



April 2, 2015

**Mr. Champe Green**, Forest Planner  
Cibola National Forest and National Grasslands  
2113 Osuna Rd. NE.  
Albuquerque, NM 87113

*Sent via email*

Re: Notice of Intent to revise the Cibola National Forest Mountain Ranger Districts Land and Resource Management Plan and prepare an associated Environmental Impact Statement.

Dear Mr. Green:

We appreciate the opportunity to submit the attached comments in response to the Notice of Intent to revise the Cibola National Forest Mountain Ranger Districts Land and Resource Management Plan and prepare an associated Environmental Impact Statement. This set of comments addresses specifically livestock grazing, Mexican wolves and prairie dogs. WildEarth Guardians is also signing a broader set of scoping comments from the Wilderness Society et al.

WildEarth Guardians is a non-profit organization dedicated to maintaining, protecting, and restoring the native ecosystems of New Mexico and the American West. Guardians has an organizational interest in the proper and lawful management of these National Forests. Our members, staff, and board members participate in a wide range of hunting, fishing and other recreational and spiritual activities on these National Forests, including the Cibola National Forest. Guardians represents approximately 43,000 total members and e-activists.

Sincerely,

Bryan Bird  
Wild Places Program Director

## **I. The Forest Plan Revision Must Provide Direction for Achieving a Sustainable Grazing Program**

### **A. Background**

#### **1. The Best Available Science Shows that Grazing Causes Significant Adverse Impacts to National Forest Resources.**

Grazing domestic cattle and sheep has been the leading cause of watershed, stream and grassland degradation and in some cases, outright destruction (Belsky et al. 1999, Fleischner 1994, Donahue 1999). Livestock grazing occurs on 70 percent of the public lands the western United States, making it the most widespread form of land utilization in western North America. Some ecologists consider it “the most insidious and pervasive threat” to grassland biodiversity (Noss and Cooperrider 1994).

Today, it is reasonable to assume that livestock grazing has affected virtually every acre of the CNF. In southwestern ponderosa pine forests, past grazing reduced grass and sedge abundance, allowed dense recruitment of seedling pines, and altered fire regimes (Belsky and Blumenthal 1997). One of the most significant changes was the reduction of fine herbaceous fuels that sustain frequent low intensity fires essential for old growth ponderosa pine forests (Covington 2003). Inappropriate grazing results in significant successional changes in vegetation. For example, grazing is the leading cause of the disturbance that caused the regional shift of perennial bunch grasses and open stands of sagebrush to dense sagebrush and harmful exotics such as cheatgrass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*) (Noss and Cooperrider 1994, Donahue 1999).

Grazing adversely affects native reptiles, mammals and songbirds, especially those that nest or forage on or near the ground (Finch et al. 1997), and may alter bird community composition (Schulz and Leininger 1991). Grazing also affects some species of small mammals, reptiles and amphibians by altering habitat or insect prey base (Kie et al. 1991). Selective grazing or “highgrading” by stock of the most nutritious plants results in loss of forage for native species, and ultimately decreases the abundance and diversity of native herbivores (Donahue 1999). Carnivore numbers inevitably decline as prey availability decreases (Brown 1992; Mech 1995) and also are often eliminated by the government at the request of the livestock industry (Robinson 2008).

Growing recognition of the importance of cryptobiotic crusts to ecosystem processes has led to more concerns about the impacts of nonnative grazers. Cryptobiotic crusts are delicate symbioses of cyanobacteria, lichens, and mosses that form on the soil’s surface. These crusts provide important ecological functions, including increasing organic matter and available phosphorus, increased soil stability, and increased water infiltration (Fleischner 1994). On most semiarid lands, a single footprint will virtually stop nitrogen

fixation by cryptobiotic crusts and increase wind and water erosion (Fleischner 1994; Davidson et al. 1996; Donahue 1999).

These grazing-related impacts are of significant concern on the Cibola, and the environmental analysis for the plan revision must analyze them in detail. The information summarized above constitutes best available science which the agency is required to use in the planning process.<sup>1</sup> We ask that you consider this information as such, or explain why it is not considering it the best available science.

## **2. Regulatory Framework**

### **a. National Forest Land Management Planning**

The 2012 National Forest System Land Management Planning Rule, 36 C.F.R. part 219, guides the development, amendment, and revision of forest plans, with an overarching goal of promoting the ecological integrity and ecological and fiscal sustainability of National Forest lands:

Plans will guide management of [National Forest System] lands so that they are ecologically sustainable and contribute to social and economic sustainability; consist of ecosystems and watersheds with ecological integrity and diverse plant and animal communities; and have the capacity to provide people and communities with ecosystem services and multiple uses that provide a range of social, economic, and ecological benefits for the present and into the future.

