



Michael J. Connor, Ph.D.
California Director
P.O. Box 2364, Reseda, CA 91337-2364
Tel: (818) 345-0425
Email: mjconnor@westernwatersheds.org
Web site: www.westernwatersheds.org

Working to protect and restore Western Watersheds

December 14, 2015

By Email

BLM Carson City District
Attn: Colleen Sievers, Project Manager
5665 Morgan Mill Rd., Carson City
NV 89701

Email: <blm_nv_ccdowebmail@blm.gov>
Colleen Sievers <csievers@blm.gov>

RE: Changes to the Nevada and California Greater Sage-Grouse Bi-State Distinct Population Segment Carson City Field Office Consolidated Resource Management Plan and the Tonopah Field Office Resource Management Plan Amendment, Nevada

Dear Bureau of Land Management:

Western Watersheds Project and the Center for Biological Diversity are pleased to offer the following comments in response to the Bureau of Land Management ("BLM") November 13, 2015 Federal Register Notice opening a comment period for significant changes to the Proposed Plan as set forth in the Greater Sage-Grouse Bi-State Distinct Population Segment (BSSG) Forest Plan Amendment and Final Environmental Impact Statement (EIS), announced on February 13, 2015.

The proposed changes include: (1) Identifying disturbance levels within BSSG habitat; (2) Adjusting buffers for tall structures near active or pending leks; (3) Adding a restriction for new high-power transmission lines; and (4) Changing on-the-ground management for habitat connectivity.

Western Watersheds Project works to protect and conserve the public lands, wilderness, wildlife and natural and cultural resources of the American West through education, scientific study, public policy initiatives, and litigation. Western Watersheds Project staff and members use and enjoy the region's public lands, including the lands at issue here, for its wildlife and other natural resources and for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes. Western Watersheds Project staff and members have personally visited and used these lands for many purposes including recreation and wildlife photography. Western

Watersheds Project has long worked to conserve the Bi-State sage-grouse and was a co-petitioner on the November 15, 2005 listing petition. Western Watersheds Project has engaged throughout this planning process including submitting scoping comments and Western Watersheds Project's Bi-State ACEC Proposal (January 30, 2013); comments on the DEIS for Greater Sage-Grouse Bi-State Distinct Population Segment Forest Plan Amendment on January 14, 2014; and comments on the revised draft EIS on October 5, 2014. We filed a formal "Protest" of the Final Plan and EIS with the BLM on March 13, 2015 and filed a formal Objection to the Final Plan and EIS with the Forest Service on April 7, 2015.

The Center for Biological Diversity is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center for Biological Diversity has over 900,000 members and activists that live near and/or enjoy the public lands where the Bi-State sage-grouse habitat occurs. The Center for Biological Diversity has an established interest in protecting the plant and animals in the Bi-State region including the imperiled Bi-State sage-grouse that reside in the area, and was a co-petitioner on the November 15, 2005 Bi-State sage-grouse listing petition. The Center for Biological Diversity has participated throughout this planning process including submitting scoping comments, comments on the DEIS, and filing a formal Objection.

Comments

The Proposed Plan Amendments and Changes Are Unclear:

An EIS "shall be concise, clear, and to the point". 40 CFR §1502.8. The BLM was a cooperative agency in the development of this land use plan amendment EIS. The lead agency was Humboldt-Toiyabe National Forest. In his Draft Record of Decision, the Humboldt-Toiyabe National Forest Supervisor states, "I have not selected one alternative over the other, but selected a mix of standards and guidelines from those available in the two action alternatives." Because the BLM never issued its draft decision, it is unclear if the agency will adopt the Preferred Alternative or take the same approach as the Forest Service. With this new reopening of the process, the BLM has an additional opportunity to clarify what it is going to do and an opportunity to address issues raised by the public during the comment and protest period.

In the Federal Register notice, the BLM states, "Following the release of the Proposed Plan and the conclusion of the protest process, the BLM identified changes and a clarification for the Proposed Plan as explained below and determined, pursuant to the applicable authorities (43 CFR 1610.2(f)(5) and 43 CFR 1610.5-1(b)), that public comment on those measures is necessary." But as we explain below, for several of the proposed changes the BLM failed to provide the specific language it is adopting. Nor has the BLM released its protest resolution report. This makes it difficult to assess the likely efficacy of the overall plan amendments or the November 2015 changes. Both NEPA and FLPMA explicitly note the importance of public input/involvement in land plan use planning processes. Effective commenting and review by the public is thwarted when the proposed action is not clear.

Habitat Disturbance:

The BLM's is now proposing to adopt a 3% cap on "anthropogenic disturbance" within Bi-State sage-grouse habitat:

Habitat Disturbance—Proposed Change

The BLM is changing the Proposed Plan, as it was set forth in the Plan Amendment and Final EIS, to set a total anthropogenic disturbance of no more than 3 percent of the total BSSG habitat on Federal lands within the Bodie Mountain/Grant, Desert Creek/Fales, and White Mountains population management unit boundaries (C-Wild-S-04), and a total anthropogenic disturbance of no more than 1.5 percent of the total BSSG habitat on Federal lands within the Pine Nut Mountains population management unit (PMU) boundaries (C-Wild-S-05), due to higher presence of risk factors in the PMU as analyzed under Final EIS Alternative C. This change is being made in response to issues raised during the protest period and based on additional policy discussions. Concerns were raised by the public that the BLM action was not adequate to protect BSSG and its habitat. Disturbance levels identified in the Final EIS will require site-specific project mitigation to insure no unmitigated net loss of habitat. This requires assessing habitat availability at the landscape scale.

