands, health, safety, and welfare. The program is not for building industrial parks or establishing private industrial or commercial enterprises (7 U.S.C. 1010). Grazing by native wildlife species is not a "maladjustment in land use." Poisoning prairie dogs is not "protecting fish and wildlife." On the other hand, grazing by non-native livestock is a commercial enterprise which is not a function of the National Grasslands.*

All tools, including livestock management such as grazing adjustments, are being used and will continue to be used in soil and vegetation management as provided in the FEIS Chapter 2, Table 2-11. Although the 2001 Forest Plan (Chapters 1 and 2) currently establishes direction, this effort provides more clarification in dealing with black-tailed prairie dog habitat. We think this is consistent with the Bankhead-Jones Farm Tenant Act of 1937.

Comment RE32 *Must allow rodenticide for all areas that become completely bare - where the prairie dog has even eaten the cactus (maybe good indicator for this management tool).*

It is recognized that it is desirable to minimize bare ground and erosion and maintain a desired vegetation community, but prairie dog colonies will naturally have a certain amount of bare ground (especially in drought years). It will be up to the District Ranger to work within the limits of this plan to determine where rodenticides will be applied. All of the action alternatives provide for an management indicator (threshold) that allows rodenticide use when objectives for vegetation desired condition are not being met (FEIS Chapter 2, Alternatives 1, 3, 4 and 5). The FEIS in Appendix H provides a process for the District Ranger to verify that the vegetation desired condition is at or below the threshold indicator and outlines an adaptive response protocol that will include rodenticides and other management tools to address the appropriate threshold and ensure that desired conditions are maintained. Available management tools, including use of rodenticide, are found in the FEIS Chapter 2, Table 2-11 and in FEIS Appendix H.

Comment RE33 *Grazing ungulates are attracted to prairie-dog colonies and appear to benefit nutritionally by foraging around in colonies (Coppock et al. 1983). Effects of large grazers on native mixed-grass prairie are interactive with but not substitutes for the significant, positive effects of prairie dogs on the grassland ecosystem (Miller et al. 2007). Prairie dogs contribute more than ungulates to habitat heterogeneity, mediated through changes in aboveground vegetation and the soil seed bank (Fahnestock et al. 2003).*

Prairie dog colonies do have vegetation with a higher proportion of green to dead leaves than do nearby prairies unoccupied by the rodents (Coppock et al. 1983). The vegetation on the colony is more easily digested and often contains a higher concentration of protein (Coppock et al. 1983). These factors appear to benefit hooved grazers at the site and make foraging on prairie dog colonies more attractive to

them. National Grasslands are mandated to provide habitat for viable populations of all native species of wildlife (36 CFR 219.19 defines viable populations). The effects of the five alternatives for prairie dog management on threatened, endangered, Region 2 sensitive and management-indicator species have been evaluated (Chapter 3 and wildlife specialist report). Chapter 2 of the 2001 Forest Plan also sets objectives for all the various vegetation structure and composition categories in a geographic area (USDA Forest Service 2001c).

Management that addresses these objectives insures habitat heterogeneity to a level that insures viability of all listed species. Concepts such as changes in level of the soil seed bank may have some merit. However, their use in management would require expensive, intense monitoring. Within a geographic area, the existence of vegetation in all structure and composition categories is evidence that the habitat needs of wildlife will be met and is more economical to monitor.

Comment *The reason for the recent poor growing conditions for grass is the new seven year
RE34 long drought.*

A combination of factors including drought, prairie dog foraging and clipping, and livestock grazing are undoubtedly contributing to the substantial reduction in grassland vegetation observed in some areas during the recent drought.

Comment *Both livestock and prairie dogs must be managed in an appropriate fashion in order
RE35 to allow for a healthy balance of forage, water, wildlife and livestock.*

We concur - Title III of the Bankhead Jones Farm Tenant Act has been amended several times by Congress since 1937. In 1962, Congress added “protecting fish and wildlife” to the act, and since prairie dogs are part of the native fauna on the national grasslands, their conservation on these lands is certainly appropriate. Also, the original act references the need to “preserve natural resources”, and there again, there’s no reason to suspect that this excludes prairie dogs and other associated native wildlife. The complex challenge before us is how to conserve and manage prairie dogs and associated species, while still meeting the intent of other provisions in the act, as well as those in many of other laws and regulations that now apply to the National Grasslands and their management.

Comment *Canada thistle and other state listed noxious weeds are becoming established in these
RE36 decimated dog towns.*

Canada thistle and other noxious weeds generally do not become established on active prairie dog colonies because of the constant clipping action and the species’ desire to keep vegetation short. Prairie dogs have been known to significantly reduce or remove all honey mesquite (woody shrub) in the southwestern U.S. Honey mesquite is a significant contributor to loss of grasslands in the southwest and its expansion has coincided with the reduction of prairie dogs over the last century (Weltzin et al. 1997). However, colonies that have been poisoned do have the potential for noxious weed invasion because of the short vegetation and greater percent of bare ground available for establishment. A discussion on noxious weeds is contained in the Range Section of Chapter 3 of the FEIS. It is possible that reestablishment of native perennial vegetation on some sites may be slow and re-seeding could help accelerate re-vegetation and slow down noxious weed establishment. Noxious weed monitoring and control is a normal operating procedure for all the associated units of the Nebraska National Forest. However, the amount of monitoring and control does fluctuate on a yearly basis according to budget allocations.

