



**National Headquarters**

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Submitted via electronic mail to [objections-intermtn-regional-office@fs.fed.us](mailto:objections-intermtn-regional-office@fs.fed.us).

April 6, 2015

Nora Rasure  
Regional Forester  
U.S. Forest Service  
Intermountain Region  
324 25<sup>th</sup> Street  
Ogden, Utah 84401

Dear Ms. Rasure:

Defenders of Wildlife was pleased to review the Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Final Environmental Impact Statement (FEIS) and Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Draft Record of Decision (draft ROD). The Humboldt-Toiyabe National will publish a final Record of Decision (final ROD) from this planning process that will amend the Toiyabe National Forest Land and Resource Management Plan with new prescriptions to conserve the bi-state Distinct Population Segment (DPS) of greater sage-grouse (bi-state sage-grouse). We are concerned, however, that some conservation measures in the draft ROD will fail to meet this purpose and need for the amendment. Defenders respectfully submits the following objection with the intent of improving those measures in the final ROD.

Please direct correspondence related to this protest to:

Mark Salvo  
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Defenders of Wildlife  
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*Bi-State Sage-Grouse*

The bi-state sage-grouse is a unique subpopulation of sage-grouse (*Centrocercus urophasianus*) that inhabits sagebrush steppe on the border of east-central California and southwestern Nevada. Research indicates that, genetically, the bi-state population is at least as different from greater sage-grouse as are Gunnison sage-grouse, which were designated a separate species from greater sage-grouse in 2000 (Oyler-McCance et al. 2005).

Aside from their distinct genetic traits, bi-state grouse appear and behave as other sage-grouse, and have the same habitat requirements. The bi-state population occurs at the periphery of greater sage-grouse range, occupying an especially fragile area of sagebrush steppe. The bi-state's limited range and small population make them particularly vulnerable to landscape disturbances. At present, only about 5,000 bi-state sage-grouse remain from a historic population that might have once numbered more than twice that number (78 Fed. Reg. 64362). Many factors have contributed to the population's decline, including livestock grazing, invasive species, unnatural fire, mining, off-road vehicle use and other effects that eliminate and degrade sagebrush habitat (FEIS: 8, fn. 1, *citing* Bi-state Executive Oversight Committee for the Conservation of Greater Sage-grouse (2012); FEIS: 85, Table 3-9).

In 2010, the U.S. Fish and Wildlife Service (FWS) determined that the bi-state sage-grouse were “warranted, but precluded” for listing under the Endangered Species Act (ESA) (78 Fed. Reg. 64358). Among other concerns, FWS found a lack of adequate regulatory mechanisms to conserve bi-state sage-grouse and their habitat as a factor supporting listing. As the FEIS observed, FWS concluded that “existing regulatory mechanisms to protect sage grouse and their habitats in the Bi-state area ‘...afford sufficient discretion to the decision makers as to render them inadequate to ameliorate the threats to the Bi-state Distinct Population Segment’” (FEIS: 1).

FWS subsequently proposed to list the bi-state sage-grouse as “threatened” under the ESA with more than 1.8 million acres of critical habitat in October 2013 (78 Fed. Reg. 64358; 78 Fed. Reg. 64328). The agency confirmed its previous finding that various land uses and related effects, as well as a lack of adequate regulatory mechanisms to conserve the population continue to threaten bi-state sage-grouse (78 Fed. Reg. 64358).

#### *Purpose and Need for the FEIS*

The Forest Service manages approximately 426,809 acres of bi-state sage-grouse habitat in the Humboldt-Toiyabe National Forest (FEIS: 1) and an additional 541,069 acres within the larger planning area for the FEIS (draft ROD: 1). All bi-state sage-grouse habitat is considered priority habitat for the species (FEIS: 7); there is no delineation of “general” and “priority” habitat for bi-state sage-grouse as there is for other sage-grouse planning efforts (FEIS: 7).

To address FWS's finding on bi-state sage-grouse, the Humboldt-Toiyabe National Forest proposes to amend the Toiyabe National Forest Land and Resource Management Plan to “conserve, enhance, and/or restore habitats to provide for the long-term viability” of the population (FEIS: abstract; 8; 9).

#### *Opportunities for Improvement*

Defenders of Wildlife outlined science-based measures to protect and recover bi-state sage-grouse in comments on the Greater Sage-Grouse Bi-State Distinct Population Segment Forest Plan Amendment and Draft Environmental Impact Statement (January 17, 2014) (DEIS) and the Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Revised Draft Environmental Impact Statement (October 9, 2014) (Revised DEIS). These included conservation prescriptions for livestock grazing management and invasive species control in sage-grouse habitat.