The BLM thus appears to be adopting standards C-Wild S-04 and C-Wild S-05. According to the FEIS at 27, these are:

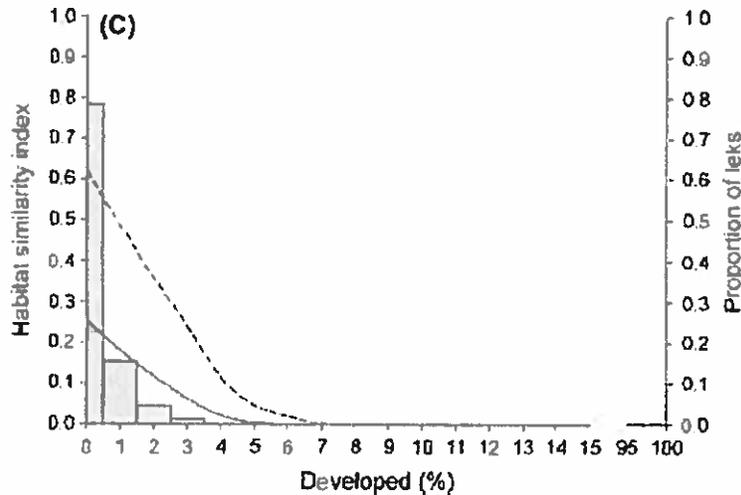
C-Wild S-04: Total anthropogenic disturbances shall affect no more than 3% of the total bi-state DPS habitat on Federal lands within the Bodie Mountain/Grant, Desert Creek/Fales, and White Mountains population management unit boundaries.

C-Wild S-05 Total anthropogenic disturbances shall affect no more than 1.5% of the total bi-state DPS habitat on Federal lands within the Pine Nut Mountains Population Management Unit boundaries.

However, the EIS never clearly defined "anthropogenic disturbances", the EIS did not provide an inventory of the percentage of BLM managed Bi-State DPS habitat that is already disturbed, and the EIS never critically assessed whether the BSSG populations can actually withstand these 1.5% and 3% caps without further population declines.

The "3%" target figure is derived from a modelling exercise that was conducted using data for greater sage-grouse across its range (Knick *et al.*, 2013¹). In that study, ninety-nine percent (99%) of active leks were in landscapes that were less than 3% developed (Knick *et al.*, 2013 page 6). As is clearly evident from the Knick *et al.* (2013) data, more than 90% of the leks were in landscapes that were less than 1% developed. Below is Figure 5C from Knick *et al.*:

¹ Knick, S. T., Hanser, S. E. and Preston, K. L. 2013. Modeling ecological minimum requirements for distribution of greater sage-grouse leks - Implications for population connectivity across their western range, USA. *Ecology and Evolution*, 3: 1539-1551.



About 78% of leks were in the 0 to 0.5% developed category. Less than 10% of leks were in areas greater than 1% developed.

Thus, based on the science the BLM should be adopting a maximum cap of 1% and even that may be too high, especially considering that areas of Bi-State sage-grouse habitat on public land adjacent to developed private land are unavailable to sage-grouse even if that habitat is in pristine condition. A 3% cap would allow every lek in this small population to be lost.

The BLM should consider alternative development caps that are lower than the proposed 1.5% and 3% caps. An alternative that limits total anthropogenic disturbances to no more than 1% of the total Bi-State DPS habitat on Federal lands within the Bodie Mountain/Grant, Desert Creek/Fales, and White Mountains population management unit boundaries, and 0.5% of the total Bi-State DPS habitat on Federal lands within the Pine Nut Mountains Population Management Unit boundaries would appear to be more reasonable based on the science and the need for the BLM to accommodate some new uses. The BLM must also define “anthropogenic disturbances” and provide an inventory of the percentage of BLM managed Bi-State DPS habitat that is already disturbed.

Adjusting Buffers for Tall Structures Leks:

Tall Structure Buffer—Proposed Change

As part of the protest process, the BLM found that it needed to correct an error in the Proposed Plan Amendment and Final EIS. The BLM found that it should have identified the buffer distance for tall structures as 4 miles from active or pending leks. This is consistent with management prescriptions proposed by the USFS. Specifically, the BLM proposes to adopt the action from Alternative C which states that tall structures, which could serve as predator perches, will not be authorized within 4 miles of an active or pending lek (C-LUSU-S-04). The 4-mile lek buffer accords with other prescriptions of surface disturbance in sage-grouse habitat and is consistent with best science available.

We support the BLM adopting the 4 mile buffer over the 2 mile buffer. However the BLM has not provided the actual language it will be adopting in the revised standard.

According to the FEIS at 23, the BLM proposed standard was “B-LUSU-S-01”:

B-LUSU-S-01: Do not install tall structures that could serve as predator perches within 2 miles of a lek.

Now the BLM appears to be proposing adopting “C-LUSU-S-04”:

C-LUSU-S-04: Do not install tall structures that could serve as predator perches within 4 miles of an active or pending lek.

Increasing the buffer for authorization of tall structures from 2 miles to 4 miles will improve consistency with the Forest Service prescription, however the Forest Service recognized a problem with C-LUSU-S-04 and agreed to modify it accordingly. The problem is that the standard as originally defined refers to “tall structures that could serve as predator perches” implying that tall structures that do not serve as a predator perches were not of concern. But sage-grouse avoid tall structures whether or not these structures are “predator perches”. Scientists have hypothesized that avoidance of tall structures by sage-grouse may be in part due to these structures providing predator perches but other rationales have also been proposed including factors related to perceived predation risk (Dinkins *et al.*, 2014²).

The Forest Service modified C-LUSU-S-04 to be consistent with best available science and in response to concerns expressed by the public to read:

C-LUSU-S-04: Do not install tall structures that could serve as predator perches or decrease the use of an area within 4 miles of an active or pending lek.

In order to meet the intentions stated in the Federal Register “to be consistent with the management prescriptions proposed by the USFS” and consistent with the best science available, the BLM should adopt the modified C-LUSA-S-04 as proposed by the USFS above.

Restricting New High-power Transmission Lines:

Transmission lines can cause sage-grouse mortality via bird collisions with lines, facilitate raptor predation of sage-grouse, the electromagnetic radiation emitted from transmission lines is known to negative effects on other bird species using areas on or near lines, and transmission lines convert habitat to non-habitat and fragment the remaining habitat, similar to roads (Wisdom *et al.*, 2011³). Excluding new transmission lines from Bi-State sage-grouse habitat is thus paramount. According to the Federal Register Notice:

High-Voltage ($\geq 120\text{kV}$) Transmission Line—Proposed Change

The BLM is designating exclusion areas for new high-power ($\geq 120\text{kV}$) transmission lines in BSSG habitat. Specifically, new high-power ($\geq 120\text{kV}$) transmission line corridors, rights-of way,

² Dinkins, J. B., Conover, M. R., Kirol, C. P., Beck, J. L. and Frey, S. N. 2014. Greater Sage-Grouse (*Centrocercus urophasianus*) select habitat based on avian predators, landscape composition, and anthropogenic features. *The Condor*, 116(4): 629-642.

