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Comments: Letter text attached here. Attachments submitted by US Mail and hand delivery.

Via electronic submission via

<https://cara.ecosystemmanagement.org/Public/CommentInput?Project=55479> and hand delivery.

Dear Supervisor Bacon:

The following are the comments of Western Watersheds Project on the Thunder Basin National Grassland 2020 Plan Amendment ("Amendment") Draft Environmental Impact Statement ("DEIS"). The Forest Service's proposal to eliminate the Black-footed Ferret Recovery Management Area, and expand poisoning and shooting of black-tailed prairie dogs upon which ferrets depend, cannot be allowed to stand. The proposed alternatives are an abrogation of the agency's duty to conserve designated Sensitive Species (the black-tailed prairie dog as well as associated species like the burrowing owl and mountain plover), and violates the agency's obligation to recover endangered species (in this case, the black-footed ferret). Furthermore, it is an outrage that the agency is placing the commercial interests of a handful of privileged ranchers who lease public lands to graze their livestock above the broader public interest in multiple use and conservation of native wildlife.

We would like to point out that livestock grazing on National Grassland lands is a privilege, not a right, and if grazing lessees cannot coexist with all native wildlife (including black-tailed prairie dogs, which are a keystone species in grassland ecosystems), without killing them, the permittees and their livestock should be removed from National Grassland lands, and their permits should be canceled permanently.

What is clear from our review of the scoping notice and the DEIS is that the Forest Service is prioritizing the wishes of a few livestock permittees over the Forest Service's duty to recover ESA listed species and protect and recover Sensitive Species.

BLACK-TAILED PRAIRIE DOGS ARE A KEYSTONE SPECIES ON THE THUNDER BASIN N.G.

Prairie dogs are one of the key ecosystems attributes that permit the survival and viability of a variety of sensitive species, including the black-footed ferret, mountain plover, swift fox, ferruginous hawk, burrowing owl, and golden eagle. Maximizing prairie dog populations and distribution provides the greatest benefit to these species, while reducing or eliminating prairie dogs is a threat to the viability of populations of these species.

For scale, prairie dogs have been extirpated from 99% of their former habitat primarily to satisfy the wishes of ranchers. The Forest Service has stated that in Wyoming, prairie dogs currently occupy 0.01% of their former habitat.

Viable populations of associated species cannot be expected at low prairie dog densities. Based on our observations of other prairie dog complexes in Montana, prairie dog complexes need to be broadly distributed and with relatively high occupancy to assure minimal viable populations of associated species (Knowles and Knowles 1994). The Forest Service must, in its revised NEPA document, properly analyze impacts to the viability of all vertebrate species linked to the prairie dog. Our members value the ecological importance of the prairie dog, and recognize that it must be protected and recovered in order to foster biological diversity and ecosystem health in the grassland biome.

Prairie dogs are fundamental regulators of ecological processes within the area occupied by active colonies. According to Miller et al. (1990: 765), "Prairie dogs have been implicated as ecosystem regulators that influence primary productivity, species composition, species diversity, soil structure, and soil chemistry by their burrowing and grazing." Hansen and Gold (1977: 213) concluded, "This study, compared with previous research, provides evidence that blacktail prairie dogs [sic] are an important ecosystem regulator as they disturb the soil, increase plant diversity (Gold 1976), increase animal diversity, and cause a decrease in primary production of the areas they use." Agnew et al. (1986) labeled prairie dogs as ecosystem regulators, maintaining shortgrass habitats. As regulators of ecosystem processes, prairie dogs are keystone species in shrubsteppe and grassland habitats.

On the High Plains, Ingham and Detling (1984) found that root-eating nematodes were more abundant and root biomass lower on a heavy-grazing prairie dog site, while available soil nitrogen was higher on the prairie dog colony. Holland and Detling (1990) subsequently found that nitrogen mineralization was highest in active prairie dog colonies and lowest in uncolonized grassland. Root biomass is lower within prairie dog colonies than on uncolonized sites (Holland and Detling 1990). In Wyoming's Shirley Basin, Schloemer (1991) found that prairie dog burrowing improves growing conditions for sagebrush by increasing snow entrapment, water infiltration, and deep percolation. Kotliar et al. (1999) concurred that the prairie dog clearly functions as a keystone species in the ecosystems it inhabits, creating habitat through its burrow networks, altering vegetation patterns, and providing an important prey base.

In order to comply with the 2012 Planning Rule, the Forest Service must include ecosystem plan components that maintain or restore the ecological integrity and diversity of ecosystems. 36 CFR [sect] 219.9. Because prairie dog colonies are integral to the health of grassland communities on the TBNG, the Forest Service must provide for prairie-dog restoration and maintenance throughout the TBNG. None of the present alternatives achieve this benchmark throughout the TBNG.

THE PRAIRIE DOG ECOSYSTEM IS CRUCIAL TO MANY WILDLIFE SPECIES

According to Miller et al. (1990: 764), "Ecologically, the prairie dog ecosystem is an oasis of species diversity on the arid plains." Sharps and Uresk (1990) found that 134 vertebrate wildlife species are associated with prairie dog colonies in western South Dakota. In a comparative study which incorporated Wyoming sites, Clark et al. (1982) found that whitetailed colonies showed a greater number of associated vertebrate species (83 species) than either black-tailed or Gunnison prairie dogs; larger towns had a greater species diversity than smaller towns.

Agnew et al. (1986) found that avian density and species richness were significantly greater on High Plains prairie dog colonies. On the High Plains, Hansen and Gold (1977) found that desert cottontails were abundant on prairie dog towns but scarce elsewhere. This has important secondary implications for eagles and hawks, for which rabbits are also an important food source. O'Meila et al. (1982) found that rodent biomass (excluding prairie dogs) was almost twice as great on prairie dog towns than off; this higher rodent abundance was echoed in the results of Agnew et al. (1986). Goodrich and Buskirk (1998) demonstrated that badgers have a heavy dependence on white-tailed prairie dogs in Wyoming. Kreuger (1986) found that pronghorns foraged more efficiently on prairie dog towns, and that forage quality was higher in nutrients on prairie dog sites. The importance of prairie dogs as prey for raptors has been noted in many studies (e.g., Tyus and Lockhart 1979, Campbell and Clark 1981, MacLaren et al. 1988, Jones 1989, Cully 1991, Kotliar et al. 1999).

Many rare and declining species, notably black-footed ferret, mountain plover, burrowing owl, ferruginous hawk, and swift fox are dependent on prairie dogs for their own persistence (Kotliar et al. 1999). Based on study of the last remaining wild ferret population that was extirpated near Meteetsee, Forrest et al. (1985) reported that black-footed ferrets are confined almost exclusively to prairie dog colonies. In Wyoming, other species associated with white-tailed prairie dogs that are of particular note due to special status or management concern include the prairie falcon, merlin, sage grouse, burrowing owl, sage thrasher, Brewer's sparrow, sage sparrow, swift fox, and pronghorn (Clark et al. 1982). The Forest Service has an obligation to maintain the ecological function of the

Thunder Basin National Grassland by protecting and restoring prairie dogs and associated species back to their natural populations and extent.

IMPORTANCE OF PRAIRIE DOGS TO PLOVER VIABILITY

Mountain plovers are often found closely associated with prairie dog colonies of all species. Kotliar et al. (1999) listed the mountain plover as a species that is dependent on prairie dog colonies for its persistence, with abundances higher on prairie dog colonies, habitat selection for prairie dog colonies, reproductive fitness higher on colonies, and population declines occurring when prairie dogs decline. An analysis of pre-settlement records of mountain plover occurrence in Montana indicates that this species was closely associated with prairie dog colonies even before the arrival of EuroAmerican settlers (Knowles et al. 1999). Knowles (1999) went so far as to state that prairie dog colonies are "necessary to provide suitable habitat for mountain plovers" on Montana's Great Plains, and termed prairie dogs "necessary for the long-term persistence of mountain plovers" in that region. This study also found that even small areas of active colonies are important plover habitat. In Wyoming, the distribution of plovers has been linked with the widespread occurrence of white-tailed prairie dogs (Oakleaf et al. 1996).

The reduction in prairie dog colonies has been directly implicated as an important cause of mountain plover declines range-wide. Knowles et al. (1999) found that the disappearance of prairie dogs due to plague and/or 'recreational' shooting also led to abandonment of nesting habitat by plovers, and plover numbers increased on sites where prairie dog populations were expanding. Knowles et al. (1999) also stated, "prairie dog eradication, carefully regulated summer grazing of cattle, and agricultural conversion of rangelands all appear to be detrimental to mountain plover conservation." According to the U.S. Fish and Wildlife Service (1999: 7594), "Further loss of prairie dog towns within the current breeding range of the mountain plover would be detrimental to plover conservation. Conversely, the conservation of the mountain plover can be enhanced by implementing strategies to increase the distribution and abundance of prairie dogs on breeding habitat." Thus, the conservation of prairie dog colonies is a prerequisite to maintaining viable populations of mountain plover. Given the paucity of mountain plover sightings in the greater Powder River Basin in recent years, it is imperative to maximize the acreage of active prairie dog colonies to maintain and enhance habitat for the Forest Service Sensitive Species. The Forest Service should also undertake a detailed science-based analysis of mountain plover population numbers and trends on the Thunder Basin, and thoroughly analyze the impact of the proposed plan amendment's various alternatives on mountain plover population viability. There is some indication that mountain plover population viability is currently at risk, and therefore any action that impacts mountain plovers has the potential to be disastrous at the population scale.

