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Working to protect and restore Western Watersheds

April 7, 2015

BY E-MAIL

Nora Rasure, Regional Forester
Objection Reviewing Officer
Intermountain Region USFS
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Ogden, Utah 84401

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Objection
Draft Record of Decision
Greater Sage-grouse Bi-state Distinct Population Segment Forest
Plan Amendment
USDA Forest Service, Humboldt-Toiyabe National Forest
Alpine and Mono Counties, California Douglas, Esmeralda, Lyon,
and Mineral Counties, Nevada

Dear Regional Forester Rasure:

Western Watersheds Project hereby files this Objection to the Draft Record of Decision for the Humboldt-Toiyabe National Forest Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment. This decision is subject to the Predecisional Administrative Review Process (Objection Process) pursuant to 36 CFR 218, subparts A and B.

Objector's name and address:

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Project Being Objected to:

Project:

Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment
Final Environmental Impact Statement and Draft Record of Decision.

Name and title of the responsible official:

William A. Dunkelberger
Forest Supervisor
Humboldt-Toiyabe National Forest
1200 Franklin Way
Sparks, NV 89431-6432

Pertinent Prior Comments & Other Evidence of Involvement:

Western Watersheds Project has a long history of involvement in projects conducted on Humboldt-Toiyabe National Forest and has a specific interest in the Forest's management of greater sage-grouse habitats. Western Watersheds Project was a co-petitioner on the November 15, 2005 listing petition that resulted in the USFWS proposing to list the Bi-State population of greater sage-grouse under the Endangered Species Act. Western Watersheds Project has also had a long history of involvement in projects in the Bi-State Sage-grouse region. Western Watersheds Project members and staff (including Western Watersheds Project's California Director) have visited and used the project area on many occasions. Western Watersheds Project engaged with the agencies and submitted substantive comment letters and relevant literature at every available opportunity during the preparation and development of the Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment:

01/30/13: Western Watersheds Project's scoping comments dated January 29, 2013 for the Greater Sage-Grouse Bi-State Distinct Population Segment Forest Plan Amendment were submitted by Katie Fite, Western Watersheds Project Boise Office, on January 30, 2013 in response to the November 30, 2012 notice of intent to prepare an EIS (Federal Register, volume 77, number 231). The notice asked for public comment on the proposal to be received by January 30, 2013 so these comments were timely. The comments package included prior comments on the Greater Sage-grouse EIS dated March 23, 2012, Western Watersheds Project's Bi-State ACEC Proposal, and scientific literature supplied on CD.

01/14/14: Western Watersheds Project's comments on the DEIS for Greater Sage-Grouse Bi-State Distinct Population Segment Forest Plan Amendment were submitted by Katie Fite, Western Watersheds Project Boise Office, on January 14, 2014 in response to the August 23, 2013 publication of the notice of availability in the Federal Register. The original 90-day comment period was extended twice and ended January 17, 2014 so these comments were timely. Copies of scientific literature were supplied on CD.

10/05/14: Western Watersheds Project's comments on the Revised DEIS for Greater Sage-Grouse Bi-State Distinct Population Segment Forest Plan Amendment were submitted by Katie Fite, Western Watersheds Project Boise Office, on October 2, 2014 in response to the July 11, 2014 publication of the notice of availability for the revised draft EIS in the Federal Register. This comment period ended on October 9, 2014 so these comments were timely. Copies of scientific literature were supplied on CD.

All of our objections are based on issues previously raised in our comments.

Reasons for Objections

Western Watersheds Project has reviewed the Forest Service's Final EIS and the Draft Record of Decision ("DROD") for the Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Humboldt-Toiyabe National Forest signed by Forest Supervisor William A. Dunkelberger and dated February 2015. Pursuant to Forest Service regulations at 36 C.F.R. § 219 et seq., we respectfully submit this objection.

Western Watersheds Project is objecting to this Proposed Plan Amendment because it will impact significant resources of interest to Western Watersheds Project and its staff and members, and because proceeding with this Proposed Plan Amendment project will violate multiple laws including the National Environmental Policy Act ("NEPA"), the National Forest Management Act ("NFMA"), the Federal Land Policy Management Act ("FLPMA"), and the Endangered Species Act ("ESA").

Objection 1. The FEIS Failed to Consider a Range of Reasonable Alternatives

The NEPA implementing regulations require agencies to "Rigorously explore and objectively evaluate all reasonable alternatives" to the proposed action. Here, despite alternative proposals from Western Watersheds Project and others, the FEIS considers only 2 grazing alternatives. Either 39,322 AUMs would be available to livestock on 848,967 acres of Bi-State sage-grouse habitat (No Action and the Preferred Alternative) or 0 AUMs would be available for livestock (Alternative C). And clearly, the Forest had no intention of opting for Alternative C. Although we asked for the agencies to consider reductions in livestock grazing, no reduced grazing alternative was even considered.