³ Wisdom, M. J., Meinke, C. W., Knick, S. T. and Schroeder, M. A., 2011. Factors associated with extirpation of sage-grouse. *Studies in avian biology*, 38: 451-472.

facilities, or construction areas in habitat (outside of existing corridors) will not be authorized (C-Min-S-09). This change is being made in response to issues raised during the protest period and based on additional policy discussions and was analyzed under Alternative C in the EIS.

The BLM is thus now proposing to adopt standard C-Min-S-09. This Direction in the FEIS at 40 is:

C-Min-S-09: Do not authorize new high-power (120 kV) transmission line corridors, transmission line ROWs, transmission line construction, or transmission line facility construction in habitat outside existing corridors.

The original BLM proposed direction listed in the FEIS at 40 is “No proposed additions (covered by C-LUSU-S-04).” C-LUSU-S-04 restricts new tall structures in all sage-grouse habitat within 4 miles of a lek irrespective of whether this is in an existing transmission corridor. C-Min-S-09 does not exclude tall structures within existing corridors. The BLM needs to clarify that both C-Min-S-09 and C-LUSU-S-04 will apply to activities in existing transmission corridors to ensure that the proposed change is more beneficial and not more harmful to Bi-State sage-grouse.

Changing On-the-ground Management for Habitat Connectivity:

According to the Federal Register Notice, the BLM is clarifying language from Alternative C to provide for management of connectivity habitat. However, the clarification itself lacks clarity and it is entirely unclear what change is being proposed here.

Connectivity Habitat—Proposed Change

The BLM is clarifying language from Alternative C to provide for management of connectivity habitat. The BSSG landscape is fragmented by areas of agriculture and urbanization, as well as areas of naturally occurring and encroaching pinyon-juniper vegetation. Sage-grouse habitats within and between PMU are often separated by stretches of unsuitable areas that may inhibit sage-grouse movements across the landscape. Alternative C provides a limited amount of management direction to maintain or enhance suitability of connective area. Alternative C includes a goal about habitat and movement and an objective of improving degraded habitat, including areas with conifer encroachment (i.e., pinyon-juniper). Actions and Best Management Practices relating to connectivity apply primarily to mineral uses. Alternative C states that where valid existing rights exist, in connective habitat areas, vegetation characteristics suitable to sage-grouse should be maintained to the extent technically feasible (C-Min-S-01). In addition, Alternative C provides additional direction not specific to connectivity which states, “Vegetation treatments and post-disturbance restoration should seed and/or transplant sagebrush to restore large patches of sagebrush cover and connect existing patches” (C-Wild-S-02). Given the fragmented nature of the bi-state landscape and the level of apparent isolation of subpopulations, additional management direction for connective habitat area is necessary to facilitate sage-grouse movement, reduce isolation, and increase genetic interchange between subpopulations. This change is being made in response to policy discussions.

According to the table in the FEIS at 26, the Direction for C-Wild-S-02 reads:

C-Wild-S-02: Vegetation treatments and post-disturbance restoration shall seed and/or transplant sagebrush to restore large patches of sagebrush cover and connect existing patches.

Given the extremely low success rates for seeding and transplanting sagebrush (Arkle *et al.*, 2014⁴) the efficacy of this approach is questionable; however, according to the table in the FEIS at 26, the BLM Proposed Direction is listed as “Same as C-Wild-S-02” so the adoption of C-Wild-S-02 is not a change.

According to the table in the FEIS at 26, the Direction for C-Min-S-01 reads:

C-Min-S-01: In connective area, maintain vegetation characteristics suitable to bi-state DPS to the extent technically feasible.

The comparable Alternative B option reads:

B-Min-G-02: In connective area, maintain vegetation characteristics suitable to bi-state DPS to the extent technically feasible. The intent of the guideline is to minimize disturbance footprint wherever possible.

The comparable BLM Proposed Direction is listed in the same section of the table as “not applicable”. Now, the BLM appears to be trying to use this mining mitigation measure which is meant to minimize mining disturbance footprints “to provide for management of connectivity habitat”. According to the Federal notice “The BSSG landscape is fragmented by areas of agriculture and urbanization, as well as areas of naturally occurring and encroaching pinyon-juniper vegetation” and “Given the fragmented nature of the bi-state landscape and the level of apparent isolation of subpopulations, additional management direction for connective habitat area is necessary to facilitate sage-grouse movement, reduce isolation, and increase genetic interchange between subpopulations.” The BLM needs to analyze how this mining mitigation measure that it previously rejected as “not applicable” would be applied, what areas it would be applied in, and what the environmental effects will be. Habitat connectivity and its identification are certainly issues that the agency needs to address on a landscape scale. The FEIS recognized that loss of habitat connectivity within and between the Pine Nut, Desert Creek-Fales, Bodie Hills, and Mount Grant PMUs is a concern for long-term conservation. FEIS at 84. But these connectivity issues merit more consideration than a vague statement “In connective area, maintain vegetation characteristics suitable to bi-state DPS to the extent technically feasible” that does not even apply to the lost connectivity between PMUs. Moreover, the public needs to be informed as to what the agency is really intending here. If the identified “connective areas” were sage-grouse habitats that are no longer used by sage-grouse they would seem areas that would benefit from restoration. “Maintain vegetation characteristics suitable to bi-state DPS to the extent technically feasible” would not conserve those areas for sage-grouse.

Genetic studies reveal that the sage-grouse populations in the White Mountain and Pine Nut PMUs are the most genetically differentiated of all the Bi-State sage-grouse sampled

⁴ 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>

(Oyler-McCance *et al.*, 2015 page 65⁵). Management actions that promote genetic connectivity may be critical to the long-term viability of the Bi-State DPS. Accordingly, conservation strategies for the Bi-State should include protecting and maintaining connectivity among and within subpopulations, and monitoring genetic diversity (*ibid.*). The White Mountain and Pine Nut PMUs are partly managed by the BLM's Carson City District and Tonopah Offices. The BLM should identify and take a hard look at the connectivity needs of the sage-grouse populations using these lands so that it can identify effective, necessary direction and make efficient use of its limited resources.