36 C.F.R. § 219.1(c). To accomplish these ecological integrity and sustainability goals, the rule imposes substantive mandates to establish plan components – including standards and guidelines – that maintain or restore healthy aquatic and terrestrial ecosystems, watersheds, and riparian areas, and air, water, and soil quality. *Id.* § 219.8(a)(1)-(3); *see also id.* § 219.9(a) (corresponding substantive requirement to establish plan components that maintain and restore the diversity of plant and animal communities and support the persistence of native species). The components must be designed “to maintain or restore the structure, function, composition, and connectivity” of terrestrial, riparian, and aquatic ecosystems, *id.* § 219.8(a)(1) & (a)(3)(i); must take into account stressors including 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, *id.* § 219.8(a)(1)(iv); and must implement national best management practices for water quality, *id.* § 219.8(a)(4). The rule also requires the Forest Service to establish riparian management zones for which plan components “must ensure that no management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment that seriously and adversely affect water conditions or fish habitat shall be permitted.” *Id.* § 219.8(a)(3)(ii)(B). And the Forest Service must “use the best available scientific information” to comply with these substantive mandates. *Id.* § 219.3.

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<sup>1</sup> 36 CFR § 219.3

The Forest Service planning directives provide further clarification. FSH 1909.12 Ch. 20 Section 23.23d – Rangelands, Forage, and Grazing states: “[w]hen developing plan components, the Responsible Official shall take into account range that contributes to local, regional, and national economies in a sustainable manner (§ 219.8(b)(3)) and consider forage, grazing, and rangelands ((§ 219.10 (a)(1)).”

“The plan must include plan components, including standards or guidelines, to provide for integrated resource management to provide for ecosystem services and multiple use integrated with other plan components as described in 23.21a. To meet this requirement the plan may include:

- a. Desired conditions for rangelands, transitory range, and other grazing lands that describe the type, level, and general location of grazing anticipated in the plan area while considering the sustainability of this contribution to the social, cultural, and economic conditions affecting communities in the area(s) of influence and the broader landscape.
- b. Objectives that identify expected progress for indicators of rangeland health or other intended achievements such as acres or number of range improvements and accommodations for native species.
- c. Suitability determinations to indicate management areas or other areas where livestock grazing or wild horse and burro management is or is not suitable, depending on physical and ecological considerations and the desired conditions for the areas.
- d. Standards or guidelines, such as seasonal closures or restrictions based on forage condition, to maintain the ecological sustainability and the sustainability of forage for grazing.
- e. Other plan content to describe the approach to range management to provide for rangeland health, restoration, and grazing opportunities for domestic livestock.”

The Plan should explain how and when suitability of lands for livestock grazing will be determined;

**(v) *Suitability of lands.* Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands. (36 CFR 219.7(e)(1)(v)).**

b. NFMA, NEPA, and APA

For a determination of livestock grazing capability to be legally sufficient it must meet NFMA, NEPA, and the APA by: (1) explaining the method used to change the capability determination from the old Plan; and (2) present information on which the capability determination is based. *See W. Watersheds Project v. United States Forest Serv.*, CV-05-189-E-BLW (D. ID., Feb. 7, 2006) (Forest Service violated NEPA because it never explained capability criteria or method used to calculate capability); *also see Ecology Center, Inc. v. Austin*, 430 F.3d 1057, 1067 (9<sup>th</sup> Cir. 2005) (agency must reveal in EIS how it conducted its “hard look,” including the data relied upon and how it analyzed data, so the public can make an informed comparison of alternatives).

NEPA imposes procedures designed to force agencies to take a “hard look” at the environmental consequences of a proposed action. *Earth Island Institute v. United States*, 351 F.3d 1291, 1300 (9<sup>th</sup> Cir. 2003). The “hard look” requirement is met in this instance when the Forest Service reports a change of capability calculation from the old Plan based on defensible methodology and data. The Forest Service under NEPA must prepare an EIS that would “foster both informed decision-making and informed public participation.” *Native Ecosystems Council v. United States*, 418 F.3d 953, 960 (9<sup>th</sup> Cir. 2005).

In order for the grazing suitability determination to be lawful it must: (1) demonstrate an informed basis that is available and understandable to the public; (2) present “a rational connection between the facts found and the conclusions made,” *Native Ecosystems*, 418 F.3d at 961, indeed failing to disclose even what those underlying facts are is a violation of the APA; and (3) meet the requirement of 36 C.F.R. § 219.20 (1982) that the Forest Service determine capability and suitability of lands for grazing, by offering a conclusory determination in fact or disclosure of methods.

c. Forest Service Manuals (FSM 2200 - Range Management) and Forest Service Handbooks (FSH 2200 - Range Management)

**B. Factors to consider in the environmental analysis**

The Needs for Change Assessment for the Cibola National Forest dated February 9, 2015 includes:

**“a. The revised plan needs to provide management direction to the livestock grazing program that incorporates adaptive management toward ecosystem-based desired conditions, with particular emphasis on management in times of drought or other extreme weather-related events.”**

The CNF should evaluate the impacts of livestock grazing on ecosystem integrity with specific attention to ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including structure, function, composition, and connectivity. 36 C.F.R. § 219.8(a)(1). Also 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. *Id.* § 219.8(a)(3). Grazing levels found incompatible with protecting ecosystem integrity should prompt the CNF to close the grazing allotments pursuant to the processes of applicable law. In the event that existing holders relinquish grazing permits or leases, the CNF should allocate vegetation to wildlife, water and healthy ecosystem function. In all grazing authorizations, the CNF should rely on the precautionary principle, first considering effects to native species and ecosystem integrity.