It is both absurd and disingenuous of the agencies to imply that considering extreme alternatives allowing 85,886 AUMs (for the Forest and BLM) and 0 AUMs is somehow informative of reduced grazing. FEIS at 267¹. Although the FEIS admits that some of the BLM allotments were failing to meet Land Health Standards there was no consideration of a reduced

¹ By having alternatives that analyze the "ceiling" as well as the "floor" of a range of options, we can disclose the effects of these "bookends" and make any needed modifications in management language in the decision knowing that the potential effects of those modifications were considered (as long as those effects fall within the range analyzed).

livestock grazing alternative. Although the USFWS has proposed critical habitat for Bi-State sage-grouse and has identified livestock grazing as a threat there was no attempt made in the FEIS to consider reduced livestock grazing in that proposed critical habitat.

Indeed, the Forest is proposing to add seasonal restrictions on livestock grazing but is maintaining the current forage allocation levels. According to the FEIS at 106, “Updated utilization standards would be applied to Bi-state DPS habitat within grazing allotments. Standard B-RU-S-01 would require managing grazing to maintain residual cover of herbaceous vegetation within 3 miles of active leks during the breeding and nesting season (March 1 to June 30).” But this approach completely ignores the need to ensure that sufficient vegetative cover is present at the end of the year so that during the subsequent breeding season there is sufficient residual vegetation to ensure successful nesting. In contrast, consideration of reductions in the areas available for grazing by livestock would have allowed for this.

Objection 2. The Forest Failed to Consider Designating Zoological Areas

In our various comment letters we repeatedly asked the agencies to consider designating special areas for the Bi-State grouse, including Zoological Areas (for example, see our letter dated October 2, 2014 pages 10, 12, 32, 57.

Relevant sections of FSM 2300 that define and explain the Forest’s authority for designating Zoological Areas include:

2372 - AREAS DESIGNATED ADMINISTRATIVELY

2372.01 - Authority. The authority for administratively designating, preserving, and managing special areas within National Forests is found in the principal acts from 1897 to the present that authorize multiple-use management and in 36 CFR 294.1.

2372.02 - Objective. To protect and manage for public use and enjoyment, special recreation areas with scenic, geological, botanical, zoological, paleontological, archaeological, or other special characteristics or unique values.

2372.05 – Definitions. 4. Zoological Area. A zoological area is a unit of land that contains animal specimens, animal groups, or animal communities that are significant because of their occurrence, habitat, location, life history, ecology, rarity, or other features.

Western Watersheds Project submitted a Bi-State ACEC Proposal on March 23, 2012 and again on January 30, 2013. This included lands within both BLM and Forest Service jurisdiction. As we explained in our comments, “there is a pressing need for the BSSG DEIS to lay out rock solid management, and to designate ACECs and Zoological areas with binding management requirements, and otherwise act to actually ensure conservation, enhancement and restoration of sage-grouse habitats and populations.”

Yet, despite the need for management changes and specific conservation land use designation proposals from the public, the FEIS dismisses designating special areas as a conservation tool. The FEIS repeatedly states, “This EIS is a Forest Service-lead planning effort and is following the Forest Service planning process. The Forest Service does not recognize or establish ACECs, nor does the Agency have the authority to establish special reserves equating to a wilderness (that authority resides with congress).” FEIS at 202, 210, 217, 242. But that the Forest Service was the lead agency does not absolve the two agencies from considering ACEC designations in a cooperative agency project. In fact NEPA specifically requires that an EIS to “Include reasonable alternatives not within the jurisdiction of the lead agency.” 40 CFR §1502.14(c). Nor does this rationale in any way address the Forest’s failure to consider establishing any Zoological Areas to conserve the Bi-State sage-grouse.

Making land use designations is one of the most powerful land use conservation tools in the limited toolbox available to land managers. Here, the Forest failed to consider designating Zoological Areas in this plan amendment process and failed to respond to public comment asking it to do so.

Objection 3. The FEIS Failed to Consider Allowing Permit Buyout or Retiring Voluntarily Relinquished Grazing Privileges

The FEIS failed to consider allowing the retirement of voluntarily relinquished grazing privileges to benefit Bi-State sage-grouse. Making provision for allotment buy-out and retirement would place an actual threat-reduction measure into the agency “tool box”. It would facilitate partnership and cooperation with conservation organizations such as the Sagebrush Habitat Conservation Fund which is attempting to reduce grazing conflicts in sage-grouse habitat while benefiting local livestock operators in Nevada. Adding retirement language would create a win-win-win situation for the agencies, the sage-grouse and for local communities.

The ecological benefits of retiring allotments are high and this action may be easier to accomplish than other proposed management solutions. Livestock grazing is a landscape level impact, and the action area for livestock impacts tends to very large with a footprint indicated by the size of the allotment itself. Removing livestock removes direct and indirect impacts at a landscape level as well as reducing impacts on specific, sensitive resources such as riparian areas, cultural sites, and sensitive species and rare plant habitats. Removal of livestock benefits wildlife by removing negative interspecies interactions, reducing competition for forage, and reducing the risk of spread of invasive plants. Combined with the removal of range improvements, this measure would also help reduce the impacts of other threats such as OHV activities and unauthorized route use by eliminating “attractive nuisances”, and would reduce subsidized predators such as ravens and coyotes that use those range improvements. It would also reduce trampling impacts to biological crusts and allow allotment lands to reach full potential as carbon sinks, thus helping to offset the loss of carbon sequestration from utility-scale developments. The inclusion of provisions for voluntary relinquishment/allotment retirement would provide the agencies the opportunity to include closing livestock grazing allotments as a component of the mitigation measures for other actions.