Under FLPMA, Areas of Critical Environmental Concern ("ACEC") are to be designated in areas "where special management attention is needed to protect and prevent irreparable damage to important historic, cultural and scenic values; fish, wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards." 43 USC § 1702(a) 43 CFR 1601.0-5a. Clearly, special management attention is needed for all Bi-State sage-grouse habitats including maintaining connectivity among and within subpopulations.

Western Watersheds Project submitted Bi-State ACEC Proposals to the BLM on March 23, 2012 and again on January 30, 2013. These proposals included lands within the Carson City District and Tonopah Field Office resource management areas, including those lands identified as connective areas in the map illustrated in FEIS Figure 3-1. Proposed connective area, alternatives B and C. Western Watersheds Project repeatedly commented on the need to establish ACECs to protect Bi-State sage-grouse habitat in our comments at every stage of the public commenting process. Other conservation organizations expressed similar concerns over the need for ACEC designations.

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. However, that the Forest Service was the lead agency does not absolve the agencies from considering ACEC designations in a cooperative agency project. The FEIS will amend both the BLM's Carson City District and Tonopah Field Office resource management plans. There is no other on-going RMP amendment process for the Tonopah Field Office that will "conserve, enhance, and/or restore habitats to provide for the long-term viability of the greater sage-grouse bi-state distinct population segment" so this RMP amendment process is the appropriate venue for consideration of ACEC designations. As an alternative to its vague direction to maintain vegetation characteristics suitable to Bi-State sage-grouse "to the extent technically feasible" in connective areas the BLM should propose ACEC designation and specific management direction for all important connective habitats. This will then allow for development of site-specific improvements tailored to each connective area.

⁵ Oyler-McCance, S. J., Casazza, M. L., Fike, J. A. and Coates, P. S. 2014. Hierarchical spatial genetic structure in a distinct population segment of greater sage-grouse. *Conservation Genetics*, 1-13.

The BLM Needs to Consider the Impacts of the Proposed Plan on Listed Species:

Nine months ago, we explained in our formal protest that the EIS does not cover impacts of the BLM's proposed direction to listed species. The BLM could have used this time to amend its analysis and correct this and other deficiencies.

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.** This critical habitat is located at the south end of Buckeye Allotment within the Pine Nut PMU. 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 other 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 and that livestock grazing is modified such that the timing and distribution of livestock changes there will be effects to the plant and its habitat. These impacts need to be analyzed.

Other Issues:

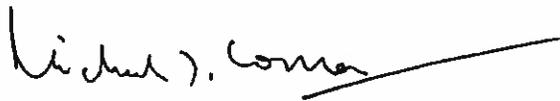
Commenters raised many other relevant, significant issues during scoping, public comment and as protest points that the BLM has yet to address. We have attached a copy of Western Watersheds Project's formal protest that was submitted in March 2015. We incorporate those protest points as part of these comments. Please consider those protest points as if raised herein. These issues include:

- The FEIS failure to consider allowing the retirement of voluntarily relinquished livestock grazing privileges to benefit Bi-State sage-grouse.
- Failure to consider designating ACECs to protect Bi-State sage-grouse and their habitats.
- Lack of consistency of proposed actions with those proposed in other planning efforts such as the greater sage-grouse LUPA process (which applies to the eastern side of the BLM's Carson City District).
- Failure to consider a reduced livestock grazing alternative.
- The FEIS failure to take a hard look at the impacts of livestock grazing and the impacts of livestock grazing on Bi-State sage-grouse or their habitat.

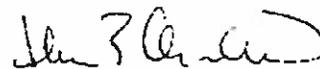
- Failure to consider physiological stress induced in sage-grouse due to exposure to livestock (Jankowski *et al.*, 2014⁶) and its consequences.
- Failure to look at the increased risks of wildfire due to livestock.
- Inadequacy of utilization standards.
- Proposed inappropriate use of cattle to “control” cheatgrass infestations despite the contrary indications clearly espoused in by best available science.
- Failure to emphasize the importance of passive restoration such as eliminating or reducing livestock levels from Bi-State sage-grouse habitat to passively restoring resistance to cheat grass dominance (Reisner *et al.*, 2013⁷).
- Failure to take a hard look at the effectiveness of proposed sage-grouse habitat restoration actions.
- Lack of certainty of implementation of adopted conservation measures.

Western Watersheds Project and Center for Biological Diversity thank you for your consideration of our comments. If we can be of any further assistance please feel free to contact us using the contact information provided below.

Respectfully submitted,



Michael J. Connor, Ph.D.
 California Director
 Western Watersheds Project
 P.O. Box 2364
 Reseda, CA 91337
 Tel: (818) 345-0425
 < mjconnor@westernwatersheds.org >



Ilene Anderson
 Desert Director
 Center for Biological Diversity
 8033 Sunset Blvd., #447
 Los Angeles, CA 90046
 (323) 654-5943
 <ianderson@biologicaldiversity.org>

⁶ 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>

⁷ 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*, 50(4): 1039-1049. doi: 10.1111/1365-2664.12097

Attachments:

Western Watersheds Project's Protest of the Greater Sage-grouse Bi-State Distinct Population Segment Plan Amendments and Final Environmental Impact Statement dated March 13, 2015. 25 pages.

Literature Cited:

- 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>
- Dinkins, J. B., Conover, M. R., Kirol, C. P., Beck, J. L. and Frey, S. N. 2014. Greater Sage-Grouse (*Centrocercus urophasianus*) select habitat based on avian predators, landscape composition, and anthropogenic features. *The Condor*, 116(4): 629-642.
- 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>
- Knick, S. T., Hanser, S. E. and Preston, K. L. 2013. Modeling ecological minimum requirements for distribution of greater sage-grouse leks - Implications for population connectivity across their western range, USA. *Ecology and Evolution*, 3: 1539-1551.
- Oyler-McCance, S. J., Casazza, M. L., Fike, J. A. and Coates, P. S. 2014. Hierarchical spatial genetic structure in a distinct population segment of greater sage-grouse. *Conservation Genetics*, 1-13.
- 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*, 50(4): 1039-1049. doi: 10.1111/1365-2664.12097
- Wisdom, M. J., Meinke, C. W., Knick, S. T. and Schroeder, M. A., 2011. Factors associated with extirpation of sage-grouse. *Studies in avian biology*, 38: 451-472.