We appreciate that the draft ROD incorporates many of the management recommendations and references included in our comments, but we are confused about the apparent disconnect between the best available science cited in both the FEIS and our comments, and certain management prescriptions included in the draft ROD. We are concerned that some of these measures are inadequate to meet the purpose and need for the plan amendment.

- **Grazing management under the proposed alternative may not achieve desired habitat conditions for sage-grouse.**

The FEIS includes a table of desired habitat conditions for sage-grouse (FEIS: 15-16, Table 2-1), which the Humboldt-Toiyabe National Forest adopted for its plan amendment in the draft ROD (draft ROD: 2). A desired condition for nesting/breeding habitat is that “[p]erennial grass height provide[] overhead and lateral concealment from predators,” citing Connelly et al. 2000; Stiver et al. [in press]; Connelly et al. 2003; Hagen et al. 2007 (FEIS: 15, Table 2-1). A desired condition for brood-rearing/summer habitat is that “[g]rass/forb height is greater than 7 inches (Hagen et al. 2007)” (FEIS: 16, Table 2-1).

The desired condition for nesting/breeding habitat should require minimum 7-inch grass height, same as brood-rearing/summer habitat. As we stated in our comments on the Revised DEIS:

Sage-grouse management guidelines recommend that grazing maintain a minimum of 7 inches (18 cm) grass height in nesting and brood-rearing-rearing habitat (Connelly et al. 2000; Hagen et al. 2007; *see also* Braun et al. 2005 and Kaczor 2008). USFWS supports the 7-inch standard for the Bi-State DPS (BSSG Assessment 2013: 58-59). Gregg et al. (1994: 165) noted that “[l]and management practices that decrease tall grass and medium height shrub cover at potential nest sites may be detrimental to sage grouse populations because of increased nest predation. ... Grazing of tall grasses to <18 cm would decrease their value for nest concealment. ... Management activities should allow for maintenance of tall, residual grasses or, where necessary, restoration of grass cover within these stands.” Because sage-grouse nesting generally begins prior to the onset of the growing season, residual vegetation from the previous year dictates available hiding cover (Cagney et al. 2010). Consequently, management should ensure that grass height averages 7 inches after the growing season to support sage-grouse nesting the following year.

Holloran et al. (2005: 648) documented the importance of herbaceous cover, including residual grass, to sage-grouse nesting success and concluded that “annual grazing in nesting habitat, regardless of the timing, could negatively impact the following year’s nesting success [by reducing residual vegetation].” Tall, dense, vegetational cover provides scent, visual and physical barriers to predation on nesting sage-grouse hens, sage-grouse nests and chicks, and may enhance nest success (Gregg et al. 1994; Rebholz 2007; Herman-Brunson et al. 2009). Hagen et al. (2007) conducted a quantitative meta-analysis of existing research on greater sage-grouse nesting and brood-rearing habitat and confirmed that female sage-grouse typically select nesting sites with greater sagebrush cover and grass height compared to random locations, and that brood areas usually had less sagebrush, taller grasses, and greater forb and grass cover than at random sites.

It is notable that some of the same scientific references cited in the FEIS in support of the minimum grass height for brood-rearing/summer habitat also recommend managing for 7-inch grass height in nesting/breeding habitat. The draft ROD also recognizes the importance of “manag[ing] livestock grazing to maintain residual cover of herbaceous vegetation so as to reduce predation during breeding/nesting season (March 1 to June 30) within 3 miles of active lek sites” (draft ROD: 11, Table ROD-1, B-RU-S-01), although it does not prescribe a minimum grass height for these habitat types.

**Recommended change:** Add 7-inch minimum grass height as a desired condition for nesting/breeding habitat in Table 2-1 (or Table 1 in the plan amendment; draft ROD: 39-40) to support sage-grouse productivity.

While the desired habitat conditions in Table 2-1 are generally in accord with the best available science and would probably benefit bi-state sage-grouse, it is unclear if certain land uses, particularly livestock grazing, would be required to achieve those conditions. For example, the forest has selected a standard that would require that “grazing permits, annual operating instructions, or other appropriate mechanism for livestock management... include terms, conditions, and direction to move toward or maintain bi-state DPS habitat desired conditions” (draft ROD: 11, Table ROD-1, B-RP-S-01; draft ROD: 45, Table 4, RP-S-01). It is presumed “desired habitat conditions” are those listed in Table 2-1 (Table 1 in the plan amendment), although this should be more clearly stated. It is also concerning that grazing permittees need only be “mov[ing] toward” maintaining these conditions to meet the standard, even in cases where habitat may be heavily degraded. It could be many years before desired conditions are finally restored (if at all) in these areas under the standard as currently written.