Many of the desired future conditions on the CNF could be accomplished or facilitated by the reduction or removal of livestock grazing. In light of the marginal economic benefits of livestock grazing, especially in light of climate disruption and given all the extent of negative ecological impacts of this activity as described above, we submit that the suitability of livestock grazing on the Forest requires serious re-evaluation.

### **C. Recommended Plan Components**

The substantive requirements of the 2012 Planning Rule require the Forest Service to comprehensively address grazing in its plan revision. Given the significant aggregate impacts of that grazing has on ecological integrity, water quality, species viability and diversity, and other forest resources and ecosystem services, the Forest Service cannot satisfy the rule’s substantive requirements without providing management direction for grazing. As described above, plans must provide standards and guidelines to maintain and restore ecological integrity, landscape connectivity, water quality, and species diversity. 36 C.F.R. § 219.8(a). Those requirements simply cannot be met absent integrated plan components directed at making grazing considerably more sustainable.

The plan components of the revised forest plan should integrate a variety of approaches to satisfy the substantive mandates of the 2012 Planning Rule. The following recommendations are based on the Forest Service’s relevant legal requirements, which are described above, and on the best available science, which is summarized in the attached literature review and which the Forest Service is required to utilize under the 2012 Planning Rule. Where applicable, the recommended plan components also incorporate information from the forest assessment and other relevant sources of information.

The Cibola forest Assessment found riparian areas in the plan area were rated as good or functioning properly on 96 (46%) of the 6th-field watersheds and a fair rating, functioning at risk, was given to 70 (34%) of the 6th-field watersheds. Assessment Report of Ecological / Social / Economic Conditions, Trends, and Risks to Sustainability, Cibola National Forest Mountain Ranger Districts Volume I Ecological Assessment. 2015 *Id.* p. 123. Grazing also contributes to a higher risk of watershed impairment by causing stresses to the functioning of the watersheds in the plan area. *Id.* p. 126. Finally, many at risk species were found to be impacted by grazing in the forest assessment. *Id.* p. 183-218.

“(1) Required plan components. Every plan must include the following plan components:

- (i) Desired conditions. A desired condition is a description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined, but do not include completion dates.
- (ii) Objectives. An objective is a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets.
- (iii) Standards. A standard is a mandatory constraint on project and activity decisionmaking, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.
- (iv) Guidelines. A guideline is a constraint on project and activity decisionmaking that allows for departure from its terms, so long as the purpose of the guideline is met. (§ 219.15(d)(3)). Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.
- (v) Suitability of lands. Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands. The suitability of lands need not be identified for every use or activity. Suitability identifications may be made after consideration of historic uses and of issues that have arisen in the planning process. Every plan must identify those lands that are not suitable for timber production (§ 219.11).

(2) Optional plan component: goals. A plan may include goals as plan components. Goals are broad statements of intent, other than desired conditions, usually related to process or interaction with the public. Goals are expressed in broad, general terms, but do not include completion dates.

(3) Requirements for the set of plan components. The set of plan components must meet the requirements set forth in this part for sustainability (§ 219.8), plant and animal

diversity (§ 219.9), multiple use (§ 219.10), and timber (§ 219.11).” Fed Reg Vol. 77, No. 68, April 9, 2012.

**Grazing Guidelines:** The grazing guidelines approved by the Board of Governors of the Society for Conservation Biology (SCB) urge the agencies to adopt “rangeland conditions [that] will meet or exceed the agency’s standard of ‘good’ with ‘stable trends’” (Fleischner et al. 1994). These guidelines state that livestock grazing may be permitted only where, and in such a manner, that it serves positive ecological roles. The Society for Conservation Biology urges agency staff to evaluate the ecological costs and appropriateness of livestock grazing on an ecosystem basis, as well as on the plants and wildlife whose habits are affected. This requires analyzing the ecological dynamics to determine whether, and to what extent, livestock grazing is ecologically justified. For example, livestock grazing may be permitted if it demonstrably helps maintain or improve the health, native biological diversity, and long-term sustainable productivity of this ecosystem.

Otherwise, livestock grazing on public rangelands should be curtailed (Donahue 1999; Fleischner et al. 1994). In the case of the CNF, there is no evidence to support ongoing grazing for ecological reasons. In every case, grazing must be compared to no grazing and reduced grazing, and the differential effects of these management schemes must be honestly analyzed and disclosed. We urge the CNF adopt the SCB grazing guidelines.