Michael J. Connor, Ph.D.
California Director
P.O. Box 2364, Reseda, CA 91337-2364
Tel: (818) 345-0425
Email: mjconnor@westernwatersheds.org
Web site: www.westernwatersheds.org

Working to protect and restore Western Watersheds

March 13, 2015

By Email and Overnight Mail

Director (210)
Attention: BLM Protest Coordinator
20 M Street, S.E., Room 2134LM
Washington, D.C. 20003

Email: <protest@blm.gov>

PROTEST

Greater Sage-grouse Bi-state Distinct Population Segment Plan Amendments Final Environmental Impact Statement

Dear Director:

Pursuant to the Bureau of Land Management ("BLM") planning regulations at 43 CFR 1610.5-2, Western Watersheds Project hereby protests the BLM's approval of the proposed amendments of the Carson City District and Tonopah Field Office Resource Management Plans. The Environmental Protection Agency published the notice of receipt of the final environmental impact statement containing the plan amendment in the Federal Register on February 13, 2015 so this protest is timely.

(I) The name, mailing address, telephone number and interest of the person filing the protest;

This protest is filed on behalf of Western Watersheds Project by:

Michael J. Connor, Ph.D.
California Director
Western Watersheds Project
P.O. Box 2364
Reseda, CA 91337
Tel: (818) 345-0425
Fax: (208) 475-4702
Email: <mjconnor@westernwatersheds.org>

Western Watersheds Project has long worked to conserve the Bi-State sage-grouse and was a co-petitioner on the November 15, 2005 listing petition. Clearly, Western Watersheds Project strongly supports increased protection for the Bi-State sage-grouse. Unfortunately, the FEIS itself is inadequate and the proposed management plan amendments are window-dressings that will not conserve these imperiled birds.

Western Watersheds Project works to protect and conserve the public lands, wilderness, wildlife and natural and cultural resources of the American West through education, scientific study, public policy initiatives, and litigation. Western Watersheds Project staff and members use and enjoy the region's public lands, including the lands at issue here, for its wildlife and other natural resources and for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes. Western Watersheds Project staff and members have personally visited and used these lands for many purposes including recreation and wildlife photography.

Because Western Watersheds Project has interests that will be affected by the proposed decision and participated in the NEPA process for this project, Western Watersheds Project has standing to bring this protest. The notice of receipt was published February 13, 2013 so this protest is timely.

(II) A statement of the issue or issues being protested

Western Watersheds Project has long worked to conserve the Bi-State sage-grouse and was a co-petitioner on the original listing petition. Clearly, Western Watersheds Project strongly supports increased protection for the Bi-State sage-grouse. Unfortunately, the proposed management plan amendments are simply window-dressings that will not conserve these imperiled birds and will not address the purpose and need for the project which is in part to establish adequate regulatory mechanisms, and the FEIS itself is inadequate.

(III) A statement of the part or parts of the plan or amendment being protested

Background
Alternatives
Affected Environment
Environmental Consequences,

(IV) A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record

Western Watersheds Project has long worked to conserve the Bi-State sage-grouse and was a co-petitioner on the original listing petition. 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. We have attached a copy of Western Watersheds Project's Bi-State ACEC Proposal to these protest.

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.

(V) Concise Statement Explaining Why the State Director's Decision is Wrong

The Proposed Decision Is Unclear

An EIS "shall be concise, clear, and to the point". 40 CFR §1502.8. The BLM was a cooperative agency in the development of this proposed land use plan amendment FEIS. The lead agency was Humboldt-Toiyabe National Forest. In his Draft Record of Decision, the Humboldt-Toiyabe National Forest Supervisor states, "I have not selected one alternative over the other, but selected a mix of standards and guidelines from those available in the two action alternatives." Because the BLM has not issued a draft decision and will not issue a final decision until after this protest period is over, it is unclear if the agency will adopt the Preferred

Alternative or take the same approach as the Forest Service. This makes it difficult, if not impossible, to assess the likely efficacy of the BLM's plan amendment at this "Protest" stage of the process. This lack of clarity has dogged the plan amendment process throughout and has been raised repeatedly by Western Watersheds Project, other conservation organizations, and government agencies (See for example the October 9, 2014 comments on the Revised DEIS from the Environmental Protection Agency).

Both NEPA and FLPMA explicitly note the importance of public input/involvement in land plan use planning processes. Effective commenting and review by the public is thwarted when the proposed action isn't clear.

The FEIS Failed to Consider Allowing 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 Greater Sage-grouse Nevada and Northeastern California Sub-Region Draft LUPA/DEIS included voluntary relinquishment/grazing privilege retirement (as did other sub-regions) "where removal of livestock grazing would enhance the ability to achieve GRSG habitat objectives" as part of its proposed action. This action was included in that DEIS because it was recommended by the NTT¹ and without such language grazing privileges would not be retired unless the local Field Office was prepared to consider a plan amendment.

The inclusion of provisions for voluntary relinquishment/allotment retirement in each alternative also provides the opportunity for the BLM to include closing livestock grazing allotments as a component of the mitigation measures for other actions. 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

¹ Sage-grouse National Technical Team. 2011. A report on national Greater sage-grouse conservation measures. Report at 17. "Maintain retirement of grazing privileges as an option in priority sage-grouse areas when base property is transferred or the current permittee is willing to retire grazing on all or part of an allotment." The planning directions say, "Each planning effort will identify the specific allotment(s) where permanent retirement of grazing privileges is potentially beneficial."

“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. After the initial buyout, it would potentially reduce BLM costs associated with rangeland management and administration.

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.

In the response to comment section, the FEIS incorrectly states, “Closure/retirement of livestock grazing allotments would require a site-specific, project-level NEPA decision.” FEIS at 217.