**Recommended change:** Clearly state that grazing permits, annual operating instructions, or other appropriate mechanism for livestock management include terms, conditions, and direction to maintain or attain, as quickly as possible, bi-state DPS habitat desired conditions in Table 2-1 (or Table 1 in the plan amendment; draft ROD: 39-40).

We are also concerned that separate and contradictory grazing prescriptions in the draft ROD may prevent the forest from achieving desired conditions in Table 2-1 (Table 1 in the plan amendment). The amendment includes a separate utilization schedule (draft ROD: 45, Table 4; *see also* FEIS: 46, Table 2-6), which fails to require a minimum grass height in sage-grouse habitat (as called for in Table 2-1, Table 1 in the plan amendment), except in riparian zones, where livestock would be removed when 4-6 inches of stubble height remained (draft ROD: 45, Table 4, RU-S-02, RU-S-03; FEIS: 46, Table 2-6).<sup>1</sup> The conflict between achieving the desired condition for brood-rearing/summer habitat (which includes riparian areas)—7 inches grass height—and the maximum utilization rate allowed in riparian areas in Table 4 is obvious. It is unclear which prescription controls in the likely case that grazing has compromised desired conditions in Table 2-1 (Table 1 in the plan amendment), but hasn’t exceeded utilization standards in Table 4 in the plan amendment (draft ROD: 45, Table 4). The FEIS assumes agencies can manage for both “residual cover” and

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<sup>1</sup> There is some confusion in the draft ROD about whether the Humboldt-Toiyabe National Forest will adopt the utilization standards in Table 2-6 in the FEIS. The Forest Supervisor contends that his decision “does not include approval of the monitoring elements identified as part of the proposed action, displayed in Table 2-6 of the final EIS” (draft ROD: 2), even though Table 2-6 is incorporated in its entirety in Table 4 in the plan amendment (draft ROD: 45, Table 4). It also appears that the draft ROD misidentifies Table 2-6 as Table 2-5 at \*B-RU-S-02 in Table ROD-1 (draft ROD: 11, Table ROD-1).

allowable utilization simultaneously (FEIS: 106), although it also admits there is no correlation between utilization and grass height (FEIS: 281).

It is also troublesome that the only measure identified for grazing in upland habitats is percent utilization of vegetative communities, including <35% - <45% of herbaceous vegetation in big sagebrush communities (draft ROD: 45, Table 4, RU-S-02, RU-S-03). Besides being notoriously difficult to monitor and measure, these utilization rates are too high to maintain healthy, diverse, vegetative communities with sufficient food and cover for sage-grouse. As we stated in our comments on the DEIS, “[u]tilization levels should not exceed 25 percent annually on uplands, meadows, flood plains and riparian habitat (Holechek et al. 2010; BLM & USFS 1994).” Holechek et al. (2010: 290), citing Gregg et al. (1994) and Sveum et al. (1998) (also referenced in the FEIS at 106), noted that grazing must be kept at conservative levels (25 to 35 percent use) “for high nesting success by sage-grouse.” Braun (2006, unpublished; cited in the FEIS) similarly recommended limiting grazing use to 25-30 percent utilization. The FEIS, citing Holechek (2011), recognizes the negative effects of over-utilization on soil and vegetative communities (FEIS: 102).

Numerous references have settled on a general 25 percent harvest coefficient for allocating forage for livestock (Holechek et al. 2010: 157, *citing* Troxel and White 1989; Galt et al. 2000; Lacey et al. 1994; Johnston et al. 1996; White and McGinty 1997; NRCS 1997). Although this rate may be more conservative than typically prescribed for light grazing, it allows both forage species and livestock to maximize their productivity, accommodates errors in forage production estimates, accounts for the potential effects of drought, and supports multiple use values (Holechek et al. 2010). Holechek et al. (2010: 157) also noted that, because most ranchers have difficulty monitoring and measuring annual grazing utilization, use of grazing coefficients higher than 25 percent “invariably leads to land degradation...when drought occurs because of rancher reluctance [to reduce livestock numbers].” Limiting livestock grazing to 25 percent utilization would help support sage-grouse habitat objectives, such as maintaining a minimum stubble height (*see* Holechek et al. 2010: 164; Manier et al. 2013: 97). An unpublished case study of the Antelope Springs Allotment in southern Idaho demonstrates that ranching operations can be successful and improve sage-grouse habitat using a 20 percent utilization standard (Steubner 2013, unpublished).