#### **a. Desired Future Condition Statements**

We recommend several desired conditions consistent and complementary with this priority topic:

- Desired Condition: The composition, structure, and function of vegetation ensure resistance and resilience to disturbances, are within or expeditiously moving toward historic conditions, that historically characteristic disturbances resume a natural role in the function of the ecosystem, and that risk of loss of key ecosystem components (e.g. native species and soil) to uncharacteristic disturbance is low.
- Desired Condition: The results of fire and other management activities emulate natural processes and significantly contribute to the maintenance and restoration of all native species in natural patterns of abundance and distribution.

We also recommend adding the guideline:

Guideline: “livestock grazing may be permitted only if it helps maintain or improve the health, native biological diversity, and long-term sustainable productivity of the Cibola National Forest as determined by consistent, comprehensive, and quantifiable monitoring” (Donahue 1999; Fleischner et al. 1994). Ecological conditions for browse and forage should not be degraded due to herbivory (Forest Service 2009:127).

#### **b. Standards and Guidelines for Livestock Grazing**



The revised CNF Plan should include strong and binding standards and guidelines for approving grazing of domestic livestock. Management should prioritize protection and restoration of resilient, fire-adapted ecosystems, allowing grazing only if it helps maintain or improve the health, native biological diversity, and long-term sustainable productivity. The CNF should amend the land management plan to expressly authorize voluntary, permanent retirement of grazing allotments for resource protection purposes, including endangered species recovery.

#### Utilization

- Standard: 25 - 30% utilization rate. The NRCS National Range and Pasture Handbook also supports this level of livestock use<sup>2</sup>.

#### Riparian Habitat Condition

- Standard: Livestock grazing in riparian habitat shall not result in stubble height of less than 24”.

#### Threatened and Endangered Species

- Standard: Forage use by grazing ungulates will be maintained at or above a condition which assures recovery and continued of threatened and endangered species.

#### Mexican Gray Wolf Recovery

In order to comply with the substantive requirements in the new forest planning rule, the Cibola National Forest (Cibola) must establish species-specific plan components in the forest plan, including standards or guidelines that will “contribute to the recovery of federally listed threatened and endangered species.” Each alternative must “[i]nclude plan components, including standards or guidelines, to maintain or restore ecological conditions within the plan area to contribute to maintaining a viable population of the species within its range.”

Additionally, the Cibola acknowledged in its Needs for Change statement (Section III (E), page 14) that, “[t]here is a need to develop plan components to contribute to the recovery and conservation of federally recognized species...”

While Mexican Gray wolves in New Mexico remain an experimental, non-essential species under section 10(j) of the Endangered Species Act (ESA) in the recently published Final Revised Experimental Population Rule<sup>3</sup>, the Fish and Wildlife Service (FWS) also

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<sup>2</sup> USDA NRCS. 2003. National Range and Pasture Handbook, Revision 1. Chapter 5.

<sup>3</sup> Available at [http://www.fws.gov/southwest/es/mexicanwolf/pdf/Mx\\_wolf\\_10j\\_final\\_rule\\_to\\_OFR.pdf](http://www.fws.gov/southwest/es/mexicanwolf/pdf/Mx_wolf_10j_final_rule_to_OFR.pdf) (January 2015).

designated them a separate subspecies and greatly expanded their recovery area. This newly expanded recovery area includes the vast majority of the Cibola National Forest, and any wolves dispersing into it would be allowed to remain there under that Rule's protections.

The impacts to wolf recovery from the Forest Service's grazing program are well documented. When the wolf release program began in 1998, the Forest Service was authorizing approximately 82,600 cattle and 7,000 sheep to graze roughly 69 percent of the Blue Range Wolf Recovery Area (BRWRA). Since the reintroduction project began in 1998, 73 Mexican wolves have been removed from the wild due to livestock depredation, reaching a high of 16 and 19 removals in 2006 and 2007, respectively.<sup>4</sup> Notably, FWS has removed more wolves from the wild because of conflicts with livestock than for any other reason.

The Magdalena Ranger District is now considered inside of Zone 1 of the Mexican Wolf Experimental Population Area (MWEPA).<sup>5</sup> The Magdalena Ranger District has 44 grazing allotments, three of the allotments are closed to grazing, and one is reserved as a grass bank allotment and the District is permitted for 83,756 Animal Unit Month's, or 64,117 Head Months.<sup>6</sup>

The Forest Service, by way of the CNF LRMP revision must prioritize endangered species recovery within its multiple use mandate, including but not limited to the Mexican wolf. Whether an agency's primary mission includes species recovery is irrelevant. See *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 154 (1978). Instead, "the ESA mandates that [agencies] place conservation above any of the agency's competing interests." *House v. U.S. Forest Service*, 974 F. Supp. 1022, 1027 (E.D. Ken. 1997).

We believe that the LRMP should include strong and binding standards and guidelines, not just "design criteria," for approving grazing of domestic livestock in the MWEPA. The standards and guidelines should mirror the recommendations in the three-year program review.<sup>7</sup>

Current Forest Plan Standards and Guidelines relative to management of habitat for threatened and endangered species include the following direction:<sup>8</sup>

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<sup>4</sup> Federal Register, Vol. 80, No. 11, January 16, 2015: 2488-2512.