But by itself, allowing for voluntary relinquishment in a Land Use Plan has no effect on whether a BLM allotment may be grazed. BLM may transfer the forage made available as a result of the relinquishment to a new permittee or lessee if grazing is an allowable use under the existing land use plan. Any qualified applicant can apply for the available forage. However, if the land use plan specifically designates public lands in allotments as being unavailable for livestock grazing (and instead held for watershed protection and wildlife habitat purposes) following voluntary relinquishment, then this establishes certainty for this important method of achieving conservation goals through partnering. Without the necessary language in the land-use plan there is no assurance that voluntary relinquishment and retirement of grazing privilege will have any degree of durability. Moreover, as we have seen numerous times at the site-specific level, the BLM declines to analyze or choose a “No Grazing” alternative because it does not comport with the governing Land Use Plan which allocated grazing acres. While this is clearly illegal, it also points to the need to have firm and clear authority for such actions in the Land Use Plan.

Likewise, the BLM ignores consideration of even closing vacant allotments in Bi-State sage-grouse habitat. FEIS at 223.

The FEIS Failed to Consider a Range Reasonable Range of 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 85,886 AUMs would be available to livestock on 2,118,811 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 BLM has no intention of opting for Alternative C. It could no reduced livestock grazing alternative at all.

It is both absurd and disingenuous of the agencies to imply that considering extreme alternatives allowing 85,886 AUMs and 0 AUM is somehow informative of reduced grazing.

FEIS at 267². Although the FEIS admits that some allotments are failing to meet Land Health Standards there was no consideration of a reduced livestock grazing alternative. Although the USFWS has proposed critical habitat for Bi-State sage-grouse there was no attempt made in the FEIS to consider reduced livestock grazing in that proposed critical habitat.

The BLM Failed to Consider Designating ACEC

Under FLPMA, Areas of Critical Environmental Concern (“ACEC”) are to be designated in areas “where special management attention is needed to protect and prevent irreparable damage to important historic, cultural and scenic values; fish, wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards.” 43 USC § 1702(a) 43 CFR 1601.0-5a. Clearly, “special management attention is needed” in the face of a the proposed listing of the Bi-State Sage-grouse.

Western Watersheds Project submitted a Bi-State ACEC Proposal to the BLM on March 23, 2012 and again on January 30, 2013. This included lands within the Carson City District and Tonopah Field Office resource management areas. Western Watersheds Project repeatedly commented on the need to establish ACECs to protect Bi-State sage-grouse habitat in our comments at every stage of the public commenting process. Other conservation organizations include Defenders of Wildlife expressed similar concerns over the need for ACEC.

Despite the need for management changes, the FEIS dismisses ACEC designation as a conservation tool and ignored Western Watersheds Project’s proposal.

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

That the Forest Service was the lead agency does not absolve the 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).

The FEIS will amend both the Carson City District and Tonopah Field Office resource management plans. There is no other on-going RMP amendment process for the Tonopah Field Office that will “conserve, enhance, and/or restore habitats to provide for the long-term viability of the greater sage-grouse bi-state distinct population segment” even though it includes important Bi-State sage-grouse habitat including Proposed Critical Habitat. So this RMP amendment process is the appropriate venue for consideration of ACEC designations.

² 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).

Only one of the five alternatives in the Draft Resource Management Plan and Environmental Impact Statement for the Carson City District considers designating ACEC for Bi-State grouse conservation. This is for a single ACEC (Pine Nut) that is considered in only Alternative and is not a component of the agency Preferred Alternative. According to the Draft Resource Management Plan and Environmental Impact Statement for the Carson City District, “The decisions for the Greater and bi-state sage grouse efforts will help inform the Carson City District Proposed RMP/Final EIS”. CCD DEIS at 1-35. Clearly then, this Bi-State sage-grouse plan amendment process is the appropriate venue for considering ACEC designations to conserve and protect Bi-State sage-grouse and Bi-State sage-grouse habitat.

The BLM’s failure to consider designating ACECs - the most powerful land use conservation tool in its toolbox, the BLM’s failure to respond to expressed public concern that it do so, and BLM’s failure to consider ACEC nominations made by the public make this land use plan amendment process and FEIS fatally flawed because it violates both FLPMA and NEPA.

Livestock Grazing

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. Most of the Bi-State sage-grouse habitat on the BLM lands are grazed by livestock:

BLM District	# Allotments containing BSSG Habitat	Allotment Acres	Permitted AUMs	Acres of BSSG Habitat in Allotments
Battle Mountain District	5	704,290	18,520	57,459
Carson City District	22	565,554	28,044	173,234
Total	27	1,269,844	46,564	230,693

The FEIS proposes no change in the amount of bi-state DPS 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).

The implementation of changes in livestock grazing is evidently dependent on new grazing permits being issued:

B-RP-S-01: Grazing permits, annual operating instructions, or other appropriate mechanism for livestock management shall include terms, conditions, and direction to move toward or maintain bi-state DPS habitat desired conditions. FEIS at 30.

Although it mentions, “or other appropriate mechanism for livestock management” the FEIS explanation states only, “Standard B-RP-S-01 would ensure that grazing permits and annual operating instructions include terms, conditions, and directions to move rangeland condition toward or to maintain bi-state sage grouse habitat desired conditions. Livestock grazing could be modified by restricting areas open to grazing, changing grazing systems, adjusting seasons of use or class of livestock, and placing additional restrictions on the construction of range improvements. These changes would result in direct effects to livestock grazing.” FEIS at 104-105. But there is another mechanism available to the BLM. The BLM has the authority to adopt new terms and conditions in RMP revisions (43 USC § 1712) and to immediately implement those changes under current grazing regulations (43 CFR § 4130.3-3). The FEIS fails to consider let alone analyze its effects in the livestock grazing section. This is unfortunate, because *establishing that conservation measures are implemented* is one of the key steps used by USFWS in determining the adequacy of regulatory mechanisms (see below).