IMPORTANCE OF PRAIRIE DOGS TO RAPTOR POPULATIONS

Prairie dogs can be an important mainstay of raptor diets. In a study near Medicine Bow, Wyoming, white-tailed prairie dogs made up 38% of the biomass in the diets of prairie falcons, 18% for golden eagles and red-tailed hawks, and 22% of ferruginous hawk diet biomass (MacLaren et al. 1988). Prairie dog colonies are also important to the survival of raptor populations on their wintering areas. Jones (1989: 256) studied winter raptor aggregations on the High Plains of Colorado: "Aggregations of ferruginous hawks, red-tailed hawks, and bald eagles were frequently observed in the vicinity of prairie dog colonies." In this study, golden eagles, ferruginous hawks, and red-tailed hawks were observed taking prairie dogs, while bald eagles and northern harriers competed for the captured prairie dogs. Declines in prairie dog colonies as a result of a plague epidemic resulted in a more than 60% decline in wintering bald eagles, ferruginous hawks, and red-tailed hawks (Ibid.). Numbers of wintering ferruginous hawks also declined dramatically following a crash in prairie dog populations in New Mexico (Cully 1991). Thus, full recovery of prairie dog populations and maximum expansion of active colonies would be the optimal outcome for maintaining and recovering raptor populations.

Conservation efforts for golden eagles should focus on protecting nest sites and important foraging areas, such

as prairie dog colonies. Golden eagles are highly territorial. Even when surface-disturbing activities such as strip mining are located away from golden eagle nest sites, the destruction of important foraging habitats, such as prairie dog colonies, within the territory of nesting pairs can be a major problem for the viability of nesting golden eagles (Tyus and Lockhart 1979). In New Mexico, plague-related declines in prairie dog abundance from 30 per hectare to less than 1 per hectare triggered a decline in the nesting population of golden eagles (Cully 1991). Thus, golden eagle protection is linked with the maintenance and recovery of prairie dog colonies. The Forest Service should undertake a detailed sciencebased analysis of golden eagle population numbers and trends on the Thunder Basin, and thoroughly analyze the impact of the proposed plan amendment's various alternatives on golden eagle population viability.

The ferruginous hawk has been identified as a species dependent on prairie dogs, and ferruginous hawk populations have shown declines in response to prairie dog population declines (Kotliar et al. 1999, and see Jones 1989). Olendorff (1993) pointed out that prairie dogs and ground squirrels were the most important prey in some areas, while hares and rabbits predominated the ferruginous hawk diet in others. The Forest Service should undertake a detailed analysis of ferruginous hawk population numbers and trends on the Thunder Basin, and thoroughly analyze the impact of the proposed plan amendment's various alternatives on ferruginous hawk population viability.

Burrowing owls are in a select group of wildlife most closely tied to prairie dog colonies, and prairie dog burrows are preferred nest sites for burrowing owls. Thompson (1984) reported that owls preferred abandoned prairie dog burrows in the early stages of succession. Green and Anthony (1989) found that nest burrows lined with dung were less susceptible to predation, perhaps explaining this unusual behavioral attribute. On the Great Plains, Sidle et al. (n.d.) found that burrowing owls actively selected for active prairie dog towns, and showed much lower usage of towns that had been decimated by plague, shooting, or poisoning. Desmond and Savidge (1999) found that burrowing owl nest success was positively correlated with density of active prairie dog burrows, and recommended preserving prairie dog colonies to maintain the viability of burrowing owl populations. The ties of burrowing owls to prairie dogs vary by region. Thompson (1984) found that burrowing owls near Casper were associated with white-tailed prairie dogs, while near Torrington they were associated with black-tailed prairie dogs. But in eastern Wyoming, fewer than half of the nesting burrowing owls were associated with active prairie dog towns (Korfanta et al. 2001). And in the Columbia Basin, where prairie dogs are absent, burrowing owls nested in badger burrows, but as a result were subjected to badger predation (Green and Anthony 1989). Thus, the ongoing loss of prairie dog colonies has undoubtedly been a prime factor in the decline of the burrowing owl.

The Forest Service is obligated to protect prairie dogs, as a key food source for raptors, and to prevent prairie dog shooting, which poses a lead poisoning threat to birds of prey and other scavenger species. The Forest Service should undertake a detailed analysis of burrowing owl population numbers and trends on the Thunder Basin, and thoroughly analyze the impact of the proposed plan amendment's various alternatives on burrowing owl population viability.

SWIFT FOX

The swift fox was determined to be "warranted but precluded" for listing under the Endangered Species Act by the U.S. Fish and Wildlife Service in 1995 (60 Fed. Reg. 31663). The swift fox is listed as a Species of Special Concern by the Wyoming Game and Fish Department, and is protected from intentional take by state regulations (Oakleaf et al. 1996). This species has been listed as dependent on the prairie dog for its persistence, and that its populations decline when prairie dogs decline (Kotliar et al. 1999). Dens are complex warrens with multiple tunnels and entrances, and prairie dog burrows may be enlarged into swift fox dens (Kilgore 1969). The diet of swift fox in various parts of its range is dominated by prairie dogs, grasshoppers, and beetles (Uresk and Sharps 1986), small rodents, including prairie dogs (Kilgore 1969), mainly lagomorphs (particularly jackrabbits) with some prairie dogs (Zumbaugh et al. 1985), and may include carrion and plant matter (Hines and Case 1991). The Forest Service needs to undertake a detailed science-based analysis of swift

fox population numbers and trends on the Thunder Basin, and thoroughly analyze the impact of the proposed plan amendment's various alternatives on swift fox population viability.

BLACK-FOOTED FERRETS

The black-footed ferret was once found throughout the High Plains. Today, Wyoming's only reintroduced population resides in the Shirley Basin. We are in agreement with the need to reintroduce black-footed ferrets in the Thunder Basin, and indeed Prairie Wildlife Research is holding a substantial amount of funding acquired by conservationists in an appeal settlement of the Big Porcupine Coalbed Methane Project, monies that must be used for ferret reintroduction on the Thunder Basin National Grassland. According to Oakleaf et al. (1992: i), "The precarious status of black-footed ferrets is a direct result of habitat fragmentation through prairie dog (*Cynomys* spp.) eradication in the North American midwestern prairies.", the very action that the proposed amendment continues. Thus, ferret viability is closely tied to the population status of its prey species, prairie dogs. According to Jachowski et al. (2011: 1564), "Given the continued decline and fragmentation of prairie dog populations in most areas throughout North America (Miller and Cully, 2001), managers concerned with recovering black-footed ferret populations should focus on increasing the size and density of prairie dog populations."

It is important to maximize the "ferret family rating" for target reintroduction sites; poisoning and shooting of prairie dogs runs counter to this goal. Prairie dog colonies within 7 km of each other should be viewed as a "complex" for the purpose of black-footed ferret reintroduction (USFWS 1989). Forrest et al. (1985) recommended that only towns with burrow densities greater than 10/ha be considered "colonies" for the purpose of reintroduction, and that intercolony distances should not exceed 20 km to facilitate ferret interchange. Miller and Reading (2012) revised that intercolony distance downward to 7 km to qualify as a complex, and this is the current standard for ferret reintroduction. At minimum, prairie dog poisoning and shooting should not be permitted as a "tool in the toolbox" in ferret recovery areas. There is no conceivable situation under which prairie dog poisoning could benefit either short- or long-term ferret recovery. In addition, the acreage of ferret recovery area should not be reduced, but rather be expanded, from the revised Thunder Basin LRMP levels.

The black-footed ferret should be reintroduced as (at minimum) an Experimental Essential population (Lockhart et al. 2006, Miller and Reading 2012). Miller and Reading (2012: 237) recommend the following:

We, like Lockhart et al. (2006), recommend that policymakers revisit use of Section 10j for black-footed ferrets. Compromise with agricultural interests may have helped locate some release sites, but in most cases, it has not helped establish black-footed ferret populations because conservationists have done most of the compromising (Lockhart et al. 2006). As a result, black-footed ferrets released into the wild enjoy little habitat protection.

It is ludicrous that the black-footed ferret is the rarest and most Endangered land mammal in the western hemisphere, yet there is no population that is considered essential for its survival. Experimental nonessential status is not good enough: Other ferret populations have been introduced with Experimental Nonessential status predicated on a management plan that was supposed to provide a level of protection for the prairie dog prey base (e.g., Conata Basin), only to have those protections removed by subsequent actions. Thus, the public should not trust agencies with Experimental Nonessential status, because the agreements underpinning such status are so easily undermined or withdrawn. This should be incorporated into the Plan Amendment.

The 1988 Recovery Plan for black-footed ferrets requires 1,500 breeding adult Ferrets distributed in 10 or more populations over the historical range of the species, with no less than 30 breeding adults in each population (see Jachowski and Lockhart 2009). According to Jachowski et al. (2011: 1564), "prairie dog populations that occupy an area >4000 ha are exceedingly rare (Proctor et al., 2006), with only two such sites identified by the BFFRIT that have not already hosted ferret reintroduction attempts." One of these two sites is the TBNG. "Therefore, in order to reach the recovery goal of establishing 10 populations of >30 adult ferrets, managers need to increase the number of large prairie dog populations beyond what is currently available." Id. This Plan Amendment does

the just the opposite.