<sup>5</sup> Federal Register, Vol. 80, No. 11, January 16, 2015: 2512-2567.

<sup>6</sup> U.S. Fish and Wildlife Service. 2014. Environmental Impact Statement for the Proposed Revision to the Regulations for the Nonessential Experimental Population of the Mexican Wolf (*Canis lupus baileyi*). Final Mexican Wolf Recovery Program. [http://www.fws.gov/southwest/es/mexicanwolf/NEPA\\_713.cfm](http://www.fws.gov/southwest/es/mexicanwolf/NEPA_713.cfm)

<sup>7</sup> Paquet, P. C., Vucetich, J., Phillips, M. L., and L. Vucetich. 2001. Mexican wolf recovery: three year program review and assessment. Prepared by the Conservation Breeding Specialist Group for the United States Fish and Wildlife Service. 64-68 pp. [acknowledging the fact that opportunistic scavenging on livestock carcasses may predispose wolves to livestock conflicts, and that there is a need to address the issue of livestock carcass detection and disposal on the BRWRA in order to reduce wolf-livestock conflicts].

<sup>8</sup> U.S. Fish and Wildlife Service. 2014. Environmental Impact Statement for the Proposed Revision to the Regulations for the Nonessential Experimental Population of the Mexican Wolf (*Canis lupus baileyi*). Final Mexican Wolf Recovery Program. [http://www.fws.gov/southwest/es/mexicanwolf/NEPA\\_713.cfm](http://www.fws.gov/southwest/es/mexicanwolf/NEPA_713.cfm)

- Manage for a diverse, well-distributed pattern of habitats for viable populations of wildlife and fish species in cooperation with states and other agencies. Apply technology and manage habitat to help recover threatened and endangered species and increase the productivity for existing native and desired non-native vertebrate species consistent with other resource considerations.
- Resist introduction of exotics.
- Grazing Management Standards: Forage use by grazing ungulates will be maintained at or above a condition which assures recovery and continued management of threatened and endangered species.
- Manage threatened and endangered species habitat to achieve delisting consistent with recovery plans and goals established by the US Fish and Wildlife Service. Manage sensitive species habitat to maintain population viability within the National Forest. Habitat management for federally listed species will take precedence over unlisted species. Habitat management for endangered species will take precedence over threatened species. Habitat management for sensitive species will take precedence over non sensitive species.
- All vegetation manipulations will be coordinated with threatened and endangered species requirements.
- Consult and cooperate with all Federal and State Natural Heritage Programs and Native American programs, such as the Navajo Heritage Program, to achieve management objectives identified in these programs.
- Studies by appropriate, qualified personnel will be conducted to ascertain suitability of reintroduction of endangered, threatened, proposed, and state listed native species to suitable habitat where not presently occupied.
- When activities conducted in conformance with Mexican spotted owl standards and guidelines may adversely affect other threatened, endangered, or sensitive species or may conflict with other established recovery plans or conservation agreements; consult with US Fish and Wildlife Service to resolve the conflict.
- Habitat requirements for threatened, endangered, and sensitive species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions. Special attention will be given to removal of mistletoe infected trees during intermediate and regeneration harvests.

We also believe strongly that the CNF should develop wolf-specific standards and guidelines, independent of grazing standards and guidelines. For example, we want permanent removal as a last resort, and we want the Forest Service to take the lead of proactive strategies for avoiding conflicts, including standards and guidelines in the land management plan.

There are proactive, predator avoidance and/or mitigation techniques, demonstrated to be successful such as herd dogs, hazing tactics. The land management plan should develop guidance for using non-lethal techniques.

The CNF LRMP should authorize at a minimum:

- closed season calving,
- reducing the number of livestock,
- altering class of livestock,
- seasonal grazing only,
- require permittees to dispose of, or render unpalatable, all livestock carcasses. If the permittees won't do it, then the USFS must, and
- grazing permit retirement as a last resort.

The 2001 Three-Year Review of the Mexican wolf reintroduction program, conducted by independent scientists on behalf of FWS, recommended "[r]equir[ing] livestock operators on public land to take some responsibility for carcass management/disposal to reduce the likelihood that wolves become habituated to feeding on livestock." The 2005 agency-conducted Five-Year Review, although it recommended against such a requirement, had data indicating that wolves becoming habituated through carcasses results in a significant loss to the population. In 2007, the American Society of Mammalogists, citing the Three-Year Review and contrasting the Mexican wolf's lax regulations with wolf reintroduction regulations elsewhere, reiterated the recommendation.

In addition, we believe the Forest Service must develop a conservation plan for the wolf and incorporate that plan into each of its Forest Plans including the CNF. At the very least, the Forest Plan should be stop #1 for livestock operators needing information on the wolf program, how their actions affect the wolf program, and what they can do to reduce their footprint on the program.

Finally, the CNF should amend the land management plan to expressly authorize administrative, permanent retirement of grazing allotments for conservation purposes, including endangered species recovery. This does not have to be wolf-specific. It should cover all T&E species.