Comment RE37 *Throughout the DEIS, drought is described as the causal agent for deteriorating rangeland health and soil erosion on overpopulated prairie dog towns. Based on observations during the summer of 2005, rangeland condition and potential wind and water soil erosion are more dependent on the density of prairie dog burrows per acre than on drought conditions. Prairie dog towns with a high burrow population had constantly low rangeland health, were at the earlier Seral Stage or lower (bare ground) and had higher rates of potential wind and water erosion. Prairie dog towns with lower burrow densities had significantly higher Seral Stages and less erosion potential.*

The Forest Service would be very interested in seeing the data upon which this argument is based. Our interpretation of the relationship between prairie dog densities and the condition of the vegetation is quite different. It is unsure what is meant by burrow densities in this argument and the assumption will be made that low burrow densities equates to low prairie dog densities, with the opposite also being true. When the Forest Service measures burrow density only active holes are counted.

We do acknowledge that as prairie dogs become established in an area they will, through daily foraging and clipping of vegetation, move a plant community from an intermediate seral stage dominated by mid sized grasses to a early seral stage dominated by forbs and short vegetation (Range Specialist Report – Fagerstone and Ramey, 1996). However, it is our belief that drought and livestock grazing play an important role in this transformation. We have also observed that after a plant community moves into the early seral stage, with high incidences of bare ground and higher rates of potential wind and water erosion, the densities of prairie dogs will also be greatly reduced. We have also observed that where there is high canopy coverage of plants, the prairie dogs will thrive, which results in high densities of prairie dogs.

Comment RE38 *Erosion is cited several times as an issue related to prairie dog colonies. There is, however, no data presented that documents this issue. Data needs to be presented in tables or amounts that demonstrates the rate of erosion on prairie dog colonies across GAs and compares this rate to similar and other soils types on Nebraska National Forest units impacted by the management project and also compares this to rates under the other seral stages and land uses on adjacent private lands. Also, an identified issue for the need to control prairie dogs is their encroachment onto private lands. Data needs to be provided that illustrates the scope of the problem and identifies the colonies or sites within the GAs that are the source of the problem.*

We have no erosion data however the issue was raised during public meetings and scoping efforts and this document recognizes the potential for erosion. The potential increase in erosion that comes from expanding bare soil can be minimized by management that maintains ground cover in the long term. This analysis provides management response by setting a threshold for vegetation conditions that would minimize this potential (FEIS Chapter 2). Additionally, descriptions of desired vegetation condition have been added to the Range Specialist Report and to the FEIS (Chapter 3, Rangeland Vegetation).

Comment RE39 *On page 3-12 you state that: "All current prairie dog colonies are assumed to be in an early seral condition due to lack of current vegetation condition data on prairie dog colonies within the Nebraska National Forest". You lack data on the vegetative conditions in prairie dog colonies yet, less than two years after the last DEIS, you need to address--vegetative conditions in colonies! If you lack data on the current vegetative conditions on prairie dog colonies on the NNF, how can you justify a need for the first goal of your "purpose and need"?*

The assumption is supported by research papers from western South Dakota (Uresk 1983, Uresk 1985, Uresk 1990). References were added to the Range Specialist Report and to Chapter 3 of the FEIS. Prairie dog colony acreages are sustained as food for the endangered black-footed ferret, such as in Conata Basin, or in other areas of the Nebraska National Forest to maintain diversity of species. Historical data about colony size exists, but acreages are not directly related to vegetation condition and production, and thus very little vegetation surveys, other than those completed for research, were performed or required in prairie dog colonies.

We believe this analysis meets the first goal of the purpose and need which is to set objectives for desired acres of prairie dog colonies in the interior of the National Grasslands to maintain or move toward desired vegetation cover, protect topsoil, and prevent the establishment of noxious and invasive species. In response to comments, the FEIS at the cited page has been changed to define a desired vegetative condition for prairie dog colonies that does provide for topsoil protection and prevents the establishment of noxious and invasive species. Monitoring identified in FEIS Chapter 2 for each alternative is designed to address the threshold for vegetation condition that would initiate management actions.

Comment RE40 *This entire DEIS must be redone to begin with real and scientifically defensible purpose and need statements. For example, if desired acres of prairie dog colonies are to be set, the purpose would be to move toward desired levels of flora and fauna biodiversity. This would be scientifically defensible.*

We believe this analysis does meet the first goal of the purpose and need which is to set objectives for desired acres of prairie dog colonies within the interior of the National Grasslands to maintain desired vegetation cover, protect topsoil, and prevent the establishment of noxious and invasive species. The DEIS was reviewed by a panel of scientists and their input (June 2007 Science Consistency Review of the DEIS found in the project record) has been incorporated as appropriate. In response to that review, the FEIS, in Chapter 2, defines a desired vegetative condition for prairie dog colonies that does provide for topsoil protection and prevents the establishment of noxious and invasive species. Monitoring identified in FEIS Chapter 2 for each alternative is designed to address the threshold for vegetation condition that would initiate management actions.