All the action alternatives further erode the already inadequate habitat area and protections for prairie dogs on the Thunder Basin National Grassland. The Forest Service's spineless abandonment of its duties under the ESA and NFMA, by capitulating to the livestock industry further reduces the chances of recovery for this listed species and increases the need to ESA listing for the prairie dog and dependent species.

It is important to note that rodenticide treatments "have a negative effect on black-footed ferrets by reducing prairie dog numbers" (Bevers et al. 1997: 496).

According to Proctor et al. (2006),

Restoring prairie dogs to an ecologically functional role will require more than just restoring random colonies. Full functionality will require restoring numerous "prairie dog complexes," or groups of prairie dog colonies close enough to allow frequent movement of prairie dogs and prairie dogdependent species between them (Forrest et al. 1985; Hoogland, this volume). Large complexes are important for many dependent species, such as black-footed ferrets. To restore and conserve the grassland ecosystem and the prairie dogs "keystone" role (Kotliar et al., this volume; Matchett et al., this volume), we must ensure not only the viability of prairie dogs themselves, but also the viability of prairie dog colonies/complexes as habitat for associated species.

Active prairie dog colonies must be within less than 7 km of each other to be considered to be part of the same complex (Miller and Reading 2012); it is therefore inappropriate to consider acreage of prairie dogs across the entire TBNG into estimates of available ferret reintroduction habitat, unless those colony acres are all within 7 km of each other.

The action alternatives fail to implement this best available science.

HABITAT SELECTION AND COLONY ATTRIBUTES

The spatial distribution of prairie dog colonies is an important conservation priority. Clark et al. (1982: 579) made the following observation for white-tailed prairie dogs in Wyoming: "Prairie dog colonies were found clumped in suitable habitat, and nearby colonies served as sources for colonizing animals." The dispersal ability of the white-tailed prairie dog is not great; Orabona-Cerovski (1991) found that less than 1% of juvenile males and 3% of juvenile females dispersed more than 200m from their natal burrows. Thus, maintaining a few isolated colonies is by far inferior to maintaining colony complexes with a high degree of connectivity to facilitate dispersal.

Clark et al. (1982) found that burrow densities for white-tailed prairie dogs averaged 25.8/ha, versus 32/ha for the black-tailed and Gunnison. But Campbell and Clark (1981) found that individual white-tailed colonies were as large and dense as black-tailed colonies, but whitetailed colonies were even more numerous and dense on the landscape. This was probably related to site productivity rather than any intrinsic propensity to create dense colonies by either species, as the white-tailed site in this study was located on moist, high-quality soils while the black-tailed site was on drier uplands (Ibid.).

THE BLACK-TAILED PRAIRIE DOG MUST BE DESIGNATED AS A SPECIES OF CONSERVATION CONCERN

Due to the importance of the black-tailed prairie dog as a keystone species, and its vulnerability to various human-caused forms of habitat loss and mortality, the black-tailed prairie dog should be designated as a Species of Conservation Concern through this Plan Amendment, an action which is well within the scope of the EIS per the 2012 Forest Planning regulations.

THE PURPOSE AND NEED FOR THIS EIS ARE COMPLETELY INAPPROPRIATE

The Forest Service has created a skewed and narrow Purpose and Need for this plan amendment that precludes the agency from developing or selecting environmentally responsible plan alternatives, including alternative that provide for the recovery of the blacktailed prairie dog, a Forest Service Sensitive Species, and the black-footed ferret, a federally listed endangered species. The purpose and need, essentially adopts wholesale, the tantrums of the handful of livestock permittees, without putting forward other, rational approaches.

Further, the Forest Service has failed to implement the 2009 amendment and 2015 plan, particularly many of the non-lethal control methods, so it is arbitrary and baseless for the Forest Service to make the determination that there is a need for change when they have refused to fully implement the current plan direction.

The DEIS fails to provide any legal support, whatsoever, for the proposition that it is the Forest Service's duty to manage public lands for the benefit and to satisfy the whims of adjacent land owners.

"DENSITY CONTROL" OF PRAIRIE DOGS HAS NO PLACE IN RESPONSIBLE WILDLIFE MANAGEMENT

There is no scientific basis for the concept of "density control" in prairie dog populations (see Public Comment Letter, unnumbered third page of DEIS, also DEIS at 39), and this should not be attempted. Black-tailed prairie dogs naturally and necessarily live in densely-populated colonies (often called "prairie dog towns"). They are highly social and depend on cooperative family bonds to escape predation and live out their life cycles. Thinning the- density of prairie dogs has no natural counterpart, and no basis in the science. It is likely to threaten the viability of prairie dog populations. It is also completely irresponsible to initiate "boundary control" for a native wildlife species. See DEIS at 14. The Forest Service is not authorized to perform an ecological form of ethnic cleansing at its boundaries with private land, to prevent native wildlife species from exiting public land (much less killing them). There is no legal duty under NFMA or elsewhere to support this proposal. There is no "need to minimize prairie dog encroachment onto non-Federal lands," (DEIS at 14) as the EIS misleadingly states, and certainly no legal mandate; instead, black-tailed prairie dogs are a wildlife species native to private lands adjacent to the Thunder Basin National Grassland.

If the state of Wyoming and private landowner wish to eradicate prairie dogs from their lands, that is up to them, pursuant to the law, to do so. It is not the Forest Service's duty to do it for them.

The Forest Service talks about "stabilization" of prairie dog populations (DEIS at 15); the stable situation is when prairie dog populations can fluctuate naturally, in the absence of human interference and non-native diseases like Yersinia pestis.

The possibility that some of these ecologically dysfunctional land and wildlife approaches may have been agreed to by a collaborative group (DEIS at 15) is irrelevant. The "Thunder Basin Working Group" has no legitimacy in WWP's estimation, beyond its ability to submit comments to the Forest Service like any other commenter, and its agreements should have no greater influence on agency decision-making than the comment of any other member of the public. This collaborative group appears to be made up of 3 conservation groups, and at least 32 of the 36 other members of the group represent either the livestock industry or their allies in industry or politics. We are concerned about possible violations of FACA with the Forest Service's reliance on this group. See DEIS at 161. This ratio is not representative of the fact that the TBNG belongs to all Americans, equally, and that an overwhelming majority of Americans support wildlife conservation over commercial uses of our public lands.

We recommend managing the density of the Thunder Basin Working group to zero; however, unlike TBNG livestock permittees, we recommend nonlethal means for this. Its recommendation can be considered as an alternative by the agency if found "reasonable" under the law, alongside any other reasonable alternative brought forward by the public. However, it is important to note that this 2018 series of recommendations is a

renegotiation, and if adopted would represent a worsening of agency policy from an ecological perspective, of the "collaborative" compromise reached in 2007, over the objections of conservation groups. The Forest Service should instead return to the direction in the 2002 Grasslands Plan, unmodified and unweakened by the collaborative undermining of Forest Service kowtowing that came later.

IT IS INAPPROPRIATE FOR THE FOREST SERVICE TO MANAGE TO PREVENT PRAIRIE DOG EXPANSION

The black-tailed prairie dog is a native wildlife species. Traditionally, land-management agencies like the Forest Service manage for habitat to support native wildlife species, but Forest Service boundaries were never intended to be barriers to native wildlife. According to the DEIS, "Forest Service personnel have had limited success in minimizing impacts of prairie dog encroachment onto private and State lands[hellip]." DEIS at i. Furthermore, one of the purposes of the plan amendment is to "minimize prairie dog encroachment onto non- Federal lands." Id. Prairie dogs do no "encroach" onto private lands surrounding the TBNG; they are native species that live there under natural conditions. If anyone is "encroaching," it is EuroAmerican immigrants and their non-native livestock, both of which have deleterious effects on native grassland ecosystems.

We also object to the stated purpose of the amendment, to "reduce resource conflicts related to prairie dog occupancy and livestock grazing." DEIS at i. Black-tailed prairie dog effects on their native ecosystems on the TBNG are part of baseline natural conditions on these public lands, to which the livestock industry is obligated to adapt if they want to lease public lands for private livestock grazing. We do not agree with the implicit assumption that grazing by private livestock is the highest-priority use, or even a priority use at all, on the TBNG.

These lands are far more valuable to the public for the restoration of native grasslands, and livestock grazing substantially interferes with the restoration of native ecosystems, on the TBNG and elsewhere. Under the Multiple Use-Sustained Yield Act, there is no legal obligation for the Forest Service to provide every use on every acre, or even on every jurisdictional unit. Any "resource conflicts" between prairie dogs and livestock should be resolved by removing livestock, and permitting prairie dogs to expand in number and acreage to fulfill their natural role in the ecosystem.

In fact, the entire ruse of "resource conflicts" amount to nothing more than permittee/state bellyaching and has no factual basis. A review of recent FOIA documents provided by the Forest Service show only a few allotments with any even minor percentage occupied by prairie dog. Similar documents regarding AUM usage also show that the "resource conflicts" that the Forest Service states is the primary purpose of the gutting of prairie dog protections, are nothing but a myth, swallowed whole by the agency. The chart of AUM usage shows no reductions based on prairie dog occupancy. In fact, the AUM usage numbers of permitted are actually higher than actual use on most allotments without such fabricated "resource conflicts". Our review of FOIA documents from other units show actual use, based on permittee convenience is 70-80% of permitted.