In response to our repeated requests that voluntary retirement and closure of livestock grazing allotments in Bi-State sage-grouse habitat be put on the table, this important conservation tool was never even considered at the Forest level. Likewise, the agencies even ignored consideration of closing vacant allotments in Bi-State sage-grouse habitat. FEIS at 223.

Objection 4. The FEIS Failed to Take a Hard Look at Livestock Grazing Impacts on Bi-State Sage-Grouse and its Habitat

Although the USFWS rates livestock grazing as threat, the FEIS has failed to take a hard look at livestock grazing impacts on Bi-State sage-grouse or their habitat. Much of the Bi-State sage-grouse habitat on the Forest is grazed by livestock:

Ranger District	# Allotments containing BSSG Habitat	Allotment Acres	Permitted AUMs	Acres of BSSG Habitat in Allotments
Bridgeport Ranger District	50	796,088	33,744	376,705
Carson Ranger District	10	52,879	5,578	42,594
Total	60	848,967	39,322	419,299

The FEIS proposes no change in the amount of Bi-State sage-grouse habitat open for grazing or in the number of AUMs permitted.” FEIS at 77. Further, “While permitted use will remain constant, adjustments in seasonal use and restrictions on the construction of range improvements may further restrict the ability of livestock operators to fully utilize permitted AUMs. The extent of this is unknown and would be based on allotment-specific analysis.” FEIS at 77. But *establishing that conservation measures are effective* is one of the key steps used by USFWS in determining the adequacy of regulatory mechanisms (see below).

These new standards will ostensibly be implemented on most allotments through the annual operating instructions. But if these standards do affect “the ability of livestock operators to fully utilize permitted AUMs” what happens? Is the Forest then going to complete a NEPA analysis to reduce the permitted AUMs? Is the Plan Amendment going to result in massive fence building exercises across the Forest to facilitate continued livestock grazing on portions of allotments that are not considered to be sage-grouse habitat? If the Forest really expects the proposed standards to effectively reduce available AUMs it should present that key analysis up front.

The FEIS fails to provide important baseline information such as when the allotment grazing permits will be up for renewal or how many permits have been renewed in the recent past and under what terms and conditions. Nor does the FEIS provide results of prior monitoring. The agencies claim that “detailed information on the monitoring information related to [prior] livestock grazing” is unnecessary. FEIS at 249. But past management and the results of that management are clearly relevant to understanding if the land use plan amendment will be effective. Establishing that conservation measures are effective is one of the key steps used by USFWS in determining the adequacy of regulatory mechanisms (see below).

Useful synopses of impacts to sage-grouse from livestock can be found in USFWS 2010² and USFWS 2013³. Greater sage-grouse are sagebrush obligates, and their populations are closely tied to the quantity and quality of sagebrush habitats, habitats that have been declining for at least the last 50 years (Connelly *et al.*, 2000⁴). The single, major activity responsible for many of these changes on public lands is livestock grazing and associated activities.

Research shows that when sage-grouse nests are actually monitored, trampling of nests and disturbance of nesting hens by cattle turns out to be relatively common; in one video-study, 6 sage-hens were disturbed by cattle on 55 video-monitored nests i.e. cattle disturbed 11% of nesting hens (Coates *et al.*, 2008⁵). At one of those nests, the disturbing cow was even observed to predate a sage-grouse egg. This is a significant impact that could be ended simply by closing grazing allotments with significant sage-grouse nesting habitat to further livestock use.

Livestock trampling impacts to biological soils crusts are of particular significance considering the spread of cheatgrass throughout the species' habitat which is both decreasing habitat quality and increasing fire risks. Fire and grazing was positively associated with nonnative abundance in all vegetation types with adequate sample sizes to evaluate these factors (Merriam *et al.*, 2007⁶). Biotic crust species richness and cover were inversely related to cover of cheatgrass (Ponzetti, *et al.*, 2007⁷). Direct experimentation has shown that lichen-dominated biological soil crust can inhibit cheatgrass germination (Deines *et al.*, 2007⁸).

Grazing across the west has led to the invasion of cheatgrass, a highly flammable noxious weed that accelerates the fire cycle to less than five years destroying the sagebrush upon which sage-grouse rely for food and cover. Approximately half of the remaining sagebrush habitat has a moderate to high probability of cheatgrass dominance (Meinke *et al.*, 2009⁹). Because sagebrush requires at least 15 years (and up to 50) to reoccupy burned sites, restoring invaded areas is a difficult and slow process. Preventing further spread into intact sagebrush should be prioritized.

² USFWS 2010. Endangered and Threatened Wildlife and Plants; 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered; Proposed Rule. Federal Register. March 23, 2010. 75(55): 13910-14008.

³ USFWS 2013. Endangered and Threatened Wildlife and Plants; Endangered and Threatened Wildlife and Plants; Endangered Status for Gunnison Sage-Grouse; Proposed Rule. Federal Register. January 11, 2013. 78(8): 2486-2538.

⁴ Connelly, J. W., Schroeder, M. A., Sands, A. R. and Braun C. E. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin, 28(4): 967-985.