Comment RE41 *The NNF's analysis (DEIS 3-13) indicates that the distribution of desired seral states as they currently exist and as proposed in the plan are well within the parameters of the existing plan. These statements appear to negate the claim that there is a negative impact to vegetative cover.*

The seral objectives provided by the 2001 Forest Plan (Chapter 2 Geographic Area) were broad general percentages and did not define desired vegetative conditions that could represent each seral stage given management direction found in Management Area direction (USDA Forest Service 2001c). The FEIS (Chapter 3, Rangeland Vegetation) for this decision describes the desired vegetative condition for prairie dog colonies and impacts to vegetative cover can now be quantified using monitoring protocols such as similarity index.

Comment RE42 *The effectiveness of the chosen alternative will depend on sufficient monitoring of range condition and wildlife populations, including black-footed ferrets, black-tailed prairie dogs, and other Forest Service management indicator species and sensitive species. We strongly recommend that the Forest Service make the necessary resources available for such monitoring.*

We agree. Monitoring is an integral part of each alternative as shown in the FEIS in Chapter 2. The necessary budgetary resources needed for that monitoring is shown in FEIS Chapter 3, Social and Economic Factors section. Budget allocations are outside the scope of this analysis and are expected to fluctuate over time; however, the agency anticipates that available resources would be used to implement the decision to the extent feasible.

Comment RE43 *The DEIS also states there is no published data on soil erosion from prairie dog colonies. This is a misstatement as Fall River County, along with others, funded and supplied the Forest Service with a study done by a professional soil scientist.*

The Forest Service is aware of the study referenced in the comment. While we agree that it was conducted by a professional soil scientist, it was not published in a recognized journal or other professional outlet. Input for this analysis regarding soil erosion was provided by a Forest Service Soil Scientist as a member of the Interdisciplinary Team (Chapter 3 of the FEIS).

Social and Economic (SE)

This section includes comments that involve primarily social or economic values and opinions.

Comment SE1 *I think you should consider the money spent on Motels, Fuel, Restaurant Food, etc. all of this has tax money involved as does the guns & ammo we use. I believe we help as far as the tourism trade.*

We recognize the existence of these values in the Social Economic Analysis found in Chapter 3. Each of the areas listed in the comment is a part of the economic analysis which includes estimates of earnings from 2001-2004 (U.S. Census Bureau – American FactFinder) based on the 2002 North American Industry Classification System (NAICS).

Comment SE2 *Please describe the costs to the FS to maintain the grazing programs and the prairie dog management/treatments and the ferret reintroduction site. Please also explain the cost to the USFWS, the Park Service, to the State and NGOs, if they participate in cost sharing. As I requested elsewhere, please let us know what FS programs budgets, if any, have been hurt or sacrificed to provide these revenues.*

Economic costs for implementing and monitoring alternatives are found in Chapter 3 under the Social Economic analysis. Monies spent by other agencies are based on their own programs. The Forest Service has assisted other agency efforts, but funding for each agency has been within their own authorities. Shifts in funding priorities are an annual part of the Forest Service budgeting process. Many factors are examined when making budgeting decisions based on priorities.

Comment SE3 *Conata Basin has also become important to ferret recovery efforts elsewhere because this site produces enough ferret kits each year to remove some for reintroduction efforts elsewhere, including Cheyenne River, Rosebud and Lower Brule Reservations, and Wind Cave National Park to date. Each kit removed is worth an estimated \$11,400 (Livieri and Biggins 2007). About 30 kits may be removed per year without harming the population, resulting in an annual value of \$342,000.*

We recognize the existence of black-footed ferret values in the FEIS Chapter 3, Social and Economic Factors.

Comment SE4 *It would be helpful for the FEIS to provide a more detailed economic study that would look at long-term trends as prairie dog colonies expand.*

Economic impacts have been provided based on the projected time span of 10 years which coincides with the FEIS analysis as a whole.

Comment SE5 *Page 3-73, Social and Economic Factors: The FEIS should include costs for monitoring as part of socioeconomic analysis.*

Also, the considerable sums that the USFS and other agencies have expended to establish the Conata Basin MA 3.63 Area did not seem to be incorporated into the economic analysis. This would seem particularly important since USFS analysis indicate Alternatives 1, 3, and 4 may compromise the viability of ferrets in the Conata Basin MA 3.63 Area. This gives the impression those significant sums of money expended on ferret reintroduction at this site may be for naught and, therefore, seems relevant if a cost/benefit analysis is undertaken.

We agree and those costs have been developed and added to the FEIS in Chapter 3, Social and Economic Factors.

Comment SE6 *Page 3-74, Population Demographics: This section indicates South Dakota ranked 46 out of 51 States in population while Nebraska ranked 38th out of 51 States. Please correct to read 50 States or note which Territory or District is being considered a State.*

We agree and the change has been made to the FEIS in Chapter 3 Social Economic Factors, Population Demographics.

Comment SE7 *Many responders commented that poisoning alternatives do not make economic sense for the Forest Service given the number of livestock impacted, extent of livestock reductions, current grazing fee and the relationship of money returned to the treasury versus ferret recovery values and costs.*

Permitted livestock on the Conata Basin ferret site can change on a yearly basis depending upon several factors including drought and/or other natural disturbance. Economic impacts of each alternative are shown in FEIS Chapter 3, Social and Economic Factors. That analysis includes impacts to grazing receipts and the potential additional expense for livestock permittees through implementation of each alternative. It also includes relationship of the potential costs associated with supplementing black-footed ferret populations for recovery values.