The FEIS fails to provide important baseline information such as when the allotment grazing permits will be up for renewal. Without this basic data it is impossible for the public and other agencies to understand when the new standards and guidelines will actually be incorporated into term permits. Nor does the FEIS provide data on how many have been renewed in the recent past and under what terms and conditions. For example, we commented, “Carson City and Tonopah BLM have also issued several grazing decisions during this period that failed to adequately protect BSSG habitats and populations. Plus agencies have renewed an unassessed number of livestock grazing permits under Congressional Riders, without any consideration for the needs of BSSG habitats and conservation of viable populations.” The agency simply responded, “These activities would be authorized under the current resource management plans, interim management direction, and the best management practices described in the BLM National Technical Team report.” FEIS 218. 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 providing a baseline for understanding if the land use plan amendments 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 2010³ and USFWS 2013⁴. 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.*, 2000⁵). The single, major activity responsible for many of these changes on public lands is livestock grazing and associated activities.

³ 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.

⁴ 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.

⁵ 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.

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.*, 2008⁶). 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.*, 2007⁷). Biotic crust species richness and cover were inversely related to cover of cheatgrass (Ponzetti, *et al.*, 2007⁸). Direct experimentation has shown that lichen-dominated biological soil crust can inhibit cheatgrass germination (Deines *et al.*, 2007⁹).

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.*, 2009¹⁰). 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.

The recent study by Reisner *et al.*, 2013¹¹ 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, 2001¹² 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

⁶ 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.

⁷ 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.

⁸ 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.

⁹ 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.

¹⁰ 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.

¹¹ 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

¹² 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.

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.*, 2012¹³). 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 (2009¹⁴) observed strike rates of up to 12 strikes per mile of fence; Stevens (2011¹⁵) observed 1.2 strikes per mile.

In addition to posing a collision risk, fences facilitate the spread of exotic and invasive plants, potentially increase mortality of sage-grouse by increasing predation rates through increased perches for raptors. 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 piñon-juniper encroachment into sage-brush 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 12¹⁶). However, without removing the fences removal of piñon-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.*, 2012¹⁷); so, by opening up fences and facilitating raven perching, piñon-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, 2005¹⁸).

¹³ 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

¹⁴ 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..

¹⁵ Stevens, B. S. 2011. Impacts of Fences on Greater Sage-Grouse in Idaho: Collision, Mitigation, and Spatial Ecology. M.Sc. Thesis, University of Idaho.

¹⁶ Evans, R. A. 1988. Management of pinyon-juniper woodlands. US Department of Agriculture, Forest Service, Intermountain Research Station. 34 pp.

¹⁷ 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

¹⁸ 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.

West Nile Virus

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 help, the analysis in the FEIS is inadequate to determine its effectiveness. Nor does the FEIS explain what the nebulous, “unless they are needed by other species” means or how this is to be determined.

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.

Jankowski *et al.*, 2014¹⁹ found that residence in a cattle-grazed habitat was associated with increased stress hormone levels in a large 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. The findings of Jankowski *et al.*, 2014 are thus of considerable concern.

Jankowski *et al.*, 2014 postulated 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.

The Proposed Utilization Standards Are Inadequate

¹⁹ 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>

The only utilization standards are not sufficient to provide 7-9 inches of protective residual cover, especially given the 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” 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 this percentage utilization approach. The utilization standard needs to be reworked to standards that will assure adequate cover.

“Targeted” Grazing In Cheatgrass Infested Habitat Is 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:

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

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 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 its own recognition that cattle is ineffective, the FEIS simply ignores recent peer-reviewed science in its analysis:

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

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.

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.

Limiting Invasive Species Expansion & Passive Restoration

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).

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.

Fire, Restoration and Vegetation Treatments

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

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>

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.

Disturbance Cap & Mitigation

The FEIS references off-site mitigation to offset the surface disturbance of habitat (eg. 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 FEIS at 219, a description of the potential mitigation actions would be included in the final EIS. Where is this?

There was evidently considerable 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 BSSG populations can actually withstand this 3% cap. Evidently, this 3% cap only applies to Forest Service lands but the FEIS is unclear. The BLM should clarify that it is not adopting the 3% cap in its ROD.

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. This critical habitat is located at the south end of Buckeye Allotment. 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 and that livestock

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.

grazing is modified such that the timing and distribution of livestock changes there will be effects to the plant and its habitat that need to be analyzed.

The Implementation and Effectiveness of BLM's Plan Amendment Measures Are Uncertain and So the Preferred Alternative Does Not Meet the Purpose and Need

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 FWS 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.

Here, the BLM has not even considered establishing ACECs to protect Bi-State sage-grouse and its habitat, or even to protect the USFWS's Proposed Critical Habitat in its land use planning. BLM is proposing to allow cattle grazing for weed control 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. The BLM has considered no reductions in livestock and active AUMs remain unchanged. These measures would have all provided conservation certainty.

The BLM must adopt adequate regulatory mechanisms to manage livestock grazing in sage-grouse habitat to avoid harming the species. The Decision must include clearly defined, minimum standards for grazing in sage-grouse habitat that will be effective and will be implemented.

The FEIS is unclear as to when the proposed Utilization Standards and other livestock related standards and guidelines would be implemented. The BLM does have the authority to adopt new terms and conditions in RMP revisions and immediately implement those changes under the current grazing regulations. 43 USC. § 1712 and 43 CFR § 4130.3-3. However, it seems that here the BLM have opted to wait until permit renewals.

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.

Moreover, the BLM has a parallel Plan Revision process underway for the Carson City District. According to the Draft Resource Management Plan and Environmental Impact Statement for the Carson City District, "The decisions for the Greater and bi-state sage grouse efforts will help inform the Carson City District Proposed RMP/Final EIS". CCD DEIS at 1-35. Evidently, there is no certainty that even the lackluster measures proposed in the FEIS will survive the imminent Carson City District RMP revision.

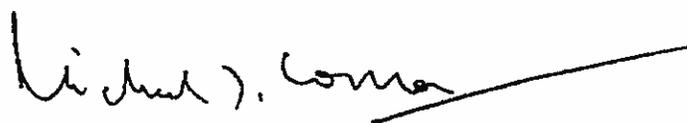
The USFWS concluded that existing regulatory mechanisms to protect sage grouse and their habitats in the bi-state area "...afford sufficient discretion to the decision makers as to render them inadequate to ameliorate the threats to the Bi-state Distinct Population Segment." FEIS at 1. "To address the 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 amendment the BLM 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.