⁵ Coates, P. S., Connelly, J. W. and Delehanty, D. J. 2008. Predators of Greater Sage Grouse nests identified by video monitoring. Journal of Field Ornithology, 79: 421-428.

⁶ Merriam, K. E., Keeley, J. E. and Beyers, J. L. 2007. The role of fuel breaks in the invasion of nonnative plants: U.S. Geological Survey Scientific Investigations Report 2006-5185, 69 pp.

⁷ Ponzetti, J., McCune, B., Pyke, D. A. 2007. Biotic soil crusts in relation to topography, cheatgrass and fire in the Columbia Basin, Washington. Bryologist, 110(4): 706-722.

⁸ Deines, L., Rosentreter, R., Eldridge, D. J. and Serpe, M. D. 2007. Germination and establishment of two annual grasses on lichen-dominated biological soil crusts. Plant Soil, 295(1-2): 23-35.

⁹ Meinke, C. W., Knick, S. T., Pyke, D. A. 2009. A spatial model to prioritize sagebrush landscapes in the intermountain west (U.S.A.) for restoration. Restoration Ecology, 17: 652-659.

The recent study by Reisner *et al.*, 2013¹⁰ concludes that livestock grazing contributes to the domination of some western landscapes by cheatgrass, an invasive grass that both destroys sage-grouse habitat and increases the frequency of wildfire. To mitigate the spread of cheatgrass, the study suggests maintaining and restoring bunchgrasses and soil crusts, two ecological features that are quickly degraded under the hooves of livestock. Such mitigation would require the decrease or elimination of livestock grazing in the affected areas.

Anderson and Inouye, 2001¹¹ found that viable remnant populations of native grasses and forbs are able to take advantage of improved growing conditions when livestock are removed. They found further that despite depauperate and homogenous conditions of permanent plots in 1950, after 45 years of no livestock grazing, vegetation had been anything but static, clearly refuting claims of long-term stability under shrub dominance. Mean richness per plot of ALL growth forms increased steadily in the absence of domestic livestock grazing. Grasses and forbs increased significantly.

Furthermore, historical and contemporary livestock production - the most widespread and long-running commercial use of public lands - can alter vegetation, soils, hydrology, and wildlife species composition and abundances in ways that exacerbate the effects of climate change on these resources (Beschta *et al.*, 2012¹²). Beschta *et al.*, recommend removing or reducing livestock across large areas of public land to make the habitat less susceptible to the effects of climate change.

To facilitate livestock grazing management, BLM and the Forest Service have constructed hundreds of thousands of miles of fences throughout the Bi-State sage-grouse habitat. Impacts from fences include loss of birds through collisions, fragmentation of habitat, habitat degradation, spread of invasive plants, facilitation of juniper expansion, and increased perching opportunities for predators such as ravens. Mortality associated with fence collisions can be dramatic in sage-grouse habitat. For example, Christiansen (2009¹³) observed strike rates of up to 12 strikes per mile of fence; Stevens (2011¹⁴) observed 1.2 strikes per mile.

In addition to posing a collision risk, fences facilitate the spread of exotic and invasive plants, and potentially increase mortality of sage-grouse by providing perches for predators such as ravens. Other effects include the potential to create a predator corridor along fences, and habitat fragmentation. Consequences of fragmentation include competition for fewer suitable nesting sites, reduced food supplies, and the isolation of breeding habitat from brood-rearing areas and leks from nesting habitat. Fences facilitate pinon-juniper encroachment into sage-brush

¹⁰ Reisner, M. D., Grace, J. B., Pyke, D. A. and Doescher, P. S. 2013. Conditions favouring *Bromus tectorum* dominance of endangered sagebrush steppe ecosystems. *J. Applied Ecology*. doi: 10.1111/1365-2664.12097

¹¹ Anderson, J. E. and Inouye, R. S. 2001. Landscape-Scale Changes in Plant Species Abundance and Biodiversity of a Sagebrush Steppe Over 45 Years. *Ecological Monographs*, 71(4): 531-556.

¹² Beschta, R. L., DellaSala, D. A., Donahue, D. L., Rhodes, J. J., Karr, J. R. O'Brien, M. H., Fleischner, T. L. and Deacon-Williams, C. 2012. Adapting to climate change on western public lands: addressing the impacts of domestic, wild and feral ungulates. *Environmental Management*, DOI 10.1007/s00267-012-9964-9

¹³ Christiansen, T. 2009. Fence Marking to Reduce Greater Sage-grouse (*Centrocercus urophasianus*) Collisions and Mortality near Farson, Wyoming - Summary of Interim Results. *Wyoming Game and Fish*. 2 pp..

¹⁴ Stevens, B. S. 2011. Impacts of Fences on Greater Sage-Grouse in Idaho: Collision, Mitigation, and Spatial Ecology. M.Sc. Thesis, University of Idaho.

habitat by providing perch sites for songbirds within sage-brush; rows of juniper seedlings can often be seen along fences where birds perch (Evans, 1988 page 12¹⁵). However, without removing the fences removal of pinon-juniper may also facilitate raven predation on sage-grouse by opening line of sight from fence posts. Sage-grouse select nest sites and brood sites away from avian predators (Dinkins *et al.*, 2012¹⁶); so, by opening up fences and facilitating raven perching, pinon-juniper treatments could paradoxically result in less nesting habitat being available for sage-grouse. It is an important management consideration to avoid negatively influencing sage-grouse nesting habitat to maintain nest dispersion to reduce predation (Holloran and Anderson, 2005¹⁷).