Comment SE8 ***The Forest Service does not realize all the cost incurred by private landowners when the government's dogs migrate and colonize on adjacent land.***

FEIS Chapter 3, Social and Economic Factors, includes the information available at the county level from such sources as the National Agricultural Statistics Service. No costs incurred by private landowners were presented during scoping for this effort.

Comment SE9 ***We ask the Forest Service to provide updated information on the extent of prejudice in its permitting process: how many ranch outfits graze livestock on your lands and how many are Native Americans? What special subsidies occur and have occurred to Caucasians that very few Native Americans ever see?***

The Forest Service does not grant preferential treatment for grazing permits based on race or any other federally protected category. Permits are waived to preferred applicants based on the sale of base property or permitted livestock.

Law, Regulation, Policy and Planning Process (LRP)

This section includes comments that deal with laws, regulations, the planning process including purpose and need for the project, alternatives, monitoring, and the analysis in general.

Comment LRP1 ***The Draft Environmental Impact Statement (DEIS) for Management of the Black-tailed Prairie Dog on the Nebraska National Forest does not state a preferred alternative.....as required by 36 C.F.R. Section 219.7(d).***

The commenter is citing the 219 NFMA regulations. The Forest Service believes it was within its authority to prepare the DEIS as it was. The Council on Environmental Quality 40 CFR Part 1502 Environmental Impact Statements, Sec. 1502.14(e), only requires designation of a preferred alternative if one exists. A preferred alternative is identified in the FEIS.

Comment LRP2 ***The Lower Brule Sioux Tribe requests formal consultation regarding revisions to the current black-tailed prairie dog management plan on the Nebraska National Forest and Associated Units as described in the Draft Environmental Impact Statement that was recently sent to our Tribal Office.***

Formal consultation with the Lower Brule Sioux Tribe occurred during July of 2007.

Comment LRP3 ***...a multiple use mandate does not mean that all uses are equally justifiable on every acre. In areas that are critically important for the recovery of ESA listed species, for example, conservation of these species should receive a priority over other uses such as private grazing. Adoption of Alternatives 1, 3 or 4 in the DEIS would mistakenly give a priority to private grazing over the conservation needs of the highly endangered black-footed ferret by allowing increased poisoning of prairie dogs that are essential habitat for ferrets.***

We understand that not all uses are equally justifiable on every acre. This effort strives to provide a mix of values while still ensuring survivability of species. We believe that, within the range of alternatives, this mix can be achieved.

Comment LRP4 *Alternatives 1, 3 and 4 fail to provide for the plant and animal community of grassland species that is dependent on prairie dogs as its keystone species. These alternatives fail to provide for the diversity of the plant and animal communities that include prairie dogs as a keystone species, and threaten the viability of the populations of prairie dogs and numerous other species on the NNF and therefore fail to meet the duties in and under the NFMA as discussed above. Instead, the DEIS appears to rely solely on the desire to poison prairie dogs for benefit to livestock grazing levels rather than on the overall guidance of the 2002 LRMP.*

The FEIS is not a decision document and alternatives are designed to frame an analysis of a broad range of alternative actions which represent the relevant input from the scoping process. This analysis provides the necessary information with regard to effects that gives the Deciding Officer background for making an informed decision consistent with applicable laws and regulations and the FEIS disclosure of effects from the broad range of alternatives. FEIS Chapter 3 provides an analysis of how each alternative would affect dependency of grassland species on the project area. The FEIS incorporated the current science in conducting that analysis and indicated anticipated impacts to these species under each alternative. It is this disclosure that assists the Deciding Officer in making an informed decision.

Comment LRP5 *The NNF must consider the cumulative impacts of the Proposed Action's annual environmental effects. The cumulative impact analysis must list the past, present and reasonably foreseeable future projects within the analysis area that may contribute to cumulative impacts, specifically including plans to poison over multiple years. Moreover, the projects listed and considered must include other federal activities, and other activities on state and private lands. 3 The cumulative impact analysis must also be of sufficient geographic scope.*

Cumulative effects are found in Chapter 3 of the FEIS.

Comment LRP6 *In a recent interview, Rey appeared to have already determined the outcome of the EIS process, Rey was reported by the Sioux Falls Argus Leader on June 24, 2007, to have said that "He expects more poisoning of prairie dogs in the Conata Basin, near Wall, home to the largest population of endangered black-footed ferrets. He said the U.S. Forest Service, which he oversees, probably will favor a state Department of Agriculture plan calling for far fewer prairie dog acres." Undersecretary Rey's comments indicate the outcome of the NEPA process has been predetermined, undermining the purpose of NEPA that the NEPA process "help public officials make decisions that are based on understanding of environmental consequences." 40 C.F.R. 1500.1(b, c)*

We believe that we are maintaining the intent of NEPA. We considered every comment received regarding our analysis in the DEIS. We believe the FEIS clearly demonstrates analysis of a broad range of alternatives and the subsequent decision will be based on the analysis.