LETHAL MEANS SHOULD NOT BE EMPLOYED IN PRAIRIE DOG "MANAGEMENT"

One of the stated purposes of the Amendment is to "increase the availability of lethal prairie dog control tools to improve responsiveness to a variety of management situations, including those that arise due to encroachment of prairie dogs on neighboring lands, natural and human-caused disturbances, and disease." DEIS at i. As a Forest Service Sensitive Species, the agency's management of black-tailed prairie dog habitats needs to be focused on the recovery and expansion to healthy population levels of this species. Widespread killing of Sensitive Species violates NFMA and the Sensitive Species Policy.

THE AMENDMENT IS A DEROGATION OF THE FOREST SERVICE'S OBLIGATION TO PROMOTE BLACK-FOOTED FERRET RECOVERY

The stated purpose of the Amendment is, in part, "support ecological conditions that do not preclude

reintroduction of the black-footed ferret." DEIS at i, emphasis added. We have two concerns with the framing of this "purpose:" (1) It is not enough to comply with ESA mandates for the Forest Service to support conditions that "do not preclude" ferret reintroduction; instead the agency must provide for ecological conditions that support and enhance reintroduction opportunities and recovery of the species. (2) The actions described in the DEIS fail to even meet this unacceptably weak stated purpose, and instead actively undermine and preclude black-footed ferret reintroduction efforts.

A minimum of 10,621 acres of active prairie dog towns at moderate density is considered necessary to support black-footed ferret reintroduction (Jachowski et al. 2011). The minimum requirement of 1,500 acres for reintroduction (see, e.g., DEIS at 115) is arbitrary and capricious and does not reflect scientific reality in regard to the threshold needed to sustain a successful ferret reintroduction, as discussed elsewhere in these comments.

We discourage the Forest Service from relying upon any determination by the USWFS Cheyenne Office that any alternative in this EIS is adequate to prevent adverse impacts to black-footed ferret recovery efforts. The Cheyenne Office of USFWS has earned for itself a reputation for incompetence and corruption among a significant part of the conservation community, and any decision the Forest Service makes will need to be sufficiently compliant with federal law and regulation to survive judicial scrutiny. ESA compliance is the duty of all federal agencies.

The ESA and FSM 2600 requires

1. Section 2 declares that ". . . all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act."

2. Section 5 of the Act directs the Secretary of Agriculture to "establish and implement a program to conserve fish, wildlife, and plants," including federally listed species.

The proposed amendment fails to comply with Section 2 and 5 of the ESA.

At FSM 2670.5:

Adverse Effect. An action that has an apparent direct or indirect adverse effect on the conservation and recovery of a species listed as threatened or endangered. Such actions include, but are not limited to:

a. Any action that directly alters, modifies, or destroys critical or essential habitats or renders occupied habitat unsuitable for use by a listed species, or that otherwise affects its productivity, survival, or mortality. (emphasis added)

The analysis of the effects of the action on black-footed ferret fails to comply with this direction.

FSM 2670.21 requires:

Manage National Forest System habitats and activities for threatened and endangered species to achieve recovery objectives so that special protection measures provided under the Endangered Species Act are no longer necessary

The proposed amendment ignores the black-footed ferret recovery plan and significantly reduces the potential for recovery of this species.

2670.31 requires:

1. Place top priority on conservation and recovery of endangered, threatened, and proposed species and their habitats through relevant National Forest System, State and Private Forestry, and Research and Development activities and programs.

But the proposed amendment clearly prioritizes the interests of a handful of livestock permittees over the recovery needs of ESA listed species.

4. Avoid all adverse impacts on threatened and endangered species and their habitats, except when it is possible to compensate adverse effects totally through alternatives identified in a biological opinion rendered by the Department of the Interior, Fish and Wildlife Service (FWS) or Department of Commerce, National Oceanic and Atmospheric Administration Fisheries (emphasis added)

The fallacious analysis of the impacts of the amendment on black-footed ferrets essentially relies on the circular logic that 'we have extirpated the species, therefore none of our actions affect the species'. Clearly, by further reducing occupied prairie dog habitats, the amendment significantly impacts the habitats for all species dependent on the habitats created by prairie dogs.

2670.32 requires:

3. Avoid or minimize impacts to species whose viability has been identified as a concern.

Yet instead of implementing this requirement, the proposed amendment significantly increases the determined killing of Sensitive Species.

The EIS and associated documents provide not a shred of legal support for its plan to kill Sensitive Species on Forest Service lands to please the handful of permittees.

FSM 2670 requires:

2672.42 - Standards for Biological Evaluations

In order to meet professional standards, biological evaluations must be conducted or reviewed by journey or higher level biologists or botanists (FSM 2634). Biological evaluations shall include the following:

1. An identification of all listed, proposed, and sensitive species known or expected to be in the project area or that the project potentially affects. Contact the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) as part of the informal consultation process for a list of endangered, threatened, or proposed species that may be present in the project area.

2. An identification and description of all occupied and unoccupied habitat recognized as essential for listed or proposed species recovery, or to meet Forest Service objectives for sensitive species.

3. An analysis of the effects of the proposed action on species or their occupied habitat or on any unoccupied habitat required for recovery.

4. A discussion of cumulative effects resulting from the planned project in relationship to existing conditions and other related projects. (emphasis added)

The current approach of the Forest Service has been that if our actions extirpated an ESA listed species then any action the Forest Service takes has "no effect" on that listed species. This specious logic is absurd as made clear by the requirements provided above.

FSM 2670.44 requires:

5. Ensure that specific management objectives, and legal and biological requirements for the conservation of endangered, threatened, proposed, and sensitive plants and animals are included in regional and forest planning, and ensure that planning for those species common to two or more forests is coordinated among concerned units.
7. Develop Forest Service recovery strategies to implement approved Recovery Plans. Apportion recovery objectives among forests. In cooperation with the FWS and States, establish recovery objectives in the absence of, or interim to, approved Recovery Plans; integrate these objectives with regional and forest plans.

Again, these requirements were entirely ignored in the DEIS.

2672.31 - Forest Plan Objectives for Federally Listed Species

Federally listed species Forest Plan objectives must relate to the overall goal of effecting recovery and achieving eventual delisting. Management to achieve species recovery levels is required by law. Management at recovery levels specified in Recovery Plans equates with the National Forest Management Act requirement to maintain viable populations of native and desired non-native vertebrate species. Forest Plan preferred alternatives must meet or exceed recovery objectives.

The proposed amendment violates this requirement.

FSM 2620 requires:

2620.44 - Forest Supervisor. Each Forest Supervisor has the authority and responsibility to:

3. Coordinate conservation strategies and habitat planning for species limited in distribution to the forest with the States, other Federal agencies, and others.
4. Evaluate the cumulative effects of proposed management on habitat capability for wildlife and fish, including endangered, threatened, and sensitive animal and plant species.

2620.45 - District Ranger. Each District Ranger has the authority and responsibility to:

2. Implement management direction and ensure that standards and objectives for wildlife and fish, including endangered, threatened, and sensitive animal and plant species are met.

Again, these requirements have been ignored in the DEIS.

2621.2 - Determination of Conservation Strategies. To preclude trends toward endangerment that would result in the need for Federal listing, units must develop conservation strategies for those sensitive species whose continued existence may be negatively affected by the forest plan or a proposed project.

The proposed amendment not only does not develop conservation strategies for Sensitive Species impacted by the proposal but eliminates the meager strategies of the 2009 amendment.

The proposed amendment violates Departmental Regulation 9500-4.

The FSM continues:

2. Provide habitat management direction to support recovery of Federally-listed species. Provide habitat management direction to ensure maintenance of viable populations generally well-distributed throughout their current range.

3. Evaluate the cumulative effects of proposed management activities on habitat capability for management indicators.

These requirements have been ignored in the DEIS.

2623 requires:

3. Recovery Tasks. Establish objectives and report accomplishments for endangered or threatened species as the Forest Service share of recovery tasks achieved pursuant to species recovery plans in coordination with the States and the U.S. Fish and Wildlife Service (FSM 2671.1 and 2671.4) or in accordance with Forest Service conservation strategies.

The proposed amendment ignores recovery tasks committed to in recovery plans and eliminates its own prairie dog conservation strategy, in violation of FSM.

THE RANGE OF ALTERNATIVES IS IMPERMISSIBLY NARROW

The Forest Service impermissibly excludes an alternative precluding all forms of lethal action against prairie dogs from consideration under the Amendment. None of the four alternatives meets minimum criteria for conservation of a Forest Service Sensitive Species, which the black-tailed prairie dog is. Under the 2002 Grasslands Land and Resources Management Plan (LRMP) covering the Thunder Basin, prairie dog poisoning was only allowed in the immediate vicinity of homes and cemeteries, and shooting was not permitted in MA 3.63 under any conditions. None of the alternatives provide this level of protection for native wildlife, or this level of likelihood of success for ferret reintroduction.

Alternative 1 would be a continuation of current management, incorporating a 2015 plan amendment that conservationists at the time blasted for weakening protections for prairie dogs. This 2015 amendment was a compromise amendment under which USFS compromised away its statutory and regulatory obligations to conserve the black-tailed prairie dog, as well as other prairie-dog associated Sensitive Species (including burrowing owl, ferruginous hawk, and golden eagle), to appease grazing permittees who sought expanded poisoning of prairie dogs (which would never have been countenanced by the Forest Service had the agency shown any stewardship ethics). Also under current management, the Forest Service denied permits to non-governmental organizations that had been engaged in dusting prairie dog colonies for fleas that carry sylvatic plague, and as a result of the Forest Service's negligent decision to deny the requisite permits, a plague outbreak decimated the black-tailed prairie dog population to the point where they were reduced to ~250 acres of active colonies in MA 3.63, a major blow to black-footed ferret recovery efforts. Clearly, the agency's existing management was inadequate to conserve this Sensitive Species and the complex web of life that is dependent on it.