Objection 5. The FEIS Failed to Take a Hard Look at Livestock Grazing and West Nile Virus Impacts on Bi-State Sage-Grouse

The standard for draining water tanks now reads:

RI-S-05: Water developments (tanks/troughs) shall be drained when not in use, unless they are needed by other species, so they do not create a breeding ground for mosquitos that carry West Nile Virus.

Although this measure may have some effect, the analysis in the FEIS is inadequate to determine the extent of its effectiveness. Nor does the FEIS explain what the nebulous phrase, “unless they are needed by other species” means or how this is need is to be determined.

As we explained in our comments, draining tanks when livestock are absent doesn’t stop mosquitoes from living in squalid trampled mud holes, leaking pipelines, etc. Nor does it stop mosquito proliferation when livestock are present. In fact, the presence of livestock around the watering troughs is an issue because those livestock provide convenient blood meals for mosquitos and enhance mosquito proliferation. Mosquitoes proliferate most in the warmer months when livestock are most likely to be present. Under the Preferred Alternative livestock would increase in the summer months. No seasonal data for mosquito production or for West Nile Virus infection rates is provided by the FEIS. Thus, whether this measure will benefit or harm Bi-State sage-grouse is never addressed.

The FEIS also failed to consider that the increased stress due to cattle presence may result in increased susceptibility of sage-grouse to West Nile virus. Jankowski *et al.*, 2014¹⁸ found that residence in a cattle-grazed habitat was associated with increased stress hormone levels in a large

¹⁵ Evans, R. A. 1988. Management of pinyon-juniper woodlands. US Department of Agriculture, Forest Service, Intermountain Research Station. 34 pp.

¹⁶ Dinkins, J. B., Conover, M. R., Kirol, C. P. and Beck, J. L. 2012. Greater Sage-Grouse (*Centrocercus urophasianus*) Select Nest Sites and Brood Sites Away from Avian Predators. *The Auk*, 129(4): 600-610. doi: 10.1525/auk.2012.12009

¹⁷ Holloran, M. J. and Anderson, S. H. 2005. Spatial distribution of greater sage-grouse nests in relatively contiguous sagebrush habitats. *The Condor*, 107: 742-752.

¹⁸ Jankowski, M. D., Russell, R. E., Franson, J. C., Dusek, R. J., Hines, M. K., Gregg, M. and Hofmeister, E. K. 2014. Corticosterone Metabolite Concentrations in Greater sage-grouse are Positively Associated with the Presence of Cattle Grazing. *Rangeland Ecology and Management*. 67(3): 237-246. doi: <http://dx.doi.org/10.2111/REM-D-13-00137.1>

sample of greater sage-grouse (329 sage-grouse, 160 from grazed sites and 169 from ungrazed sites). They found higher immunoreactive corticosterone metabolites in greater sage-grouse in cattle-grazed versus ungrazed sites and found a positive correlation of immunoreactive corticosterone metabolites in greater sage-grouse with cattle fecal pat count. The maximum rise in immunoreactive corticosterone metabolites associated with the high end fecal pat count approached levels associated with the acute stress from capture. Lower and average fecal pat counts were associated with immunoreactive corticosterone metabolites levels that were comparable or higher than found in male sage-grouse in noise-treated leks. Jankowski *et al.*, 2014 postulate that the increases in the stress hormone may be a physiological response to the direct visual presence of cattle on the landscape, infrastructure associated with cattle grazing, or the use of degraded habitats (e.g., reductions in perennial grasses or trampled riparian areas). The increased stress may result in increased susceptibility of sage-grouse to West Nile virus. According to Blickley *et al.*, 2012¹⁹ (p. 7) reduced immune response due to elevated glucocorticoids could have a significant effect on survival in areas where sage-grouse are exposed to West Nile virus.

Objection 6. The Proposed Utilization Standards Are Inadequate

The presence of adequate residual vegetation is important to successful sage-grouse nesting and brood rearing. The key operative here is “residual vegetation”. Sage-grouse begin nesting in the early spring; the residual - often dried and brown - vegetation from the prior year provides a degree of camouflage for the drably colored sage hens as they sit on their nests. Unfortunately, the utilization standards are not sufficient to provide 7-9 inches of protective residual cover, especially given the already widespread depletion and species composition changes caused by grazing.

B-RU-S-01: Manage 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. FEIS at 30, 106

B-RU-S-02: Manage livestock grazing in accordance with the utilization standards in Table 2-6.