### **Using the Forest Plan Revision to Alleviate Grazing Impacts on Natural Resources**

In April of 2006, the United States Forest Service (USFS) published the Forest Plan Amendment For Grizzly Bear Habitat Conservation For The Greater Yellowstone Area National Forests. See attachment 1. This amendment incorporated habitat standards and other relevant provisions from the Final Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Area to ensure the conservation of habitat to sustain the recovering grizzly bear population. The Final Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Area was developed as directed by the 1982 Grizzly Bear Recovery Plan Task Y426 and Task Y53.

Like most National Forests, the six Forests in the Greater Yellowstone Area are permitted for livestock grazing. There have been ongoing conflicts between grizzly bears and

livestock in the Area, some of which have been resolved by resting or closing grazing allotments in conjunction with willing permittees. The Plan Amendment includes special provisions to continue to identify opportunities to reduce grizzly bear/livestock conflicts by partnering with willing permittees to rest or close grazing allotments. Below is the wording of these provisions.

## **Proposed Plan Component Language for CNF Forest Plan Revision Regarding Mexican Wolf**

### **Objective- Mexican Wolf Habitat**

#### **Mexican Wolf Habitat Conservation Standard For Livestock Grazing**

- Standard: Inside Zone 1 of the Experimental Population Area, do not create new active commercial livestock grazing allotments, do not increase permitted animal unit months from the baseline and phase out existing livestock grazing allotments as opportunities arise with willing permittees.

#### ***Application Rule for Livestock Grazing Standard***

Allotments include both vacant and active commercial grazing allotments. Reissuance of permits for vacant cattle allotments may result in an increase in the number of permitted cattle, but the number of allotments must remain at or below the baseline. Allow combining or dividing existing allotments as long as acreage in allotments does not increase.

#### **Mexican wolf habitat conservation guideline for livestock grazing**

- Guideline: Inside Zone 1 of the Experimental Population Area, cattle allotments or portions of cattle allotments with recurring conflicts that cannot be resolved through modification of grazing practices may be retired as opportunities arise with willing permittees. Outside Zone 1 of the Experimental Population Area in areas identified in state management plans as biologically suitable and socially acceptable for grizzly bear occupancy, livestock allotments or portions of allotments with recurring conflict that cannot be resolved through modification of grazing practices may be retired as opportunities arise with willing permittees.

#### ***Application Rule for livestock grazing guideline***

Permittees with allotments with recurring conflicts will be given the opportunity to place livestock in a vacant allotment outside Zone 1 of the Experimental Population Area where there is less likelihood for conflicts with grizzly bears as these allotments become available.

## **Mexican wolf habitat conservation monitoring for livestock grazing**

- Guideline: Inside Zone 1 of the Experimental Population Area, monitor, compare to the baseline, and annually submit for inclusion in the Interagency Field Team Annual Report: the number of commercial livestock grazing allotments on the national forest and the number of permitted livestock allotments with recurring conflicts with Mexican wolves.

## **Compliance and effectiveness monitoring**

### **Minimum monitoring requirement in the Revised Plan for Grazing**

- a. Allotment inspections: performed periodically to ensure compliance with stocking rates, season of use, allotment boundaries, and range improvement.
- b. Utilization monitoring: performed at a minimum at the end of grazing season to ensure compliance with forage utilization limits and other requirements included in the terms and conditions of the permit.
- c. Riparian (greenline) monitoring: performed once every 5 years on selected sites and allotments in key areas to track the ecological trend of riparian vegetation and streambank stability.
- d. Rooted frequency monitoring or other assessment of rangeland condition and trend: performed once every 5 years on selected allotments in key areas to track the ecological trend of upland and meadow vegetation.
- e. BMP evaluation program: performed annually at one or more, randomly selected site to assess implementation and effectiveness of best management practices. This monitoring assesses whether site-specific BMPs have been developed and implemented, as well as vegetation and riparian condition.
- f. Monitoring of fecal coliform bacteria in representative range allotments

## **II. Wildlife**

### **a. Prairie Dog**

The 1985 Forest Plan has no regulations regarding recreational shooting of prairie dogs or plague management. The “Assessment Report of Ecological/Social/Economic Conditions, Trends, and Risks to Sustainability” (hereinafter “Assessment Report”) states that threats to Gunnison’s prairie dogs (a potential “Species of Conservation Concern”) on the Cibola include recreational shooting and plague. The Assessment Report states that plague could be affected by management through “dusting” with the insecticide Deltamethrin; guidelines for dusting that incorporate the best available science should be included in the LRMP. In addition, it would be efficient to include a discussion of the potential uses of the sylvatic

plague vaccine currently being developed, as the vaccine will likely be ready for use within the lifespan of the revised LRMP. Any discussion of prairie dogs in the LRMP should also include the black-tailed prairie dog, as both are keystone species and are designated Forest Service “sensitive” species.

