To: Russel Bacon, Thunder Basin National Grassland Supervisor May 15, 2019

From: Greg Warren

Subject: 2020 Thunder Basin National Grassland Plan Amendment #55479

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Dear Mr. Bacon,

These comments are in response to your Notice of Intent to prepare an environmental impact statement (EIS) for the 2020 Thunder Basin National Grassland Plan Amendment, which proposes to:

- 1. Change the existing Thunder Basin National Grassland Management Area 3.63, "Black-footed Ferret Reintroduction Habitat," to a new Management Area 3.67, "Rangelands with Short-stature Vegetation Emphasis."
- 2. Draw the boundaries for Management Area 3.67 to strategically use natural barriers to prairie dog movement such as the Cheyenne River and Rochelle Hills and to reduce conflicts in prairie dog management.
- 3. Eliminate use of the Black-tailed Prairie Dog Conservation Assessment and Management Strategy for the Thunder Basin National Grassland (2009, 2015), and amend the Thunder Basin National Grassland Land and Resource Management Plan to include all necessary direction for prairie dog management.
- 4. Establish a minimum 1/4 mile boundary management zone in Management Area 3.67 where the Grassland shares a border with private or State property, and allow landowners to request up to a 3/4 mile boundary management zone for special circumstances. Within boundary management zones, lethal control of prairie dogs in cooperation with other landowners will be the priority.
- 5. Where possible, adopt use of the Natural Resources Conservation Service's Ecological Site Descriptions in Management Area 3.67 as the basis to describe plant communities, evaluate current and desired conditions, and maintain or improve native vegetation and wildlife habitat.
- 6. Within Management Area 3.67, manage active prairie dog colonies toward a target of 10,000 acres to support viable populations of associated species such as mountain plover, burrowing owl, and swift fox. Colonies would be distributed across the landscape and vary in size up to approximately 1,000 acres with an emphasis on colonies of 100 to 400 acres. At least one complex in Management Area 3.67 would be managed for at least 1,500 acres of active prairie dog colonies.
- 7. Allow use of a suite of tools for prairie dog management throughout Management Area 3.67, including but not limited to translocation, application of deltamethrin (i.e., "Delta dust" or equivalent), fences, vegetative barriers, and rodenticides. Do not allow use of anticoagulant rodenticides.
- 8. Allow recreational shooting in Management Area 3.67 with seasonal restrictions in place when necessary.
- 9. Consider recommendations for prairie dog management from a third party collaborative stakeholder group.

Purpose and Need

The NOI states that, "The purpose of this project is to amend the Thunder Basin National Grassland Land and Resource Management Plan to better balance prairie dog colony conservation and control with other Grassland uses." The term "better balance" is vague and is subjective. A clear statement of purpose and need is critical as the foundation for the formulation, evaluation, and comparison of alternatives. The statements of purpose and need for the Amendment must be revised to clarify the intent. The scope of the EIS clearly includes ecological purposes of the grasslands, which should be addressed by adding the following purpose and need statements:

- Ensure habitat requirements are met and necessary acreages are provided to support viable populations of prairie dogs and their associated species on the TBNG; and
- Maintain sufficient acres of prairie dog habitat: (a) to support black-footed ferret reintroduction;
 (b) to support other dependent species; and (c) to maintain Region 2 sensitive species.

Furthermore, the purpose and need must add consideration of the following important changed conditions that were not addressed:

- Recovery of the black-footed ferret, a species listed as endangered on March 11, 1967, more than 50 years ago, is proceeding at a vastly slower pace than was expected;
- The U.S. Fish and Wildlife Service (USFWS) finalized a 10(j) rule that designates the state of Wyoming as a special area for ferret reintroductions on October 30, 2015;
- Rapid and extensive fragmentation of prairie dog habitat has occurred/is occurring as a result of energy development across the state of Wyoming and across the range of the black-tailed prairie dog;
- There is a need to modify the National Grassland land and resource management plan in a way that is responsive to the ongoing and projected future impacts of climate change.