According to the FEIS at 106, “Updated utilization standards would be applied to bi-state DPS habitat within grazing allotments. Standard B-RU-S-01 would require managing grazing to maintain residual cover of herbaceous vegetation within 3 miles of active leks during the breeding and nesting season (March 1 to June 30). Standard B-RU-S-02 would apply the utilization standards in Table 3-14 to bi-state DPS habitat within grazing allotments in addition to standard B-RU-S-01.” But Table 3-14 does not include “residual cover” at all. It provides utilization standards for herbaceous and shrub species i.e., the percentage of new growth that can be eaten by livestock. This will not assure that sufficient residual cover remains in years with lower herbaceous productivity. We repeatedly explained to the agencies the problems of using

¹⁹ Blickley, J. L., Word, K. R., Krakauer, A. H., Phillips, J. L., Sells, S. N., Taff, C. C., Wingfield, J. C. and Patricelli, G. L. 2012. Experimental Chronic Noise Is Related to Elevated Fecal Corticosteroid Metabolites in Lekking Male Greater Sage-Grouse (*Centrocercus urophasianus*). PLoS ONE 7(11): e50462.

this percentage utilization approach. The utilization standard needs to be reworked to standards that will assure adequate cover in the following season.

Objection 7. “Targeted” Grazing In Cheatgrass-Infested Sage-grouse Habitat Is Dangerous and Inappropriate

In our October 2, 2014 comments (page 169) we included this quotation from Reisner, 2010²⁰

Management Implications These collective findings raise serious red flags regarding proposals to use cattle grazing to control *B. tectorum* in *Artemisia* ecosystems where remnant bunchgrass communities persist (Miller *et al.* 1994; Mosely 1996; Olson 1999). In contrast, numerous studies have recommended reducing cumulative livestock grazing levels as one of the most effective means of passively restoring *Artemisia* ecosystem resilience (McIver and Starr 2001; Suring *et al.* 2005; Wisdom and Chambers 2009; Pyke 2010). Our findings suggest that shifts in the size of and connectivity between basal gaps in perennial vegetation may serve as an important early warning indicator of when cattle grazing or other stressors are compromising *Artemisia* ecosystem resilience and resistance. Future research should focus on gathering information

The same concerns are expressed in almost identical language in Reisner *et al.*, 2013²¹ which we also cited and submitted:

Our findings raise serious concerns regarding proposals to use cattle grazing to control *B. tectorum* in these systems where remnant bunchgrass communities persist (Vallentine & Stevens 1994). In contrast, our findings support recent guidance for passively restoring resistance of these systems by reducing grazing levels (Pyke 2011). Future research should focus on gathering information concerning the size of and connectivity of such gaps across a range of ES consistent with maintaining resistance. These data could be used to develop indicators for adaptive management frameworks to conserve and restore these endangered systems.

Although the FEIS cites both studies, it simply ignores the clear concerns expressed in those studies regarding any proposals to use cattle grazing to control *B. tectorum*. It proposes:

*B-Weed G-01: Grazing may be used to target removal of cheatgrass or other vegetation hindering bi-state DPS objectives to move habitat toward desired habitat conditions (Table 2-1) 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%.

Despite the serious problems posed by cheatgrass, and the Forest’s own recognition that cattle are ineffective, the FEIS simply ignores recent peer-reviewed science in its analysis:

²⁰ Reisner, M. D. 2010. Drivers of plant community dynamics in sagebrush steppe ecosystems: cattle grazing, heat and water stress. Dissertation, Oregon State University, Corvallis, OR, pp. 286.

²¹ Reisner, M. D., Grace, J. B., Pyke, D. A. and Doescher, P. S. 2013. Conditions favouring *Bromus tectorum* dominance of endangered sagebrush steppe ecosystems. *Journal of Applied Ecology*. doi: 10.1111/1365-2664.12097

Guideline B-Weed-G-01 allows the use of domestic livestock to control undesirable vegetation in order to achieve bi-state DPS habitat desired conditions. 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).

Despite the contrary indications clearly espoused in recent period reviewed science, the FEIS uncritically relies on Davison *et al.*, 2005²² – an unpublished report that does not even mention cheatgrass, and a 1999 book chapter by Olson, 2009²³ which likewise fails to discuss cheatgrass. The FEIS simply ignores the fact that peer-reviewed scientific studies have established that grazing by livestock, especially by cattle, is a risk factor for cheatgrass proliferation, and requires a reduction in livestock use. Guideline B-Weed-G-01 should be re-stated to require mandatory reductions in cattle grazing in areas infested and at risk for infestation from cheatgrass.

The proposed Land Use Plan Amendments are supposed to “conserve, enhance, and/or restore habitats to provide for the long-term viability of the greater sage-grouse bi-state distinct population segment” to address the inadequacy of regulatory mechanisms identified by USFWS in its ‘proposed threatened’ decision. Guideline B-Weed-G-01 does the exact opposite.

Objection 8. The Forest Ignores Passive Restoration to Limit Invasive Species Expansion

Standard B-Wild-S-03 includes “limit the expansion or dominance of invasive species, including cheatgrass”. In response to comment on the how this can be effectively done, the FEIS at 233 responds

Response: Sometimes, doing the bare minimum to maintain habitat will be the best action we can take to limit the expansion of noxious and invasive species. By including this as a habitat restoration need in the RPMs, decision makers will be required to consider the potential effects of their proposed habitat restoration actions and take actions to limit the expansion or dominance of invasive species.