Comment LRP7 ***We request a mandatory standard to the LRMP that prohibits livestock grazing in all boundary management zones where prairie dogs now exist but are not wanted. As written currently, the LRMP contains authority for poisoning and shooting, yet any long-term livestock grazing adjustments will require additional environmental analysis. This should be changed to prioritize the management action that represents a real long term solution (removing livestock grazing).***

The Boundary Management Zone decision is outside the scope of this decision. Where poisoning may occur in the IMZ under this decision, direction is for livestock removal for a period to allow for meeting long-term objectives. Additional activities within boundary management zones that involve livestock management are appropriately made at the allotment management plan level and can include systemic changes such as rest, deferment, or livestock removal.

Comment LRP8 ***It is clearly in the interest of the state and the nation to assure that wildlife species be managed for their long-term viability. However, the meaning of the word "sustain" is unclear, and we suggest that it be clarified in the Final EIS.***

The Forest Service describes in detail the methods and models used to predict how many ferrets could be expected in each alternative in the Biological Effects Analysis (Appendix O, pages 54 to 72, including Table 7). The CBSG report in combination with information collected and reported by Liveri in Conata Basin was used to predict the how many acres are needed to sustain different population levels of black-footed ferrets and the probability of survival of that population. This is all presented in the Biological Effects Analysis (Appendix O, pages 66-72, including Table 7) and FEIS Chapter 3 (pages 3-38 to 3-40).

The literature during the past 20 years has gradually recommended not focusing on a single number (minimum viable population) for any endangered species but rather a range of possibilities (Mills 2007). Originally, an effective population of 50 was proposed as a minimum to protect against short-term loss of fitness due to inbreeding for an endangered species. The 50-rule is the genetic effective size (N_e), which is only about one-fifth to one-third that of the total population size (150-250) (Mills 2007). The 50 rule was proposed as a short-term guideline for captive breeding, not the long term survival of wild populations which would have many other factors affecting their persistence. The 50-rule was based solely on genetic factors and did not incorporate other factors that would increase the minimum necessary for persistence. Current literature suggests a value of 500 as the minimum size (N_e) necessary to ensure long term maintenance of genetic variation (Mills 2007) and higher numbers have been suggested (Frankham et al. 2002).

In addition, merely to remove the black-footed ferret from the endangered species list the recovery plan requires at least 10 sites with 100 or more breeding adults (USFWS 1988).

Comment LRP9 *In particular, the current designation of black-footed ferrets as experimental, nonessential should be more thoroughly described in the Final EIS. We suggest that the original US Fish and Wildlife Service (USFWS) Final EIS rule outlining this designation be reviewed to document the legal management options for this species and that they be specifically incorporated into the FS Final EIS. The designation does not provide that this reintroduced population of black-footed ferrets and the population goals as outlined in the Draft EIS dictate the final decision alternatives.*

The Biological Effects Analysis (Appendix O, page O-38) describes the current ferret designation as nonessential experimental population. Consultation requirements under the Endangered Species Act (ESA) with the U.S. Fish and Wildlife Service will be met to ensure the intent of ESA Section 7(a) (1), conservation of listed species is met. Details of the effects analysis for the black-footed ferret are documented in the Biological Effects Analysis (Appendix O, Direct, Indirect and Cumulative Effects, pages O-73 to O-96).

Comment LRP10 *The USFS states on page 3-6 (Effects common to all Alternatives) that prairie dogs "...cause soil loss, reduce vegetative cover, and increase wind and water erosion," yet the DEIS states that there are "...no direct effects to soil and water resources from prairie dogs" (DEIS 3-6) and that soil-prairie dog relationships are poorly understood.*

The FEIS (Chapter 3, page 3-6) indicates that the proposed actions do not directly impact soil and water resources as stated in the following "There are no direct effects to the soil and water resources from the proposed actions. Neither prairie dog poisoning nor setting a range of prairie dog acres causes soil erosion. Rodenticide will be applied at the prairie dog burrow holes and not directly in a water feature."

The indirect effects from the proposed actions reflects the point that as prairie dog colonies expand and age, there is an eventual shift in vegetation expressions which results in exposure of more soil and the potential for accelerated soil loss through wind or water erosion. We believe that increased potential for soil loss is an indirect effect of those shifts in vegetation expression as expressed in the paragraph immediately preceding the above quote.

Comment LRP11 *Moreover, WWF believes that the NNF should include specific language, as requested of the NNF, for programmatic reductions and/or voluntary relinquishment of grazing leases on allotments within the Conata Basin and include such analysis of impacts necessary to undertake such buyouts as they become available. Acquisition, trade and grazing rights purchase could ameliorate pressure to control interior prairie dog colonies. Mechanisms should be built into any mandatory prairie dog acreage caps to allow increases if key land purchases or exchanges occur.*

The Forest Service believes that third-party conservation actions with willing landowners adjacent to the National Grasslands would greatly enhance black-footed ferret and prairie dog conservation. Third-party agreements will allow an augmentation of prairie dog colony acres for black-footed ferrets. FEIS Chapter 2, Table 2-11, identifies third-party solutions as a possible management tool. The Record of Decision discusses the strong public support for a deferred decision on the Conata Basin MA 3.63 management to allow third-party actions to occur. By deferring the decision in MA 3.63 areas, the Forest Service is allowing black-footed ferret viability to be further analyzed and considered.