The following is a brief discussion of the importance and relevance of each of these changed conditions:

• The most recent five-year status review (USFWS 2008) found that the black-footed ferret remains one of the most endangered mammals in the United States, and continues to warrant endangered status. The goal established in the 2013 Black-footed Ferret Recovery Plan for free-ranging ferrets is a total of at least 3,000 breeding adults, in 30 or more populations, with at least one population in each of at least 9 of the 12 States within the historical range of the species, with no fewer than 30 breeding adults in any population, and at least 10 populations with 100 or more breeding adults, and at least 5 populations within colonies of Gunnison's and white-tailed prairie dogs. Despite more than two decades of reintroduction efforts, the recovery plan reported that only about 400 breeding adults were living in the wild (USFWS 2013). In announcing the availability of the revised black-footed ferret recovery plan (78 FR 77485-77486, Dec. 23, 2013), USFWS concluded that: "Downlisting of the black-footed ferret could be accomplished in approximately 10 years if conservation actions continue at existing reintroduction sites and if additional reintroduction sites are established. Delisting will be possible if more intensive reintroduction efforts are conducted." This proposed action is an example of the problem. To date, extremely slow progress has been made towards recovery,

- and removing the contribution of the TBNG reintroduction site would be a huge and damaging step backwards.
- The purpose of the 10(j) rule was to help facilitate reintroductions of the species onto non-federal lands while providing regulatory assurances that will encourage greater private landowner participation in black-footed ferret recovery. Furthermore, it would allow implementation of recovery efforts on non-federal lands to proceed more quickly. The proposed action fails to provide appropriate management direction that would be applicable when an adjacent private landowner elects to participate in ferret recovery efforts. This should be added to the proposed action.
- Today, there are more than 60,000 oil wells operating in Wyoming (https://oilwellmap.com/state-well-locations/wyoming-oil-well-locations/). An example of the current rapid pace of development is a supplemental EIS currently being prepared by BLM in which a group of companies propose to drill approximately 5,000 oil and natural gas wells on 1,500 well pads in Converse County, encompassing approximately 1.5 million acres over a 10-year period. The proposed action would remove the controlled surface use stipulations in MA 3.67 that under current direction are aimed at maintaining habitat for a potential reintroduction of black-footed ferrets. I believe this change would be incompatible with achieving goals for ecosystem sustainability and species diversity and would lead to irreversible, irretrievable, and cumulative impacts. It is also contrary to the statement in the scoping document that "The responsible official will design the proposed action so that it does not cause substantial adverse impacts or substantial lessened protections for potential species of conservation concern."
- The fifth report by the Intergovernmental Panel on Climate Change (2013) reported that atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. Carbon dioxide concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from net land use change emissions. The mean rates of increase in atmospheric concentrations over the past century are, with very high confidence, unprecedented in the last 22,000 years. The Planning Rule requires that the plan must provide for ecological sustainability by considering system drivers including climate change (36 CFR § 219.8(a)(iv)). The impacts of altered climatic conditions affecting the native vegetation and wildlife must be incorporated as a consideration in the purpose and need for this proposed action.

Proposed Changes to the Grassland Plan

1. Changing MA 3.63 (Ferret Reintroduction Habitat) to MA 3.67 (Short Stature Vegetation)

The Bankhead-Jones Farm Tenant Act of 1937, as amended (7 U.S.C. § 1010) must be a fundamental legal basis for describing the purpose and need of the proposed action and the alternatives to be analyzed. The legislation describes that, "The Secretary is authorized and directed to develop a program of land conservation and land utilization, in order thereby to correct maladjustments in land use, and thus assist in controlling soil erosion, reforestation, preserving natural resources, protecting fish and wildlife, developing and protecting recreational facilities, mitigating floods, preventing impairment of dams and reservoirs, developing energy resources, conserving surface and surface moisture, protecting

the watersheds of navigable streams, and protecting the public lands, health, safety, and welfare, but not to build industrial parks or establish private industrial or commercial enterprises."