Western Watersheds Project agrees with the statement that “sometimes, doing the bare minimum to maintain habitat will be the best action we can take”. Yet throughout the entire process, the agencies have ignored our concerns that greater emphasis be placed on passive restoration. For example, eliminating or reducing livestock levels from Bi-State sage-grouse habitat will assist in passively restoring resistance to cheat grass dominance (Reisner *et al.*, 2013).

²² Davison, J.C.; Smith, E.; Wilson, L.M. 2005. Livestock grazing guidelines for controlling noxious weeds in the Western United States. University of Nevada Cooperative Extension and University of Idaho College of Agricultural and Life Sciences. Unpublished report. EB-06-05.

²³ Olson, B.E. 1999. Grazing and weeds. In: Sheley, R.L.; Petroff, J.K.; editors. Biology and Management of Noxious Rangeland Weeds. Oregon State University Press, Corvallis, OR. p. 85-96.

Western Watersheds Project commented that “Maintenance of large, intact sage communities must focus on removing harmful disturbances from those communities (such as livestock grazing disturbance, livestock facilities, excessive roading, etc.).” Curiously the agency response is “**Response:** Maintenance of large, intact sage communities must focus on removing harmful disturbances from those communities (such as livestock grazing disturbance, livestock facilities, excessive roading, etc.)” FEIS at 247. Evidently the agencies agree with Western Watersheds Project that livestock grazing disturbance, livestock facilities, and excessive roading, etc. should be removed.

The presence of livestock in critical habitat increases risks of wildfire. Combustion of cattle fecal pats has a wide range of implications for fire management. According to Scasta *et al.*, 2014²⁴, cattle fecal pats readily ignite, are a common source of spot fires in semiarid grasslands, and release extreme amounts of energy when burning.

Arkle *et al.*, 2014²⁵ made a comprehensive study of the effectiveness of restoration activities in burned sagebrush. They found that restoration actions did not increase the probability of burned areas meeting most guideline criteria. Of 313 plots seeded after fire, none met all sagebrush guidelines for breeding habitats. Less than 2% of treated plots met winter habitat guidelines. Arkle *et al.* concluded from their results that sage-grouse are relatively unlikely to use many burned areas within 20 years of fire, regardless of treatment, and that reestablishing sagebrush cover will require more than 20 years using past restoration methods. Their findings reiterate the importance of reducing threats to sage-grouse in their remaining occupied habitats. The findings also underline the need to avoid any use of prescribed fire in sage-grouse habitat.

Hess and Beck, 2014²⁶ also looked at the effectiveness of sage-grouse habitat restoration actions. They found that mowing did not promote a statistically significant increase in sage-grouse nesting or early brood-rearing habitat attributes such as cover or nutritional quality of food forbs, or counts of ants, beetles, or grasshoppers compared with reference sites.

Objection 9. The Proposed Disturbance Cap & Off-Site Mitigation Is Unclear

The FEIS references off-site mitigation to offset the surface disturbance of habitat (e.g. for Non-discretionary Locatable Minerals. FEIS at 53, 126) but does not provide a breakdown or tabulation of what off-site mitigation is available. According to the FEIS at 219, a description of the potential mitigation actions would be included in the final EIS. Where is this?

²⁴ Scasta, J. D., Weir, J. R., Engle, D. M. and Carlson, J. D. 2013. Combustion of Cattle Fecal Pats Ignited by Prescribed Fire. *Rangeland Ecology & Management*, 67: 229-233.

²⁵ Arkle, R. S., Pilliod, D. S., Hanser, S. E., Brooks, M. L., Chambers, J. C., Grace, J. B., Knutson, K. C., Pyke, D. A., Welty, J. L. and Wirth, T. A. 2014. Quantifying restoration effectiveness using multi-scale habitat models: implications for sage-grouse in the Great Basin. *Ecosphere* 5(3): 31. <http://dx.doi.org/10.1890/ES13-00278.1>

²⁶ Hess, J. E. and Beck, J. L. 2014. Forb, Insect, and Soil Response to Burning and Mowing Wyoming Big Sagebrush in Greater Sage-Grouse Breeding Habitat. *Environmental Management*. DOI 10.1007/s00267-014-0246-6.

There was evidently considerable confusion and concern expressed by many commenters including Western Watersheds Project over the proposed 3 percent disturbance cap. See FEIS at 202. The EIS has not critically assessed whether the Bi-State sage-grouse populations can actually withstand this 3% disturbance cap on Forest Service lands.

Objection 10. The FEIS Fails to Take a Hard Look at the Effects on Listed Species

Western Watersheds Project repeatedly asked the planners to look at the effects of the Proposed Amendments on native plants and wildlife, sensitive species, and other values of the public lands. The USFWS published a final rule designating the rare Webber's ivesia, *Ivesia webberi*, as a threatened species on June 3, 2014. 79 FR 33878. The USFWS also published a final rule designating critical habitat for Webber's ivesia that same day. 79 FR 32126. Webber's ivesia occurs in the project area and the project area also includes designated critical habitat for Webber's ivesia on BLM lands within the planning area boundary. The USFWS listed Webber's ivesia because of increased wildfire frequency within the species' range and increased wildfire suppression activities, off-highway vehicle (OHV) use, roads, development, livestock grazing, and climate change. 79 FR 33878. Livestock grazing has the potential to result in negative effects to *I. webberi* due to trampling and substrate disturbance. *ibid.* So do vegetation treatments and ground disturbing activities.