A wide range of actions such as buffers and easements in the current amendment and 2015 plan were never implemented, yet the Forest Service, with no factual support, determined that the compromise of a compromise was a failure at placating these ranchers with their bloated sense of entitlement.

This spinelessness and eagerness to abandon ESA and NMFA duties to please the livestock industry is found at all levels of the agency.

From: Painter, Cristi L -FS

Sent: 30 Aug 2017 14:53:11 +0000

To: Hays, Misty A -FS; Walker, Michael S -FS

Subject: RE: Ferret management plan and doodle poll

Is this even worth our time anymore at this point? It has been made very clear we aren't getting ferrets and there is a proposal from the RO to get rid of our 3.63 area, so I am just wondering how much effort we put into this at this point in time? I will continue to participate if you ask me to. Cristi Painter Wildlife Biologist

So the decision to gut the minimal protections in the current Forest Plan was already made years ago. This NEPA process is just the pro forma process to ratify a decision already made at the top.

Under the agency's Proposed Action (Alternative 2), the Black-Footed Ferret Reintroduction Area (MA 3.63) would be replaced with a Rangelands management area (MA 3.67) with revised boundaries, with management repurposed from providing the habitat necessary for ferret reintroduction, to livestock production.

This appears to be a rehash of a 2013 State of Wyoming proposal. According to the Forest Service's own analysis, "Based on the current population of black-tailed prairie dogs (BTPDs) and associated species on Thunder Basin National Grassland (TBNG), it is believed that this State's current proposal will not allow for the FS to manage viable populations of burrowing owls and mountain plover or reintroduce black-footed ferrets."¹

This and other analyses conducted by the Forest Service since 2000 demonstrate that the proposed action will result in significant harm to both ESA listed and Sensitive Species.

Prairie dog 'recreational' shooting would be allowed on a seasonal basis, and zinc phosphide rodenticide would be authorized inside the former Ferret Recovery area.

Further gutting protections, a massive loophole of a $\frac{3}{4}$ mile buffer area along private and state would render MA 3.67 biologically meaningless. The EIS is silent on this fact.

Under Alternative 3, the Black-footed Ferret Recovery area would be changed to a Short- Stature Grassland Management Area, and the former Recovery Area would be managed to allow as little as 1,500 acres of active prairie dog colonies. This is far too little to support black-footed ferret reintroduction based on the best available science. 'Recreational' prairie dog shooting restrictions would be eliminated.

The Forest Service adds insult to injury by labeling Alternative 4 as the Orwellian "Prairie Dog Emphasis" alternative, notwithstanding the fact that prairie dog protections and conservation efforts under this alternative are weaker than those currently in effect. Shooting restrictions would continue inside the former Recovery Area, but rodenticide use (but only zinc phosphide) would be permitted throughout. To put the cynical absurdity of this alternative into proper perspective, this is rather like having a "Children's Emphasis" school lunch program in which zinc phosphide is the only poison used in their food.

This alternative expands the massive loophole, discussed above, to 1 mile essentially eliminating MA 3.67 protections.

THE EIS FAILS TO CONSIDER AN ALTERNATIVE PROHIBITING LETHAL TAKE OF PRAIRIE-DOGS

Existing management permits the lethal control of prairie dogs using rodenticide, even in Category Area 1. TBNG

Prairie Dog Assessment, 2015 at 12 (see Attachment). Thus, the No Action alternative would permit prairie dog poisoning throughout the TBNG, even in areas designated for black-footed ferret recovery. The black-tailed prairie dog is a USFS Sensitive Species. The agency has no business permitting the poisoning of Sensitive Species on federal lands. Likewise, shooting of prairie dogs should not be permitted anywhere on the Thunder Basin National Grassland. There is no alternative that prohibits shooting and poisoning of prairie dogs, a Forest Service Sensitive Species, throughout the TBNG. This is an eminently reasonable, fiscally conservative and indeed, a prudent alternative that would both improve public safety and result in ecologically preferable outcomes for prairie dog viability, black-footed ferret reintroduction, and the viability of associated species of concern. USFS's failure to consider such an alternative in detail is a serious violation of NEPA.

THE EIS FAILS TO CONSIDER REINSTATING 2002 GRASSLANDS PLAN DIRECTION

The 2002 Grasslands Plan, which includes programmatic direction for the Thunder Basin National Grassland, which designated 53,830 acres of the TBNG as MA 3.63, Black-footed Ferret Reintroduction Habitat. Final EIS and LRMP Revision Record of Decision ("TBNG LRMP ROD"), Thunder Basin National Grassland, at 2. In this Management Area, "[p]rairie dog populations are maintained or increased through vegetation management and/or relocation of prairie dogs" and prairie dog shooting is prohibited. TBNG LRMP ROD at 22. In addition, use of rodenticide in MA 3.63 is limited. Id. at 39. Under this plan, "The blacktailed prairie dog is also identified as a management indicator species, and populations of this species will be allowed to expand as a result of less use of rodenticides on the public rangelands." Id. at 24, emphasis added. These limitations are as follows: "Current plan direction calls for prohibiting the use of rodenticides except for the following situations: public health and safety risks and damage to private and public facilities, such as cemeteries and residences. It provides direction to consult with the U.S. Fish and Wildlife Service on statewide prairie dog conservation plans for additional guidance on poisoning unwanted prairie dog colonization on adjoining agricultural lands." Id. at 40, emphasis added.

The original Grasslands Plan, prior to subsequent amendments, constitutes an eminently reasonable alternative for both prairie dog and black-footed ferret management. It was in full force and effect for at least five years. The Forest Service must consider in detail an alternative that incorporates this management direction in full. Such an alternative should be selected as the final Plan Amendment.

THE EIS FAILS TO CONSIDER AN ALTERNATIVE AUTHORIZING PRAIRIE DOG TRANSLOCATIONS

At various times in the past, NGOs have conducted translocations of prairie dogs from areas proximate to private property to areas well inside the Black-footed Ferret Management Area, as an alternative to lethal use of rodenticides. This program was working quite well until the Forest Service unreasonably deferred to state and livestock interests, and ceased to issue permits. See DEIS at 29. It is important to note that the Forest Service, and only the Forest Service, has the authority to grant or deny permits for activities such as these on National Grassland lands. The State of Wyoming is entitled to zero deference in this regard. The Forest Service must consider in detail at least one alternative that authorizes nonlethal translocation of prairie dogs to the MA 3.63 area as an alternative to lethal control in all cases.

THE EIS FAILS TO CONSIDER AN ALTERNATIVE REQUIRING DUSTING FOR FLEAS

According to Miller and Reading (2012: 237), "We propose an immediate goal of protecting existing reintroduction sites and potential reintroduction sites against plague." At various times, NGOs have conducted, at their own expense, dusting of prairie dog colonies to eliminate the fleas that carry *Yersinia pestis*. The Forest Service has itself concluded that this is an effective method, and offers collateral benefits for sensitive species dependent on prairie dogs. TBNG 2015 Prairie Dog Assessment at 31. While several alternatives state that dusting for fleas "may" occur (e.g., DEIS at 33), no alternative requires or grants authorization in advance for NGOs to pursue dusting programs when needed. Give the agency's predilection for prairie dog killing (and given historical failures

by the agency to dust with a frequency sufficient to prevent a catastrophic plague outbreak), we do not believe that leaving the decision on whether or when to dust for plague-carrying fleas to the discretion of the agency is either wise or warranted. The Forest Service must consider in detail at least one alternative that requires such dusting efforts, both inside and outside the MA 3.63 area. The Forest Service's denial of dusting permits to NGOs led directly to the catastrophic decline in prairie dogs from plague during 2017-18. See DEIS at 6.

THE EIS FAILS TO CONSIDER AN ALTERNATIVE REDUCING OR ELIMINATING LIVESTOCK GRAZING AND/OR RESTORING WILD BISON THROUGHOUT THE TBNG

Under each alternative, the Forest Service plans to authorize an identical 120,800 AUMs of livestock grazing. DEIS at 100. The Forest Service states that "resource conflicts" between prairie dogs and private livestock is the primary driving need for the proposed action yet the Forest Service arbitrarily restricts the action alternatives to reducing a native Sensitive Species, while leaving the non-native invasive species, livestock untouched. This is arbitrary.

The Forest Service cites livestock grazing as one of the factors "widely recognized as a primary driver of cottonwood decline in most systems" based on a number of cited studies, yet argues that "it is unlikely a reduction in livestock grazing would result in increased cottonwood recruitment due to ongoing land uses that have altered the hydrogeomorphic condition of the riparian systems and resulted in dewatering and salinification" without citing a single scientific study. DEIS at 65.

The Forest Service concedes, "Livestock grazing and large-scale control and eradication efforts for prairie dogs have historically reduced the availability of habitat with suitable vegetation height and burrow density for Burrowing Owls." TBNG 2015 Prairie Dog Assessment. In the context of creating vegetation barriers to contain prairie dog expansion, Forest Service states, "The use of fenced vegetation barriers would accelerate the establishment of a vegetation buffer. Excluding livestock grazing could also accelerate the recovery time of the plant communities previously inhabited by prairie dogs (Hygnstrom and Virchow 1994)." DEIS at 78.