The purposes of the Endangered Species Act (ESA) of 1973 (16 U.S.C. § 1531 et seq.) are to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." The ESA also established as a policy of Congress an affirmative responsibility that "all federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of this Act." Conserve is defined under the ESA to mean "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary." The proposed change in wording to "Reintroduction of the black-footed ferret will not be precluded in the Management Area" indicates that the TBNG is proposing to abdicate its responsibility to help recover the species.

As currently addressed in the MA 3.63 direction, protecting black-footed ferret habitat is the primary consideration in defining the appropriate mix of uses in this small portion of the National Grasslands. The current direction is consistent with requirements of both the Bankhead-Jones Farm Tenant Act and the Endangered Species Act. Prioritizing the commercial growing of domestic livestock over the recovery of a critically endangered species appears to be contrary to the mission of the National Grasslands. The grasslands management direction must continue to provide for the long-term conservation of black-tailed prairie dogs and other species associated with prairie dog colonies, and to provide for adequate acreages and distributions to support a future reintroduction of the black-footed ferret, under all alternatives that are analyzed in detail in the DEIS.

2. MA 3.67 boundaries

I agree that it seems prudent to draw the management area boundaries in such a way that conflicts with adjoining landowners would be reduced. I do not have comments at this time on the specific modifications to the boundaries under the proposed action.

3. Prairie dog management strategy, 6. Target acres, 7. Suite of tools, 8. Shooting

The scoping notice describes that, "The Forest Service proposes to amend prairie dog management direction in the Thunder Basin National Grassland land and resource management plan to place greater emphasis on control and active management of prairie dog colonies to address significant concerns related to health, safety, and economic impacts on neighboring landowners." The scoping document further describes that, "Despite the ecological significance of prairie dogs, the animals cause widespread and significant concern related to public health, safety of humans and livestock, agricultural production, land values, and facilities. In the State of Wyoming, prairie dogs are classified as an agricultural pest."

I reviewed the Notice of Intent materials and did not find any substantive discussion that described in detail the nature of the purported health, safety, and economic impacts on neighboring landowners. The DEIS must clearly and thoroughly describe the landowner's concerns and the actions that have been taken to date to address those concerns. The DEIS must establish clear rationale, beyond stating the intent of being a good neighbor, for the need to take actions on the National Grasslands to protect non-Federal landowners. The DEIS must also disclose the relative costs and effectiveness of alternative

methods (other than lethal control of prairie dogs) that would address health, safety, and economic impacts.

The photograph identified as figure 5 and the statement on page 7 of the scoping document make it clear that the desire for more livestock forage is an objective driving the proposed Amendment. If a "better balance" is needed between wildlife and livestock grazing, the DEIS must consider an alternative that would change some allotment boundaries so that the entire acreage of the national grassland is not allotted for livestock grazing, in order to gain more management flexibility (for example, by "grass banking"). Such an alternative is prudent in the Great Plains where the amount of annual precipitation is extremely variable, and is especially needed in the face of climate change. The DEIS must thoroughly address for the proposed action and alternatives the relationship between providing forage for livestock vs. providing habitat for prairie dogs and other wildlife species under changing conditions.



Scoping document: "Figure 5. Livestock graze on a prairie dog colony. The U.S. Forest Service proposes to amend the Thunder Basin National Grassland plan to better balance prairie dog management with other grassland uses."

The Notice of Intent mentions that the Amendment will conform to the substantive requirements of the 2012 Planning Rule that guides implementation of the National Forest Management Act, including 36 CFR § 219.8 and 219.9. In addition, plan components must be reviewed and revised as needed for consistency with the degree of compliant direction found in FSH 1909.12 part 05.1. The Planning rule requires the responsible official to include plan components that 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. A self-sustaining population of black-footed ferrets requires large, dense complexes of prairie dogs. The proposed acreage goals for MA 3.67, with an emphasis on colonies 100-400 acres in size and only one complex of 1,500 acres of active colonies, are plainly insufficient to contribute to the recovery of black-footed ferrets anywhere on the TBNG. The DEIS must analyze whether the proposed action would support viable populations of species of conservation concern. I am particularly concerned about collateral mortality of burrowing owls, swift fox, grassland birds, and other wildlife from the expanded use of poisons and unregulated shooting on the TBNG.