The FEIS does not even mention Webber's ivesia; in fact impacts to rare plants are entirely ignored. Clearly, if livestock grazing is a threat to Webber's ivesia any changes in the timing and distribution of livestock may affect the plant and its habitat. These potential impacts need to be analyzed.

Objection 11. The Proposed Decision Does Not Meet the Purpose and Need Because the Implementation and Effectiveness of the Forest's Land Use Plan Amendment Measures Are Uncertain

When the USFWS evaluates the Inadequacy of Existing Regulatory Mechanisms in making listing decisions it uses its 2003 Policy for Evaluation of Conservation Efforts When Making Listing Decisions ("PECE"). 68 FR 15100. This policy requires the USFWS to consider and evaluate new regulatory standards for (A) The certainty that the conservation effort will be implemented; and, (B) The certainty that the conservation effort will be effective.

The Forest must adopt adequate regulatory mechanisms to manage livestock grazing in sage-grouse habitat to avoid harming the species. Unfortunately, the Forest has considered no reductions in livestock, active AUMs remain unchanged, and no special Zoological Areas have been proposed. These measures would have all provided conservation certainty.

Here, the Forest has not even considered establishing Zoological Areas to protect Bi-State sage-grouse and its habitat, or even to protect the USFWS's Proposed Critical Habitat in this land use planning exercise. The FEIS has not shown that the utilization standards will be effective in maintaining sufficient residual vegetation nor has it established the effects of implementation on sage-grouse and sage-grouse habitat. The Forest is specifically promoting cattle grazing as a weed control mechanism despite the agency's own knowledge that this is not

just an ineffective practice but is diametrically opposite to scientists' recommendations to reduce cattle grazing to reduce cheatgrass infestation.

In Table 2-7, Issues Comparison by Alternative under No Action “Domestic livestock grazing would continue under the terms and conditions of the current grazing permits until updated by allotment-level NEPA analyses.” However, for the Preferred Alternative “Additional standards and guidelines would require grazing permits to be updated, utilization standards adjusted, and range improvements modified or removed in order to improve bi-state DPS habitat and reduce negative impacts from infrastructure. Reduced livestock use on Federal lands could lead to increased impacts on private lands.” Based on “would require grazing permits to be updated”, it appears that the amendment standards and guidelines would not be implemented until permit renewal. The FEIS omits any mention of the Nat'l Def. Authorization Act of 2015, Pub. L. No. 113-291 § 3023 from the list of Applicable Laws, Regulations, Policies and Executive Orders that is provided on page 12. This law allows that, “The terms and conditions in a grazing permit or lease that has expired, or was terminated due to a grazing preference transfer, shall be continued under a new permit or lease until the date on which the Secretary concerned completes any environmental analysis and documentation for the permit or lease required under the NEPA”. Of course, the permit length for those new permits would be for another 10 years under the same terms and conditions.

The USFWS 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 at 1. “To address the USFWS finding, the Forest and the BLM Carson City District and the Tonopah Field Office are proposing to amend their respective Forest Plan and RMPs, collectively referred to as “land use plans”, to include goals and objectives, and/or standards and guidelines, or actions and best management practices as part of a region-wide effort (USDI BLM and USDA Forest Service, draft, May 2013) to conserve the bi-state DPS and its habitat.” FEIS at 8. Clearly, with so much uncertainty over the implementation and effectiveness of the Forest Plan amendment the Forest has not reached the USFWS bar, and in doing so has failed to meet the stated Purpose and Need for the project. Under the PECE policy the USFWS will have no choice but to consider the proposed amendments as ineffective and/or of uncertain implementation.

HOW THE DRAFT PLAN DECISION MAY BE IMPROVED

The Forest Service should withdraw the proposed decision and instead act to implement a modified Alternative C - modified to specifically exclude guideline Weed-G-01 which if implemented would result in further degradation of already impaired sage-grouse habitat.

Alternative C was analyzed in the FEIS, would comply with Forest Service Policy, would provide the certainty required by the USFWS PECE policy that the conservation effort will be implemented and will be effective, would fit the purpose and need, and would ensure protection

from livestock impacts on these public lands to Bi-State sage-grouse, Bi-State sage-grouse habitat, and proposed B-State sage-grouse critical habitat.

In the alternative, the Forest Service should withdraw the Draft Decision and recirculate a revised DEIS that considers a range of alternatives, that considers measures that will be effective in conserving Bi-State sage-grouse and their habitat, and that takes hard look at the effects of each alternative on all of the Forests sensitive and significant resources.

Western Watersheds Project thanks you for your due consideration of our Objection. The literature cited within this letter was either cited by the Forest Service or was submitted during the planning process. If the Regional Forester needs copies of any of these publications we are happy to provide electronic copies on request. Please feel free to contact Western Watersheds Project's California Director by telephone at (818) 345-0425 or by e-mail at <mjconnor@westernwatersheds.org>.

Respectfully submitted,

A handwritten signature in black ink that reads "Michael J. Connor". The signature is written in a cursive style and is underlined with a single horizontal line.

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