Solutions regarding controversial species, in this case the prairie dog habitat of the black-footed ferret, are sometimes difficult. However, some approaches have been used by the Forest Service to address the conflict between livestock and large carnivores. For example, in the Forest Plan for grizzly bear habitat

conservation in 6 national forests of the Greater Yellowstone System (GYE), the Record of Decision incorporates the phasing out of livestock allotments. For example, the Plan states: cattle allotments or portions of cattle allotments with recurring conflicts that cannot be resolved through modification of grazing practices may be retired as opportunities arise with willing permittees. Opportunities have in fact arisen as third parties have compensated livestock permittees for their relinquishment of allotments. More than 500,000 acres have been retired greatly benefiting wildlife, the agencies, and the livestock permittees. All parties agreed that this approach was the preferred method for dealing with livestock-large carnivore conflicts in the GYE. (See http://www.fs.fed.us/r1/wildlife/igbc/Subcommittee/yes/YEamend/gb_internet.htm; pages A-4 and A-5)

Mindful of the above Forest Service example, there could be provision for permanent voluntary retirement of term grazing allotments as a way of resolving user conflicts. The permanent refers to term allotments; some grazing consistent with prairie dog habitat objectives could still occur.

Comment LRP12 *As written in the DEIS you missed the concept of the plan. The State plan calls for the "good neighbor policy" as the focus. This alternative misses completely. Also the 8,000-12,000 acres in the State plan is for the Conata Basin/Badlands complex, which includes the Badlands National Park acres as part of the 8,000-12,000 acres. Page 42 thru 43 of the State plan clearly shows this, not the concept in the DEIS.*

Alternative 4 was coordinated with the state and includes their input in its development.

Comment LRP13 *The recommendations presented by the Commission are broader in scope than the Alternatives presented in the DEIS. The Commission believes that its recommendations on management approach and acreage objectives can be incorporated into Alternative 1 with the inclusion of language that management and control be coordinated between the IMZ and the BMZ and that the desired range of acres of prairie dogs is based on suitable habitat across the whole GA. Likewise, these recommendations could potentially be incorporated into Alternative 4 or possibly 5.*

This decision applies only to IMZ but analysis included connected and cumulative actions that might be occurring in the BMZ. In the absence of an official complaint about encroachment from adjacent landowners, the untreated acres that are in the BMZ can be counted towards meeting the objective for the GA. If, however, a complaint is received in subsequent years, additional acres within the IMZ will have to be found to meet the threshold value.

Comment LRP14 *If Smithwick has been losing prairie dogs to disease and shooting since 2002, how can it become a ferret reintroduction site? If you fail to manage it for its Forest Plan purpose, how are any of your alternatives consistent with the Forest Plan?*

The action alternatives (except Alternative 4) set specific objectives consistent with MA 3.63 ferret reintroduction goals and objectives found in the 2001 Forest Plan, Chapter 2, Fall River Southeast Geographic Area (Objectives, Standards and Guidelines). The presence of plague does not disqualify a site as a reintroduction area. Prairie dog populations affected by plague can recover to near pre-plague population levels within a few years. Plague is extensively discussed in the FEIS, Chapter 3. All reintroductions are coordinated with U.S. Fish and Wildlife Service to ensure success.

Comment LRP15 *The AZA suggests the following alternative solutions that benefit both landowners and endangered species recovery efforts: fully preserve the ferret recovery area within Buffalo Gap's Conata Basin; remove livestock grazing from the "boundary management zones" adjacent to private lands where prairie dogs are already being poisoned, so that vegetation has the greatest chance of reaching a height which may help prevent recolonization by prairie dogs; work with livestock grazing permittees and third parties on voluntary retirement or relocation of livestock grazing permits in Conata Basin's ferret recovery area.*

The full suite of tools will be considered for managing for black-footed ferrets, black-tailed prairie dogs, and vegetation desired conditions. This is described in Appendix H of the FEIS.

Comment LRP16 *The one index the NNF proposes to use in Alternative 3 (the "Similarity Index" or SI) is an inappropriate metric, as it relates to forage production for livestock, not a natural condition of the landscape caused by wildlife modification.*

SI is an appropriate metric for monitoring desired condition for vegetation when applied correctly (see June 2007 Science Consistency Review of the DEIS Appendix D found in the project record). The Range Specialist Report and FEIS Chapter 3, Rangeland Vegetation section, were edited to provide a description of desired condition for vegetation on prairie dog colonies as suggested by the Science Consistency Review.

Comment LRP17 *Authorize only those actions and activities that do not reduce the suitability of the area as black-footed ferret reintroduction habitat. Alternatives 1, 3, and 4 propose to cap ferret habitat and allow immediate toxicant use to reduce ferret habitat to achieve those caps. It appears that Alternatives 1, 3, and 4, if selected, would require and additional Forest Plan Amendment to allow destruction of ferret habitat or toxicant use would be out of compliance with Standard 1 under the Conata Basin MA 3.63 Area direction.*

This standard is identified as part of a potential amendment to the 2001 Forest Plan and can be found in the FEIS, Chapter 2, under Alternatives 1, 3, and 4.