A guideline purports to allow the full suite of tools to support prairie dog colony expansion and to reduce or eliminate colonies. However, throughout the proposed action the focus is on prioritizing the

use of rodenticides to control prairie dogs on the national grassland. The DEIS must include one or more alternatives that provide for a better balance with regard to application of nonlethal tools, and provide a reasonable comparison of effectiveness, costs, and environmental impacts.

I am not aware of any scientific evidence that justifies using "density control" within a prairie dog colony as a means of reducing the incidence of plague. This speculative concept has no basis in science and makes no sense in light of the natural behavior of prairie dogs and the social organization within their colonies. Application of deltamethrin dust is the current proven method of preventing or controlling plague eipzootics. The 2012 Planning Rule requires the use of the best available scientific information to inform planning and plan decisions. Density control should be removed from the proposed action and any alternatives analyzed in detail.

I strongly agree with prohibiting the use of anticoagulants such as Rozol on the National Grassland.

4. Boundary management

The DEIS must explain the scientific basis for and the anticipated costs accruing from establishing a minimum ¼ mile boundary with every border with private or state property and prioritizing lethal control using rodenticides. There should be one or more alternatives that consider and evaluate a different approach.

5. NRCS Ecological Site Descriptions

The Proposed Action describes adding the following guideline to the Grassland Plan Direction: "Areas that no longer contain desirable vegetation cover or plant species diversity may be reclaimed using native seed mixtures consistent with the reference plant community and compatible with the ecological site to enhance rangeland health (biotic integrity, soil and site stability, and hydrologic function). Where consistent with Forest Service policy, non-native seed may be used. Guideline" (Page 25)

Given the impacts of current and future climate change, it would be unsound policy to use the reference plant community and ecological site descriptions to "enhance rangeland health". According to the fifth IPCC report, models have projected that summer warming patterns in western, central, and eastern North America generally will exceed natural variability estimates, and will exceed natural variability in all regions of North America, by mid-century. This warming is predicted to lead to a two- to four fold increase in heat wave frequency over the 21st century. This has clear implications for the management of rangelands. The wording in the proposed action must be revised and the impacts of climate change must be addressed in the DEIS for all alternatives analyzed in detail.

9. Collaborative Stakeholder Group

I recommend removing direction to consider recommendations from a third party collaborative stakeholder group for prairie dog management. Instead, I recommend that only normal NEPA and NFMA public involvement processes be followed.

Third party groups cannot be controlled by the agency, but I recommend that the Forest Service encourage any public advisory group to be formed with a charter that establishes group goals such as to:

Encourage stakeholders with diverse ideas and expert knowledge to participate,

- Enhance communication through constructive dialogue, debate and deliberation,
- Utilize positive, enforceable ground rules that reflect collective values and principles,
- Promote joint problem-solving and creative solutions,
- Present only recommendations that gained group member consensus, and
- Promote continuous improvements in process and recommendations.

Comments on changes to plan components

For the purposes of achieving the objectives of National Grasslands and the Endangered Species Act, I recommend the following changes be made to plan components that are part of the proposed action and/or be incorporated into another alternative:

Chapter 1

- I recommend that the existing desired condition description for MA 3.63 be retained and be embedded in the proposed MA 3.67 desired condition description. The statement would read: "Large prairie dog colony complexes are established and maintained as suitable habitat for black-footed ferret reintroductions. Land uses and resource management activities are conducted in a manner that is compatible with maintaining suitable ferret habitat."
- The revision of F.34 proposes to make a change that misses the important point that mountain plovers are strongly associated with prairie dog colonies. The original language should be retained, or the new language revised.
- The changed wording proposed for F.65b regarding recommendations from a collaborative stakeholder group does not conform to Forest Service direction for forest plan components. It should be removed.
- F-XX. Remove the clause "excluding density control".
- Forest plan components are not supposed to restate already existing laws and regulations.
 Therefore the first sentence of H.1 is not needed and should be deleted. The second sentence should be retained.
- The wording of H.XX is clumsy and unclear; impacts cannot be minimized by considering
 information. I suggest changing this guideline to a standard and rewording as: "Any use of lethal
 control of prairie dog colonies must include design criteria to minimize impacts to species that
 are associated with prairie dog colonies, including mountain plover, burrowing owl, and swift
 fox."
- M.3 deleting the second bullet is short-sighted and counterproductive. It should be retained.
- The targets and value ranges for percentage of management areas in late, late intermediate, early intermediate, and early seral stages by Geographic Area were removed for MA 3.67, with a note to see Chapter 3 for direction regarding Management Area 3.67. I did not find that information in Chapter 3. The DEIS must provide such a comparison.

Chapter 3 and Appendices

- p. 3-16/ MA 3.67 The first sentence in the last paragraph should be modified as follows:
 "Livestock and prairie dogs utilize forage in most areas annually, but some areas receive little to no use due to topography."
- Vegetation, XX this plan component should be revised to acknowledge adjustments needed to address climate change. Planting of non-native species should be discouraged, rather than stating it may be used.
- Fish and Wildlife, XX The size ranges given in the standard are too small and not appropriate to the ecological function of black-tailed prairie dogs and would not support a self-sustaining population of black-footed ferrets. This should be revised.
- Fish and Wildlife, XX Remove "density control" from the guidelines and from the Glossary.
- Do not allow for recreational shooting of prairie dogs in Management Area 3.63/3.67.
- Do not allow landowners to request up to a 3/4 mile boundary management zone for special circumstances. Do not add direction that prioritizes lethal control of prairie dogs within boundary management zones, in cooperation with other landowners. Revise the plan component to provide more flexibility in the approach. Add direction that would apply in the event that an adjacent landowner elected to participate in ferret recovery efforts.
- Do not add this proposed guideline, which is not based on best available science and lacks clarity in its wording: "Density of active prairie dog burrows within an active prairie dog colony may be managed to minimize impacts to soil and vegetation. Impacts to associated species will be considered prior to implementation of density control."
- Delete this proposed standard: "Reintroduction of the black-footed ferret will not be precluded in the Management Area. Any effort to reintroduce black-footed ferret would occur in coordination with the Wyoming Game and Fish Department and would be consistent with the Wyoming Black-footed Ferret Management Plan." Do not add direction that any effort to reintroduce black-footed ferret must be consistent with the Wyoming Black-footed Ferret Management Plan, which was not developed to comply with Forest Service requirements under NFMA and ESA. Any direction developed by the State of Wyoming must be adopted through the amendment process of establishing plan components that support the goals and desired conditions of the National Grassland Plan.
- Do not remove the existing standard that states, "Authorize only those uses and activities in the reintroduction area that do not reduce habitat below the level needed to support a long-term sustainable black-footed ferret population. Until habitat is available to support a long-term sustainable black-footed ferret population, do not authorize uses and activities that would prevent annual increases in the prairie dog population."
- Do not remove the existing standard that states, "Manage all prairie dog colonies within this Management Area as though they were occupied by black-footed ferrets, and apply all Standards and Guidelines as though black-footed ferrets occupy all colonies."
- Do not remove the existing standard that states, "Oil and gas stipulations for black-footed ferrets apply to all prairie dog colonies within this management area."

- Do not remove the existing standard that describes, "Prior to the U.S. Fish and Wildlife Service authorizing a black-footed ferret release, the Forest Service will coordinate and consult with the U.S. Fish and Wildlife Service, the state wildlife agency and other agencies that conduct, authorize or fund predator control to help ensure that predator control activities on the national grassland to reduce livestock losses do not pose significant risks to black-footed ferrets."
- Do not modify the boundary of MA 3.63 or draw the boundaries for Management Area 3.67 to reduce conflicts in prairie dog management unless quality black-footed ferret habitat is maintained over at least a 45,000-acre area and is available for the reintroduction of the species.

Thank you for considering these comments.