The LRMP should also include guidelines for management of recreational shooting of prairie dogs. The Forest is authorized to close designated areas to recreational shooting pursuant to 36 CFR 261.50 (a) and (b) and 36 CFR 261.58 (v). Indeed, the Forest closed three units on the Rita Blanca to shooting in order to assess the efficacy of the sylvatic plague vaccine on the three study sites. In New Mexico and Texas, shooting is allowed under the respective state fish and game department regulations. The Oklahoma Department of Wildlife Conservation does not allow prairie dog shooting on the Rita Blanca Grassland in Oklahoma.

Recreational shooting of prairie dogs on the Grassland in the remaining areas of Texas and Oklahoma should be limited, and preferably eliminated, as it is incompatible with prairie dog conservation and management towards the goal of black-footed ferret reintroduction. The Kiowa and Rita Blanca have some of the largest acreages of prairie dogs in the region, and the area of Texas known as a “High Lonesome” has been identified as a potential black-footed ferret reintroduction site. Public lands are one of the few places with the potential to provide refuge for prairie dogs, which are elsewhere poisoned, shot, and otherwise persecuted. Public lands, in particular national grasslands, are some of the last, best places in which large, contiguous acreages of prairie dog towns can be conserved, and provide the best opportunities to protect intact native grassland ecosystems with their full complement of native wildlife.

Recreational shooting of prairie dogs should be prohibited on public lands for both ecological and moral reasons. Ecologically, shooting disrupts prairie dog colony function, introduces lead into the environment, endangers prairie dog associates such as the burrowing owl, and in extreme cases can lead to elimination of prairie dog colonies. Morally, recreational shooting treats living animals as disposable targets, promotes animal cruelty, and reinforces negative and misleading myths about prairie dogs, e.g. that they are merely “varmints” and pests that should be eliminated from the ecosystem.

Prairie dog colonies exposed to shooting suffer health impacts and behavioral changes. “[R]esearch indicates that recreational shooting of prairie dogs can have extremely detrimental effects on prairie dog population levels, stress levels, and colony viability. In a study conducted in Montana, population size of colonies decreased by 35% on hunted colonies and 15% on adjacent unhunted colonies” (Slobodchikoff et al., 2009, p. 159, internal citations omitted). “In response to recreational shooting, prairie dogs change their behavior; they spend less time aboveground and, when aboveground, devote less time to feeding and more to scanning. Further, prairie dogs exposed to shooting submerge into burrows sooner and stay underground longer in response to humans” (Reeve & Vosburgh, 2006, p. 142, internal citations omitted). “Decisions to protect prairie dog populations from shooting would benefit wildlife because shooting produces noise disturbance that can disrupt foraging, reproductive patterns and other processes that are essential to survival.

Additionally, prohibiting shooting in these areas would lessen the chance that other (including sensitive) wildlife species would become the target” (BLM, 2012, p. 4-273).

In addition to the detrimental effects of shooting on prairie dogs themselves, recreational shooting can introduce poisonous lead (from ammunition) into the environment and affect predators and scavengers that feed on prairie dog carcasses. “[C]ontinued lead poisoning among carnivores and raptors appears to result mostly from ingestion of lead fragments in hunted vertebrate carcasses” (Pauli & Buskirk, 2007, p. 103). Prairie dogs shot with expanding bullets contained enough lead to be lethal to nestling raptors and damaging or potentially lethal to adult raptors (Pauli & Buskirk, 2007, p. 107).

[R]ecreational shooting of prairie dogs contributes to the problem of lead intoxication in wildlife food chains that include prairie dogs. Indeed, some features of recreational shooting, including the killing of large numbers of animals, not removing carcasses from the field, and using expanding bullets, is in contrast to traditional forms of hunting and may present potentially dangerous amounts and particle sizes of metallic lead to scavengers and predators of prairie dogs. (Pauli & Buskirk, 2007, p. 107)

Secondly, from a moral standpoint, prairie dog shooting is animal cruelty and violates standards of ethical hunting. For example, prairie dog shooting violates the Fair Chase Statement of the Boone and Crockett Club, which maintains that modern hunting “involves the regulated harvest of individual animals in a manner that conserves, protects, and perpetuates the hunted population. The hunter engages in a one-to-one relationship with the quarry and his or her hunting should be guided by a hierarchy of ethics related to hunting,” including “[attaining] and maintain[ing] the skills necessary to make the kill as certain and quick as possible,” and “behav[ing] in a way that will bring no dishonor to either the hunter, the hunted, or the environment.”<sup>9</sup> This is not the case in prairie dog shooting situations where shooters attempt to kill as many animals as possible, use high-powered rifles against small animals with the intent to explode animals’ bodies on impact, and do not treat the animals or their ecosystem with respect. Prairie dog shooters neither harvest the animal’s meat for consumption, nor do they collect the animal’s pelt; rather, they routinely abandon animal carcasses. Though proponents justify prairie dog shooting on private land or public lands grazing allotments as “pest control,” prairie dog shooting can, at best, be described as target practice on living creatures and at worst as sadistic amusement.<sup>10</sup> We agree with biologist Constantine Slobodchikoff, who says, “Given the