Despite these major ecological problems caused by livestock, the Forest Service doesn't even list reducing or eliminating livestock on TBNG lands as one of its "Tools for Livestock Management." DEIS at 77.

The natural role of bison on the TBNG is cited at several points in the DEIS (DEIS at 66, 73), yet the agency has declined to consider an alternative restoring bison, a wildlife species native to the Thunder Basin, to the TBNG.

The rejection of any alternatives dealing with the source of the problem, private livestock, is arbitrary and unsupportable.

THE DRAFT EIS FAILS TO TAKE A 'HARD LOOK' AT ENVIRONMENTAL CONSEQUENCES

Failure to Take a Hard Look at Livestock - Prairie Dog Competition for Forage

The Forest Service cites concerns by livestock permittees that competition with prairie dogs reduces forage for cattle. DEIS at 76. Hansen and Gold (1977) noted that the diets of prairie dogs and cattle are broadly similar, and that prairie dogs do reduce the amount of available forage. But O'Meila et al. (1982) found that although prairie dogs reduced the available forage for cattle, cattle on prairie dog plots failed to show a statistically significant decrease in weight gain over control animals. These researchers concluded, "The statistically similar steer weight gain performances during the green-herbage period indicates that sufficient herbage was available to meet the

demands of both steers and prairie dogs, even under a regime of heavy utilization" (p. 583). Knowles (1986) found a symbiotic relationship between livestock and prairie dogs: Prairie dogs selected areas disturbed by overgrazing to establish colonies, while livestock preferentially foraged on prairie dog colonies due to higher-quality of forage. Krueger (1986) found higher shoot nitrogen in prairie dog towns, indicating enhanced forage quality for all grazers. The primary impact on grazing permittees at present is drought, not competition for forage with prairie dogs. The Forest Service provides no factual support whatsoever that prairie dogs are having a real impact on forage quantity and quality within grazing allotments even within the context of the drought. In fact, documents we recently obtained through FOIA provide factual support for the exact opposite conclusion.

In addition, competition with livestock is not a criterion for reducing or eliminating prairie dog colonies. These are native species occupying far less than 1% of their original habitat prior to widespread extermination efforts. If there is any real competition for resources between native wildlife species that are designated Sensitive Species and private, non-native livestock, it is the allocation of resources to this discretionary use that needs to be reduced.

The Forest Service states,

In Wyoming, prairie dogs are classified as an agricultural pest (W.S. 11-5- 102(a)(xii)). Prairie dog burrowing and clipping habits and the variable nature of their colony extent can have negative effects on forage availability for domestic livestock; infrastructure such as dams, cemeteries, corrals, and buildings; and the monetary value of pasture, residential, and other lands.

DEIS at 5. So what? It is reasonable to expect those who wish to graze their private livestock on public lands, particularly at the far-below-market rents charged by the federal government, to endure the slight inconvenience of sharing the land with the native wildlife. Ranchers who cannot run their cattle in a way that is fully compatible with native wildlife and healthy ecosystems can (and should) remove their livestock to private lands that do not have multiple-use legal requirements.

The EIS provides a table listing reference values for forage production by soil type (DEIS at 84), but then fails to analyze how many acres of each soil type are currently meeting that reference value, and if not, whether the reduction in forage production is due to livestock herbivory, prairie dog herbivory, other species herbivory, or some proportion. The agency goes to great lengths to determine how many AUMs of cattle forage might be reduced by maximum prairie dog expansion under each alternative (DEIS at Tables 11, 12, 13, and 14), but makes no effort to measure the effect of current livestock herbivory, soil compaction, and other impacts on the productivity of forage vegetation.

Furthermore, the agency makes no attempt to analyze the impact of current levels of livestock grazing on rangeland health and the spread of cheatgrass (*Bromus tectorum*) and Japanese brome (*Bromus japonicus*). While there is abundant science showing that livestock spread and exacerbate cheatgrass infestations, there is little scientific evidence that prairie dogs do.

The DEIS also fails to take a hard look at the scale of the supposed "conflicts". Documents obtained from the TBNG demonstrate that the supposed "conflicts" are either non-existent across most of the Grassland or in areas that do have prairie dogs, are insignificant. We provide these as attachments.

Again, the DEIS fails to provide any factual or legal basis for the proposed amendment.

Failure to take a hard look at impacts to black-tailed prairie dogs

The black-tailed prairie dog is a Forest Service Sensitive Species. All of the Plan Amendment alternatives would increase the amount of poisoning and shooting, potentially significantly, that kill prairie dogs. The Forest Service

argues that the proposed alternative may affect individuals, but will not result in a loss of population viability. DEIS at 127. This conclusion is free from scientific support, and is arbitrary and capricious, particularly in light of the ongoing threat of plague outbreaks, which currently have nearly eliminated prairie dogs from the TBNG. This by itself threatens the viability of the prairie dog population on the TBNG. Adding additional mortality in the form of poisoning and shooting, while failing to categorically authorize dusting for fleas that carry plague and failing to categorically authorize nonlethal relocation as an alternative to killing the prairie dogs is likely to provide a synergy of negative pressure on the prairie dog population likely to extirpate it on the TBNG under each of the Plan Amendment alternatives under consideration.

The DEIS, at 110, absurdly states:

Mammal Black-tailed prairie dog

Sensitive;

Potential SCC

May adversely impact individuals but not likely to result in a loss of viability in the planning area, nor cause a trend toward Federal listing; No substantial adverse impacts or substantially lessened protections as a result of the plan amendment

This statement directly contradicts nearly everything in the DEIS and supporting documents.

Failure to Take a Hard Look at Impacts of Sylvatic Plague

Sylvatic plague is a major threat to the viability all species of prairie dog. Sylvatic plague has been documented in Sweetwater, Albany, Natrona, and Laramie Counties, and plague has been present continuously in the Shirley Basin since 1985 (Cully and Williams 2001). These researchers stated that "all 4 species of prairie dogs are highly susceptible to plague infections" (Ibid., p. 895). For black-tailed prairie dogs, Cully and Williams (2001) hypothesized that a 3 kilometer distance between colonies is enough to interrupt the spread of plague and assure the probable survival of neighboring colonies. There is currently no effective method to control the spread of plague in prairie dog colonies. Because prairie dogs are already stressed by endemic or epidemic levels of sylvatic plague, stronger conservation measures are needed to prevent impacts from activities that can, in fact, be controlled.

It is clear that the proposed plan amendment and associated measures will not increase the resiliency of prairie dog populations to plague events in any way. There are no provisions for dusting prairie dog colonies for fleas, which is the first and most obvious defense against plague. Requiring the dusting of colonies is a measure that needs to be analyzed in all alternatives. Also, the Forest Service must provide scientific evidence that maintaining prairie dog colonies in a more fragmented state will provide a buffer to slow the spread of plague. While this conclusion may be intuitive, real-life examples (e.g., the Rocky Flats area of Colorado) do not appear to support the concept that isolated, fragmented colonies are less vulnerable to plague, or that large, contiguous populations tend to be completely wiped out during a plague event.

The role of immune response to plague and the potential for evolution of resistance to plague should have been analyzed in the DEIS. There is some evidence that prairie dogs sometimes test seropositive for antibodies to sylvatic plague, suggesting that a level of immunity might be developed within exposed populations. This possibility, and its implications for prairie dog management, needs to be thoroughly considered by the Forest Service.

Failure to Take a Hard Look at Impacts of Prairie Dog Shooting

Prairie dog shooters typically use .22 caliber munitions designed to fragment and burst into tiny pieces on impact. According to Pauli and Buskirk (2007) in a study performed on the Thunder Basin, "The amount of lead in a single prairie dog carcass shot with an expanding bullet is potentially sufficient to acutely poison scavengers or predators." Attachment A. Ingestion of 180 mg or more by a nestling raptor can result in death (Hoffman et al. 1985); according to Pauli and Buskirk (2007), "We found that 47% of prairie dogs shot with expanding bullets contained >180 mg of elemental lead, enough to be acutely lethal to nestling raptors and, depending on the absorption rate of the bullet fragments, an amount potentially sufficient to be acutely lethal to adult raptors as well." Conversely, Stephens et al. (2009) found lead blood levels in ferruginous hawks, golden eagles, and possibly burrowing owls that were relatively low in the wake of 2001 shooting closures on the TBNG. In areas where shooting would be permitted, the Forest Service must analyze the impact of lead shot on other species preying on or scavenging injured or killed prairie dogs, and the concomitant impact to the viability of populations of raptors, reintroduced ferrets, and other terrestrial and avian predators and scavengers, including (but not limited to) swift fox, golden eagle, ferruginous hawk, and burrowing owl.

Knowles and Vosburgh (2001: 15-16) also raise this issue:

Fragments of lead ingested by raptors when scavenging shot prairie dog carcasses have the potential to kill or severely disable raptors. Burrowing owls are reported to scavenge poisoned prairie dogs (Butts 1973) and would also be expected to feed on prairie dogs killed by recreational shooting. Ferruginous hawks and golden eagles are 2 other raptors known to scavenge on dead prairie dogs. Shooting in some areas has been sufficiently intense during the past decade to literally put millions of pieces of lead on the ground. It is unknown if passerine birds are picking up pieces of this toxic heavy metal. Mortalities in mourning [sic] doves have been noted with ingestion of only 2 lead pellets. Ingestion of lead is a known significant problem for birds (Lewis and Ledger 1968 and Wiemyer et al. 1988).