Comment LRP18 *One of the 2 stated purposes of this DEIS is to manage prairie dogs to sustain black-footed ferret populations, thus ferrets are one of the wildlife populations of interest. Yet USFS does not list any suggested techniques to monitor ferret populations. Estimating black-footed ferret numbers must be an objective within all alternatives, because all proposed alternatives present potential threats to long-term persistence of this species.*

The U.S. Fish and Wildlife Service is the lead agency in black-footed ferret population monitoring. The Forest Service will coordinate closely with them to assist in these monitoring efforts.

Comment LRP19 *Moreover, several alternatives in this proposal are not in step with the prevailing attitudes of the American people, who wish to see consistent protections implemented to conserve endangered species and their habitats. In South Dakota, as elsewhere, the public consistently supports conservation of prairie dogs (57% of South Dakotans feel prairie dogs are important components of prairie ecosystems and deserve some protection), despite the fact that they are regarded as a highly controversial species (Gigliotti 2005).*

Also plans to increase poisoning are going against public opinion with sixty-three percent of the South Dakota and Colorado residents, surveyed by the Prairie Dog Coalition, a Colorado-based nonprofit group. The public also support strict safeguards for prairie dogs on public lands.

Federal laws, regulations, and policies mandate that the Forest Service manage the National Grasslands for multiple uses and values, including wildlife and livestock grazing. This does not imply that every acre of National Grassland has to accommodate each multiple use or value. However, the Endangered Species Act prioritizes conservation and protection of threatened or endangered species where conflicts arise.

The Forest Service multiple use mandate is reflected in the 2001 Forest Plan, Chapter 1, which identifies the mix and priority of uses for the Nebraska National Forest and associated units determined to be most appropriate under the various laws, regulations and policies (USDA Forest Service 2001c). The Purpose of and Need for Action for this decision further supports multiple use on the National Grasslands in the project area (FEIS Chapter 1).

Comment LRP20 *I would appreciate an explanation as to why the government or whoever else deems this action necessary when we have so many other desperate needs for funding at present.*

The necessity of this action is found in the FEIS in Chapter 1, Purpose of and Need for Action.

Comment LRP21 *Rather than amend the plan again to allow even more poisoning, reasonable options outlined in the existing management plan should now be implemented options such as eliminating livestock grazing in some areas during drought and creating vegetative barriers to restrict prairie dogs.*

The administrative tools referenced by the commenter have been utilized and will continue to be used to meet the purpose and need of this analysis. The use of rodenticide in conjunction with the referenced tools is part of this analysis and provides managers with a more complete suite of management actions to address the purpose and need of the analysis.

Comment LRP22 *Alternatives 1, 3 and 4 would fail to maintain black-footed ferret numbers in the Conata Basin with a reasonable probability of persistence. All three alternatives would result in less than the minimum ferret population recommended by the Conservation Breeding Specialist Group (CBSG) of the World Conservation Union's (IUCN's) Species Survival Commission (DEIS 3-38). Modeling by CBSG 2004 and Miller 2005 (discussed on page 3-38), indicates a minimum of 120 breeding adults are needed to maintain adequate persistence probabilities. Moreover, the effective population size for genetic purposes is perhaps 3 times that number (USFWS 1988). None of the alternatives 1, 3 or 4 will result in either an actual or effective population size near 120 breeding adults. They should, therefore, by the NNF's own criteria, be eliminated from further consideration.*

The FEIS is not a decision document. Alternatives were designed to frame an analysis of a broad range of alternative actions which represent the relevant input from the scoping process and the diversity of public opinion surrounding prairie dog habitat management. This analysis provides the necessary information with regard to effects that gives the Deciding Officer background for making an informed decision consistent with applicable laws and regulations and the FEIS disclosure of those effects.

FEIS Chapter 3 provides an analysis of how each alternative would affect sustaining black-footed ferret viability, which was identified as a purpose of this effort (FEIS, Chapter 1, Purpose of and Need for Action). The FEIS incorporates the current science in conducting that analysis and indicates impacts to these species as they are anticipated by alternative. It is this very disclosure that assists the Deciding Officer in making an informed decision.

Comment LRP23 *This alternative represents a significant improvement on the 2002 FLRMP; however, the exceptions essentially swallow the rule. The Forest Service similarity index is based on the NRCS National Range and Pasture Handbook, but by a slight of hand creates a loophole that will not allow the similarity index to improve the range condition on the thousands of acres where ferrets have been introduced. "[A]ny actions taken to reduce prairie dog acreage below the maximum objective will be commensurate with current prairie dog densities." DEIS at 2-3. Acreage is only one component of the problem in the Conata Basin. The other component, which is the most critical for those acres designated as ferret and/or prairie dog habitat, is the density of the prairie dog population. This Alternative will allow the Conata Basin to continue to look like a moonscape with no prairie dog population management on up to 19,000 acres. Current prairie dog densities in the Conata Basin is the culprit that has destroyed the vegetative resource of the area. This is tantamount to the continued non-management in the most critical areas.*

The Forest Service recognizes the relationship of prairie dog acreages and densities. This is a point we made in the quote above "Any actions taken to reduce prairie dog acreage below the maximum objective will be commensurate with current prairie dog densities." We believe prairie dog densities are but one of the factors driving vegetation resource conditions in the area.