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<sup>9</sup> Fair Chase Statement: Hunter Ethics, available at [http://www.boone-crockett.org/huntingEthics/ethics\\_fairchase.asp?area=huntingEthics](http://www.boone-crockett.org/huntingEthics/ethics_fairchase.asp?area=huntingEthics)

<sup>10</sup> Examples of prairie dog shooters delighting in “maximum carnage” and otherwise glorifying the violence of the animals’ deaths, as well as in some cases spreading misinformation about the prairie dogs’ ecological role, can be found at: [dogbegone.com](http://dogbegone.com); [blackboreproductions.com/red-mist-death-on-the-prairie.aspx](http://blackboreproductions.com/red-mist-death-on-the-prairie.aspx) (stating that the prairie dog population is “exploding” and comparing them to a zombie apocalypse); [www.youtube.com/watch?v=GD37WWhVGec](http://www.youtube.com/watch?v=GD37WWhVGec) (7:25 “You ripped him up! Very nice.”); [www.youtube.com/watch?v=1YmeWXgQOyI](http://www.youtube.com/watch?v=1YmeWXgQOyI) (at the 3:40 mark shooters laugh at the struggles of a wounded prairie dog; this video has multiple instances of prairie dogs being wounded but not killed. There is also an extended version at [www.youtube.com/watch?v=lkVJ5gCczJ4](http://www.youtube.com/watch?v=lkVJ5gCczJ4));



declining numbers of prairie dogs, and ethical and moral issues associated with this practice, it is difficult to justify the shooting of prairie dogs in the name of recreation” (Slobodchikoff et al., 2009, p. 159). Public lands, in particular, should be a refuge from the widespread persecution that prairie dog species face.

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[bulletin accurateshooter.com/2014/09/hunting-prairie-dogs-in-south-dakota-with-dan-eigen](http://bulletin accurateshooter.com/2014/09/hunting-prairie-dogs-in-south-dakota-with-dan-eigen), starting at approximately the 2:20 mark; [www.youtube.com/watch?v=nbUSfYBPjmo](http://www.youtube.com/watch?v=nbUSfYBPjmo); [www.youtube.com/watch?v=GD37WWhVGec](http://www.youtube.com/watch?v=GD37WWhVGec)

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## **Attachment 1**

### **Wording from 2006 The Greater Yellowstone Area National Forests Plan Amendment**

#### From Amendment part 1 -- Goal, standards, guidelines, and monitoring

##### **Grizzly Bear Habitat Conservation Standard For Livestock Grazing**

Inside the Primary Conservation Area, do not create new active commercial livestock grazing allotments, do not increase permitted sheep animal months from the 1998 baseline (Figure A-9), and phase out existing sheep allotments as opportunities arise with willing permittees (Page A-4).

##### ***Application Rule for Livestock Grazing Standard***

Allotments include both vacant and active commercial grazing allotments. Reissuance of permits for vacant cattle allotments may result in an increase in the number of permitted cattle, but the number of allotments must remain at or below the 1998 baseline. Allow combining or dividing existing allotments as long as acreage in allotments does not increase. Any such use of vacant cattle allotments resulting in an increase in permitted cattle numbers could be allowed only after an analysis to evaluate impacts on grizzly bears (Page A-4).

##### **Grizzly bear habitat conservation guideline for livestock grazing**

Inside the Primary Conservation Area, cattle allotments or portions of cattle allotments with recurring conflicts that cannot be resolved through modification of grazing practices may be retired as opportunities arise with willing permittees. Outside the Primary Conservation Area in areas identified in state management plans as biologically suitable and socially acceptable for grizzly bear occupancy, livestock allotments or portions of allotments with recurring conflict that cannot be resolved through modification of grazing practices may be retired as opportunities arise with willing permittees (Page A-4).

##### ***Application Rule for livestock grazing guideline***

Permittees with allotments with recurring conflicts will be given the opportunity to place livestock in a vacant allotment outside the Primary Conservation Area where there is less likelihood for conflicts with grizzly bears as these allotments become available (Page A-5).

##### **Grizzly bear habitat conservation monitoring for livestock grazing**

Inside the Primary Conservation Area, monitor, compare to the 1998 baseline, and annually submit for inclusion in the Interagency Grizzly Bear Study Team Annual Report: the number of commercial livestock grazing allotments on the national forest and the number of permitted domestic sheep allotments for recurring conflicts with grizzly bears. (Page A-5)

#### From Amendment part 2 -- The 1998 baseline

##### ***Livestock grazing on public lands within the Primary Conservation Area***

There were 100 commercial livestock grazing allotments inside the Primary Conservation Area in 1998 and 23,090 permitted sheep animal months (Figure A-9). Allotments with less than 100 acres inside the Primary Conservation Area were not included. Where several allotments are managed as one, this was counted as a single allotment. Sheep animal

months are calculated by multiplying the permitted number of sheep times the months of permitted use. In many cases, actual use by sheep may have been less than the permitted numbers identified for 1998 (Page A-6).