The direct impacts of prairie dog shooting are also severe. Individual shooters can seriously impact prairie dog colonies. Randall (1976) chronicled the activity of three individual shooters who traveled from Minnesota to shoot white-tailed prairie dogs in Wyoming. In one week they concentrated on seven towns and tallied 1023 kills. Small colonies may be particularly vulnerable to negative impacts from shooting (Knowles 2002, citing J. Capodice, pers. comm.). Entire colonies can potentially be eliminated from shooting pressure (Knowles 1986; Livieri 1999).

According to a Pauli (2005) study conducted on the Thunder Basin National Grassland, "shooting dramatically altered the behavior of surviving prairie dogs, which reduced the body condition of survivors and increased their ectoparasite burdens and corticosterone levels." See Attachment B. In addition, shooting may depress the ability of prairie dogs to resist plague exposure; indeed, "Shooting appears to raise levels of infestation with fleas, an important disease vector, so that costs of coloniality and shooting appear to be multiplicative" (id.). In addition, this study found that shooting resulted in a decrease in time spent foraging, an increase in time spent in vigilance behaviors, a decrease in pregnancy rates and dramatic declines in reproductive output, a decrease in juvenile survival rates for survivors, a decrease in adult body condition, and an increase in ectoparasite loads (a key feature for flea-spread plague). Irby and Vosburgh (1994) found that even light shooting has a significant effect on prairie dog behavior, with 42% of prairie dogs retreating to the burrows on a lightly shot colony, contrasted with a 22% retreat rate on unshot colonies, and 55% retreat rate on heavily shot colonies. Keffer et al. (2000) found that after they shot 22% of the black-tailed prairie dogs on one colony as part of a controlled shooting study, 69% (212 individuals) of the remaining prairie dogs left the colony. According to Pauli (2005),

"In May-July 2004, a plague epizootic occurred on one of my study colonies, killing 95% of the inhabitants. Nine of 17 surviving prairie dogs developed antibodies to plague, suggesting that seroconversion is the primary mechanism for survival during epizootics. Survivors exhibited increased body condition and occurred in apparently functional coterie. Therefore, plague survivors should contribute to the recovery of a colony after an epizootic. If antibody development to plague is a heritable trait among prairie dogs, survivors may ultimately

contribute to plague resistance in previously exposed colonies."

Pauli (2005) found that shooting could significantly inhibit the increase of prairie dog colonies compared to unshot colonies. For Wyoming's Great Divide Basin (where shooting efforts have historically been light in comparison to the Thunder Basin), Maxell (1973) noted, "Most active prairie dog towns were located some distance from the main thoroughfares in the [Great Divide] Basin, probably due to human predation in the form of varmint hunters" (p.85). Studies also report that shooting may decrease colony expansion rates (Miller et al. 1993; Reading et al. 1989). One study revealed that a colony in Montana had a 15% annual expansion rate when prairie dogs were not hunted, contrasted with a 3% expansion rate when they were (Miller et al. 1993). This dramatic decrease in rates of expansion represents decreased migration, which constitutes human interference with an integral population dynamic in prairie dogs: prairie dog dispersal. Given the indirect impacts of shooting on prairie dog health and population dynamics, what are the impacts of shooting on the viability of prairie dog colonies for lands where shooting occurs?

The DEIS is entirely silent on the social effects of allowing/facilitating sadistic behavior in individuals with mental health problems. Clearly, a decision condoning and facilitating individuals whose mental health problems allow them to obtain pleasure, satisfaction or 'recreation' through the purposeless killing of other creatures is not an appropriate use of public lands and wildlife. This is particularly important to examine in light of the growing evidence between sadistic violence against animals and similar violent acts against humans and the growing violent extremism in the United States.

<https://www.psychologytoday.com/us/blog/animal-emotions/201711/the-link-between-violence-toward-nonhuman-animals-and-humans>

https://scholar.google.com/scholar?q=The+link+between+violence+toward+animals+and+violence+toward+humans&hl=en&as_sdt=0&as_vis=1&oi=scholar&sa=X&ved=0ahUKEwjVYZap1KrXAhXJKWMKHxNIA00QgQMIJjAA

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C13&q=link+between+animal+cruelty+and+violence&btnG=

Understanding the Link between Violence to Animals and People: A Guidebook for Criminal Justice Professionals. Attached.

<https://www.ncbi.nlm.nih.gov/pubmed/16175959>

<https://www.humanesociety.org/resources/animal-cruelty-and-human-violence-faq>

Failure to take a Hard Look at Impacts to Burrowing Owls

The DEIS fails to take the requisite hard look at impacts of the Plan Amendment on burrowing owls. Burrowing owls require active prairie dog towns as their obligate habitat (Butts and Lewis 1982, McDonald et al. 2004, Attached, Lantz 2005, Attached). Burrowing owls appear to be declining on the TBNG over recent years. TBNG 2015 Prairie Dog Assessment at 20.

The Forest Service admits that increased prairie dog shooting will provide a "high potential for loss of individuals" but that there will be "no substantive effect" from nontarget poisoning from zinc phosphide. DEIS at 130. According to McDonald et al. (2004: 3), "Continued loss of prairie dog colonies through active eradication, habitat loss, or disease will negatively impact burrowing owl population viability." Recognized threats include: "Because of their close association with prairie dogs, loss of burrowing owl habitat can generally be equated with loss of active prairie dog colonies through eradication programs, agricultural and urban conversion, and sylvatic plague

(*Yersinia pestis*).¹ Id. Also under recognized threats, "Vehicular traffic, pesticides, domestic animals, and recreational shooting of prairie dogs can negatively impact burrowing owl populations directly through mortality or indirectly through their effect on reproductive success or food supply of owls." Id. The decline in burrowing owl occupied range and population "has occurred [hellip] directly as a result large-scale poisoning and sylvatic plague" (McDonald et al. 2004: 47). According to McDonald et al. (2004: 50):

Several studies have indicated that pesticides constitute a threat to at least certain populations of burrowing owls, both by direct poisoning or by secondary ingestion of pesticide-laden prey items (James and Fox 1987, LeClerc 1990, Baril 1993, World Wildlife Fund 1993, Blus 1996, James and Espie 1997, Mineau et al. 1997, Sheffield 1997b, Gervais et al. 2000, Klute et al. 2003). Rodenticide treatments (fumigation, strychnine-coated grain distribution) used to control burrowing mammals have been shown to have deleterious effects on burrowing owls in the form of: direct mortality, decreased adult body mass, and decreased breeding success (Klute et al. 2003).

Butts and Lewis (1982, Attached) found that no owls nested after three years in prairie dog colonies that had been poisoned.

Among the recommendations for burrowing owl conservation is this: "When controlling burrowing mammals, relocate them instead of using pesticides. Do not use traps or poisoned meat or grain when burrowing owls are present. Do not completely eliminate burrowing mammals" (Dechant et al. 2002, Attached; McDonald et al. 2004). The Forest Service's conclusion that poisoning of prairie dogs will have "no substantive effect" on burrowing owls is arbitrary and capricious, unscientific, and without merit. The agency also fails to analyze how the acreage of prairie dog complexes that would remain under each alternative would affect the viability of burrowing owl populations.

Failure to take a Hard Look at Impacts to Mountain Plovers

Mountain Plovers appear to be declining on the TBNG over recent years. TBNG 2015 Prairie Dog Assessment at 20. According to the DEIS, "a minimum of 7,500 to 10,000 acres of prairie dog colonies would be adequate to provide for viability [of mountain plovers] [hellip] based on the following quantitative and qualitative evidence." DEIS at 62. The agency recognizes (citing Duchant et al. 2018) that "few to no birds [would be] occurring outside prairie dog colonies." Id. Yet the agency does not analyze the impacts of prairie dog acreage reductions, either directly from poisoning and shooting, or cumulative from these human-caused mortality factors on prairie dogs themselves, or on species dependent on them, including burrowing owls, mountain plovers, and raptors.

Failure to take a hard look at impacts on black-footed ferret reintroduction

Based on the best available science, more than 10,000 acres of active prairie dog colonies are required to support long-term viability for an introduced population of black-footed ferrets; indeed none of the sites with acreages of prairie dog colonies less than 10,625 acres were successful (Jachowski et al. 2011, Attached). The Forest Service relies on 1,500 acres of active prairie dog colonies TBNG-wide (DEIS at 114 et seq.) to determine whether alternatives pass the threshold for sustaining ferret recovery. This is arbitrary and capricious because (1) successful reintroduction requires more than 10,625 acres in the complex, and (2) complexes must be comprised of active colonies no more than 7 km distant from each other.

Failure to take a hard look costs

The DEIS fails to take a hard look at both the costs of implementing the proposed amendment including costs to implement the livestock grazing program, alongside the income generated from continuing to authorize the source of the problem, private livestock grazing. No cost benefit analysis to the taxpayer is provided.

THE DRAFT EIS FAILS TO COMPLY WITH NFMA

The Action Alternatives Fails to Comply with Diversity Requirements

The National Forest Management Act requires Forest Plans to:

"provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives" 16 USC 1604(g)(3)(b)

The entire purpose of the proposed amendment is to significantly reduce protections for prairie dogs which serve as a keystone species, providing critical habitat to a wide range of Forest Service Sensitive Species and ESA listed species. As discussed above, prairie dogs have been widely exterminated across their entire range to placate the wishes of ranchers. This more than century long effort to eradicate prairie dogs has resulted in a 99% loss of their former habitat. This loss has resulted in similar severe declines of dependent species such as black-footed ferrets, burrowing owls and other species.