Comment LRP24 *The Forest Service failed to coordinate with the local government, which they are mandated to do. The Forest Service shows little concern about the damages and expenses their neighbors incur from prairie dogs that come off of Forest Service land. In chapter 3, the Forest Service states, "there appears to be no published or unpublished references documenting and quantifying comparative wind (or water) erosion rates on and off prairie dog colonies." THIS IS A COMPLETELY FALSE STATEMENT. There is plenty of information on wind and water erosion including one done on the Buffalo Gap National Grasslands, which shows astonishing rates of erosion. The Forest Service had 22 pages of references. It is hard to believe that no one could find anything on wind and soil erosion unless the Forest Service did not like what they found and purposely left this out. Once again attempting to mislead the public. Very little emphasis is placed on the economic effect prairie dogs have on the local economy. Prairie dogs are a constant drain on any economy. Even cities spend a lot of money controlling their rodents, thus protecting the health and well being of their citizens.*

We disagree that the Forest Service failed to coordinate with the local government. Their input was used to develop Alternative 3 and local government officials from Fall River County in South Dakota who facilitated development of the alternative were asked to review it prior to publishing the DEIS (see administrative record Public Involvement and Content Analysis section). Please see the comment responses RE39 and RE44 above with regards to published soil erosion. Economic effects displayed in the FEIS Chapter 3, Social and Economic Factors, indicate that impacts to individual livestock permittees can be large, but impacts to most counties is small based on the projected changes in permitted livestock grazing and the diversity found in the makeup of county economic industries.

Comment LRP25 *Page 3-70, Paragraph 3: This paragraph includes a discussion on the Bessey and Pine Ridge Ranger Districts. Previous descriptions of the areas affected by this DEIS did not include these Districts and it is unclear if they are intended for analysis in this DEIS.*

These references have been deleted.

Comment LRP26 *Page 1-2, Table 1-2: This Table lists current active prairie dog colony acreages and Table 3-23 on Page 3-62 also lists current active acres. There is a small discrepancy between the total acreage for the Nebraska National Forest in the tables. We recommend these numbers be reviewed for consistency.*

These acreage discrepancies have been corrected.

Comment LRP27 *Another concern is the short time public comment period. The Tribe requests that the public comment period be lengthened so that the Tribe has adequate time to consult with Forest Service officials, meet with our own staff members, and to prepare official comments that can be included in the public record.*

The Forest Service consulted with the Lower Brule Tribe to obtain their concerns and comments in July 2007. Communications continue between the Tribe and U.S. Forest Service officials.

Comment LRP28 *The FEIS should consider whether the proposed monitoring (e.g., vegetation, prairie dog, and ferret) can actually be implemented. Appendix H of the DEIS gives an overview of an implementation plan, but knowing when thresholds are exceeded is extremely complex and not a trivial undertaking. The following issues need to be considered regarding monitoring tools to provide information for adaptive management.*

The similarity index (SI) as defined in the DEIS (footnote on page 2-3) does not seem to be the most appropriate measure to assess value of habitat for prairie dogs (Administrative Record from USFS Region 2 based on the Science Consistency Review Meeting held on June 7-8, 2007, at Fort Collins, Colorado).

Similarity index (SI) is another method to evaluate an ecological site. This method compares the present plant community to the historic climax plant community for that site or to a desired plant community that is one of the sites potential vegetation states. The SI to the historic climax plant community is the percentage, by weight, of historic climax vegetation present on the site. Likewise, the SI to a desired plant community is the percentage, by weight, of the desired plant community present on the site. The FEIS Chapter 3, Rangeland Vegetation section, the Range Specialist Report, and Record of Decision include a desired plant community objective for prairie dog colonies.

The desired range of seral stages set in the 2001 Forest Plan (Chapter 2) is based upon the historical range of variability (USDA Forest Service 2001c). The desired range of seral stages provides for a range of habitat requirements for all species. This FEIS and amendment to the 2001 Forest Plan does not propose to change the desired range of seral stages.

Comment LRP29 *Appendix H, Implementation Plan: ... We recommend additional guidance in the FEIS to identify:*

- * Which colonies will be subject to toxicant use.*
- * How ferrets may be moved if appropriate.*
- * Procedures and sufficient time for third parties to provide compensation so prairie dog conservation can occur.*
- * How third party solutions might interface to conserve ferret occupied prairie dog habitat.*

The Adaptive Response Protocol in FEIS Appendix H stipulates that colonies will not be subject to rodenticide use unless they meet certain threshold criteria. The dichotomy provided in the adaptive response protocol ensures that those criteria are met on specific colonies. Moving of black-footed ferrets in proposed treatment areas will be part of the coordination effort with the U.S. Fish and Wildlife Service as provided for in FEIS Appendix H at Section A4. FEIS Appendix H also provides guidance to work with third-party solutions as shown in Table H1, Administrative Tools. This provides guidance to the Responsible Official to consider all of the above before applying management tools to address a threshold concern.

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

Appendix J Consistency Check with the Forest Plan.

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

Appendix L Forest Plan Amendment Factors Determining Significance or Non Significance

Appendix M Forest Plan Amendment