**Recommended change:** Clarify that utilization standards in Table 4 in the plan amendment are subject to maintaining or restoring desired habitat conditions in Table 2-1 (Table 1 in the plan amendment) in the final ROD. Limit utilization of herbaceous species in upland habitat to 25 percent annually to maintain and restore forage species and provide for sustainable livestock production.

- **The use of livestock to control annual grasses (cheatgrass) is unproven, unlikely to achieve desired habitat conditions, and may contribute to continued degradation of sage-grouse habitat.**

The draft ROD includes a guideline to use livestock to “target removal of cheatgrass or other vegetation hindering bi-state DPS objectives to move habitat toward desired habitat conditions (Table 2-1, final EIS) when restoring habitat and or mitigating disturbance. Sheep, goats, or cattle may be used as long as the animals are intensely managed and removed when the utilization of desirable species reaches 35%” (draft ROD: 13, Table ROD-1, B-Weed G-01) (notably, the use of livestock to control cheatgrass is not specifically identified in Table 4 in the plan amendment).

There is little scientific support for using domestic livestock to control cheatgrass. As the FEIS noted:

Recent research suggests that cattle grazing, even at the highest intensities, does not reduce cheatgrass cover. Increasing intensity of cattle grazing results in a decrease in the remnant native perennial grasses and biological soil crusts which promotes an increase in the magnitude of cheatgrass dominance (Reisner 2010; Reisner et al. 2013). While cattle grazing may not be effective for cheatgrass control, many species of noxious and invasive weeds can be controlled with specifically designed grazing strategies using cattle, sheep, and goats (Davison et al. 2005; Olson 1999) (FEIS: 110).

The Bureau of Land Management advised against using livestock to control cheatgrass in the Idaho and Southwestern Montana Greater Sage-Grouse Draft Land Use Plan Amendment and Environmental Impact Statement, as Defenders quoted in our comments on the Revised DEIS:

Intensive livestock grazing is often suggested for controlling cheatgrass competition. Although targeted grazing may have some applications for fuels management, it is not effective in reducing cheatgrass competition (Hempy-Mayer and Pyke 2008). During the short time when cheatgrass is highly palatable in the spring, a sufficient number of livestock cannot be concentrated on a small enough area to reduce the cheatgrass seed significantly or reduce cheatgrass seed lying on the soil surface. In addition, this type of grazing can be detrimental to remaining perennial grasses, opening the site up for further cheatgrass expansion in the future. (Idaho: 3-64 – 3-65)

In fact, the best available science recommends limiting livestock grazing where it may contribute to the spread of cheatgrass. Defenders excerpted those recommendations in our comments on the Revised DEIS:

Reisner et al. (2013) found that, even after controlling for other factors that may contribute to the spread of cheatgrass, there was a strong correlation between grazing and cheatgrass incursion.

If the goal is to conserve and restore resistance of [big sagebrush] systems, managers should consider maintaining or restoring: (i) high bunchgrass cover and structure characterized by spatially dispersed bunchgrasses and small gaps between them; (ii) a diverse assemblage of bunchgrass species to maximize competitive interactions with *B. tectorum* in time and space; and (iii) biological soil crusts to limit *B. tectorum* establishment. Passive restoration by reducing cumulative cattle grazing may be one of the most effective means of achieving these three goals. (Reisner et al. 2013: 1)

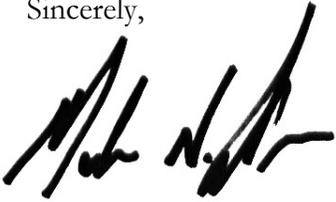
**Recommended change:** Do not allow use of livestock to control cheatgrass in the final ROD.

The draft ROD contends that the approved amendment in the draft ROD meets the purpose and need of the planning process to conserve bi-state sage-grouse (draft ROD: 3). We are concerned that certain measures in the amendment would prevent land managers from achieving this goal. We hope

the Forest Service will accept our recommendations for improving the final ROD to conserve sage-grouse and its habitat.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark N. Salvo', written in a cursive style.

Mark N. Salvo  
Director, Federal Lands Conservation

Attachments

Defenders of Wildlife Comments on the Greater Sage-Grouse Bi-State Distinct Population Segment Forest Plan Amendment and Draft Environmental Impact Statement (January 17, 2014)

Defenders of Wildlife Comments on the Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Revised Draft Environmental Impact Statement (October 9, 2014)