The proposed amendment continues this long tradition of persecution of prairie dogs and eliminates direction intended to recover the species and at best allows the species to exist on a few tiny fragments that entirely fail to allow the species to provide ecosystem services required by other species dependent on large, functional prairie dog populations for survival.

The 2002 Forest Plan provided minimal requirements for the protection and recovery of prairie dogs, their ecosystem functions and for their dependent species.

Through political pressure from the ranchers, these minimal requirements were watered down in 2009.

This proposed additional amendment virtually eliminates the few remnant protections not gutted in 2009.

See Letter Submission: Graph of Acres Managed with Prairie Dog Emphasis

Previous attempts to gut the limited protections, such as 2012 efforts, were found to not comply with NFMA mandates. Efforts by the Regional Forester to place more pliant staff who were more willing to ignore the best available science, professional ethics and legal compliance have resulted in essentially the same proposals that were found to not be complaint with NFMA by staff with more integrity, now all of a sudden, found to be perfectly acceptable. See attached.

The Action Alternatives Fails to Comply with the 2012 Planning Regulations

The 2012 Planning Regulations require:

(a) Ecological sustainability. (1) Ecosystem Integrity. The plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity, taking into account: (i) Interdependence of terrestrial and aquatic ecosystems in the plan area. (ii) Contributions of the plan area to ecological conditions within the broader landscape influenced by the plan area. (iii) Conditions in the broader landscape that may influence the sustainability of resources and ecosystems within the plan area. (iv) System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of terrestrial and aquatic ecosystems on the plan area to adapt to change. (v) Wildland fire and opportunities to restore fire adapted ecosystems. (vi) Opportunities for landscape scale restoration. (emphasis added) 36 CFR 219.8(a)

The proposed amendment not only fails to implement plan components to restore the ecological integrity of the planning area, it actually removes the few components that were in the plan from 2001, 2009 and 2015 for the recovery of prairie dogs, the ecological services they provide and the species that are dependent on that habitat. The determinations in the DEIS, BA and Sensitive Species report are specious and unsupportable.

The amendment fails to implement any standards and guidelines to comply with 219.8(a).

Ecosystem plan components. (1) Ecosystem integrity. As required by [sect] 219.8(a), the plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore their structure, function, composition, and connectivity. 36 CFR 219.9(a)

In doing so, the plan must include plan components to maintain or restore: (i) Key characteristics associated with terrestrial and aquatic ecosystem types; (ii) Rare aquatic and terrestrial plant and animal communities 36 CFR 219.9(a)(2)

As discussed earlier, it is well known that prairie dogs create unique ecological processes that are critical to a wide range of other species. The proposed amendment utterly fails implement standards and guidelines that restores this important function to the landscape. Certainly, this habitat created by prairie dogs is a key characteristic of much of the TBNG.

The proposed amendment fails to comply with the requirements of 219.9(a). Further, the amendment completely fails to restore rare animal communities.

From the Sensitive Species report:

A critical component of management to support the persistence of black-tailed prairie dog on the TBNG is plague control. Plague control involves both control of transmission at the scale of the individual prairie dog and control of plague's movement across the landscape.

Yet despite this "critical component" the proposed action fails to implement any requirements.

The responsible official shall determine whether or not the plan components required by paragraph (a) of this section provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area. If the responsible official determines that the plan components required in paragraph (a) are insufficient to provide such ecological conditions, then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area. (emphasis added) 36 CFR 219.9(b)(1)

The amendment eliminates even the pretense of contributing to the recovery of listed species. The deciding officer does not have any rational basis to conclude that the amendment contains standards and guidelines that contribute to the recovery of listed species. The entire thrust of the amendment is to eliminate the last few requirements that could have contributed to the recovery of the black-footed ferret.

The Forest Service is mandated by the recovery plan to provide not just for reintroduction but recovery and providing habitat for 100 breeding adults on at least 18-22,000 acres of full functioning prairie dog habitat. The amendment doesn't even pretend to do this.

The Sensitive Species report, at 350, makes the effects of the proposed action on Sensitive Species clear:

The available information indicates that the plan amendment has the potential to cause substantial adverse impacts to or substantially lessen protections for blacktailed prairie dog, because the amendment will address control of the distribution, size, and expansion of active black-tailed prairie dog colonies.

In summary, the persistence of the blacktailed prairie dog population on the TBNG is dependent to a large degree on anthropogenic management and the occurrence of plague, and the plan amendment has the potential to cause substantial adverse impacts to or substantially lessen protections for the species because of its influence over levels of rodenticide use and plague prevention activity in the plan area.

The 2012 Planning regulations also require:

Riparian areas. (i) The plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of riparian areas in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity 36 CFR 219.8(a)(3)

Again, the amendment fails to implement standards and guidelines to restore the ecological integrity of the Cheyenne River corridor or other riparian areas in the planning area.

The 2012 Planning regulations further require:

Role of science in planning.

The responsible official shall use the best available scientific information to inform the planning process required by this subpart. In doing so, the responsible official shall determine what information is the most accurate, reliable, and relevant to the issues being considered. The responsible official shall document how the best available scientific information was used to inform the assessment, the plan decision, and the monitoring program as required in [sect][sect] 219.6(a)(3) and 219.14(a)(4). Such documentation must: Identify what information was determined to be the best available scientific information, explain the basis for that determination, and explain how the information was applied to the issues considered. 36 CFR 219.3

The actions proposed in the amendment such as colony size and areas, population 'density control', viability determinations and other aspects of the plan fail to utilize the best available science.

The fawning deference by the Forest Service towards the state of Wyoming and the so-called 'working group' also violate the requirement to use the best available science as the basis of decision-making.

This requirement echoes that of NEPA found at 40 CFR 1502.24

Methodology and scientific accuracy.

Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

The DEIS fails to comply with 219.4(1)(v)

From the cursory dismissal of its consultative duties, it is unclear if the DEIS fully complies with 219.4(1)(v).

The Action Alternatives Fails to Comply with Sensitive Species Policy

The prairie dog is a Forest Service listed Sensitive Species. As such the Forest Service must comply with its own Sensitive Species Policy (see *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1165 (10th Cir. 2002)).

FSM 2670.5 requires:

2672.1 - Sensitive Species Management. Sensitive species of native plant and animal species must receive special management emphasis to ensure their viability and to preclude trends toward endangerment that would result in the need for Federal listing. There must be no impacts to sensitive species without an analysis of the significance of adverse effects on the populations, its habitat, and on the viability of the species as a whole. It is essential to establish population viability objectives when making decisions that would significantly reduce sensitive species numbers.

The proposed amendment prioritizes the desires of a few livestock permittees over the needed of Sensitive Species. The amendment's purpose is specifically to remove "special management emphasis". No population viability objectives have been provided in the DEIS or any other associated document.

The FSM further requires:

2670.22 - Sensitive Species.

1. Develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service actions.
2. Maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System lands.
3. Develop and implement management objectives for populations and/or habitat of sensitive species. (emphasis added)

The proposed amendment removes management practices put in place to ensure that Sensitive Species do not become threatened or endangered. The amendment completely fails to maintain viable populations distributed throughout their geographic range. In fact, its admitted purpose is to reduce the area occupied by these Sensitive Species. The amendment also fails to develop and implement objectives for populations and habitats and does away with the meager 2015 plan.

2670.22 (2) is further defined in:

2670.45 - Forest Supervisors. The Forest Supervisors:

2. Develop quantifiable recovery objectives and develop strategies to effect recovery of threatened and endangered species. Develop quantifiable objectives for managing populations and/or habitat for sensitive species. 2672.32 - Forest Plan Objectives for Sensitive Species. For sensitive species, include objectives in Forest plans to ensure viable populations throughout their geographic ranges.

No quantifiable objectives were developed to ensure the recovery of ESA listed species and in fact the amendment does away with even the pretense of supporting the recovery of the black-footed ferret.

No quantifiable objectives have been developed for Sensitive Species either.

No Forest Plan objectives have been provided to ensure viable populations throughout the species geographic

range. The DEIS, at 14 states:

Although these numbers were close to those predicted during the 2002 planning process, the Prairie Dog Conservation Assessment and Management Strategy provided no direction and little flexibility regarding such a management situation.

This statement is patently false. Both the 2009 amendment and the 2015 Strategy contain a wide range of direction and flexibility, yet the record shows that the Forest Service failed to implement this direction and flexibility and in many cases, detailed in correspondence with Defenders of Wildlife, refused to allow others to implement the direction and flexibility contained in the current plan.

The evidence is clear, over the last two decades, the Forest Service has repeatedly capitulated to pressure from a handful of ranchers and their henchmen to weaken protections for a wide range of imperiled species because these ranchers find them inconvenient. This proposed amendment is the removal of the last remaining shards of management direction to recovery prairie dogs and the various species that depend on occupied prairie dog habitat to exist.

The proposal violates the ESA, NFMA and NEPA as discussed above. As such the entire process needs to be scrapped and the Forest Service needs to start over to restore prairie dog habitat and recover the species dependent on it.

The Forest Service needs to remove itself from the 19th century mentality fully on display in the proposed amendment.

Please carefully consider and respond to the issues raised in these comments, as well as those scientific studies referenced in, as well as those attached to, these comments as part of your obligation to fulfill scientific integrity requirements pursuant to NEPA. We also incorporate as an addendum to our comments the separately submitted comments to the DEIS submitted by Defenders of Wildlife.

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