Relief Sought

The BLM should withdraw consideration of the Preferred Alternative and instead act to implement a modified Alternative C - modified to exclude the anti-conservation guideline Weed-G-01. Alternative C was analyzed in the EIS, would comply with BLM 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.

Western Watersheds Project thanks you for your due consideration of our protest. If we can be of any further assistance 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, appearing to read "Michael J. Connor", with a long horizontal line extending to the right from the end of the signature.

Michael J. Connor, Ph.D.
California Director
Western Watersheds Project
P.O. Box 2364
Reseda, CA 91337
Tel: (818) 345-0425
Fax: (208) 475-4702
< mjconnor@westernwatersheds.org >

ATTACHMENTS:

Bi-State ACEC Proposal. Submitted by Western Watersheds Project on March 23, 2012 and January 30, 2013.

Western Watersheds Project

Protest

Greater Sage-grouse Bi-state Distinct Population Segment
Plan Amendments Final Environmental Impact Statement

ATTACHMENTS:

Bi-State ACEC Proposal. Previously submitted by Western Watersheds
Project on March 23, 2012 and January 30, 2013.

ACEC Proposal: Bi-State PMU's ACEC Proposal

BLM must designate ACECs that protect occupied sage-grouse habitats across the landscape that are necessary for sage-grouse to fulfill all their seasonal needs to sustain viable populations in the short, mid and long term.

In areas where BLM and the Forest Service (or USFWS or other federal agency) lands together provide critical linked habitat, special designations must span artificial administrative unit boundaries. The Forest too must designate RNAs, Reserves or Conservation Areas.

FLPMA directs the secretary of the Interior to "prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values ... giving priority to ACECs ...".

ACECs are to be designated in areas "where special management attention is needed to protect and prevent irreparable damage to important historic, cultural and scenic values; fish, wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards." (43 USC § 1702(a) 43 CFR 1601.0-5a).

To be considered as a potential ACEC and analyzed in resource management plan alternatives, an area must meet the criteria of relevance and importance, as established and defined in 43 CFR 1610.7-2

An area meets **relevance** criteria if it contains one or more of the following:

- A significant historic, cultural, or scenic value (including but not limited to rare or sensitive archeological resources and religious or cultural resources important to native Americans).
- A fish and wildlife resource (including but not limited to habitat for endangered, sensitive, or threatened species, or habitat essential for maintaining species diversity).
- A natural process or system (including but not limited to endangered, sensitive, or threatened plant species; rare, endemic, or relic plants or plant communities which are terrestrial, aquatic, or riparian; or rare geological features).
- Natural hazards (including but not limited to areas of avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or dangerous cliffs). A hazard caused by human action may meet the relevance criteria if it is determined through the RMP process that it has become part of a natural process.

The value, resource, system, process, or hazard described in the relevance section must have substantial significance and values to meet the **importance** criteria. This generally means that the value, resource, system, process, or hazard is characterized by one or more of the following:

- Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern especially when compared to any similar resource.
- Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened or vulnerable to adverse change.

- Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandate of FLPMA.
- Has qualities that warrant highlighting, or poses a threat to human life or safety.

Sage-grouse ACECs: Protect the complex of seasonal habitats required by sage-grouse. Provide for viable populations over time. Allow for integrated management to prevent further fragmentation, and to implement passive and active restoration and rehab to recover essential habitats like springs that provide critical brood rearing habitat that are on the verge of being lost altogether in this very arid landscape. Provide habitat security for sage-grouse during lekking and nesting periods. Limit disturbance, stress and displacement of birds from winter habitats.

Relevant Values

The Proposed ACEC meets the criteria of having Relevant values.

Significant wildlife and other resources are found here. These are significant and substantial values. The qualities are of more than local significance. They are of special worth, consequence, distinctiveness and cause for concern. NDOW identified these lands as important for populations of sage-grouse.

The values of the Proposed ACEC are greatly threatened by livestock disturbance and livestock-associated vegetation treatments and infrastructure. Livestock disturbance, facilities and vegetation treatments promote weed invasion, especially cheatgrass. Livestock water facilities and trampling promote West Nile virus. Livestock presence and facilities subsidize nest and egg predators. Livestock disturbance promote further desertification and add to stresses caused by climate change which are predicted to adversely impact the Great Basin and this land area. Climate change is expected to amplify adverse impacts of livestock grazing, further stress waters, and promote cheatgrass and other invasive species. See Fleischner (1994), Belsky and Gelbrad (2000), Connelly et al. 2004, USDI Pellant 2007 Congressional Testimony, Knick and Connelly (2009) Studies in Avian Biology.

Poor management decisions by agencies, and a series of deeply flawed segmented livestock grazing and facility actions, have torn apart the fabric of the sagebrush landscape in many areas, including very important sage-grouse habitats of the ACEC.

The uplands, including mature and old growth Wyoming big sagebrush communities are critical for sage-grouse nesting. The black sagebrush, along with Wyoming big sagebrush, is at times critical for wintering habitats. The fragile, small streams, springs and seeps, and associated sagebrush habitats, provide essential sage-grouse brood rearing habitat. These, and higher elevation mountain big sagebrush communities, are all greatly threatened by continued livestock grazing disturbance which occurs at high levels during sensitive periods that conflict with sage-grouse needs for habitat security. These high levels of grazing are also degrading soils and microbial crusts which are essential as a frontline defense to prevent invasive species like cheatgrass. These high levels of grazing also degrade native vegetation structure, composition and function, deplete forbs, reduce essential native bunchgrass nesting cover, and cause other adverse impacts.

Agencies have also allowed mining exploration and development, and energy development to intrude on important and essential sage-grouse seasonal habitats.

The complexly interspersed sagebrush habitats have nationally significant values. They are essential habitat for the existing declining population of sage-grouse. They provide critical connectivity with neighboring PMU's and opportunity for genetic interchange. Their further degradation by livestock and any intensified mining, energy or other development will increase fragmentation and serve to further isolate birds and populations.

Loss of this PMU would further isolate sage-grouse in neighboring areas.

There are identified leks within the Proposed ACEC. These areas are critical for the survival of the birds and livestock grazing during lekking season may disrupt breeding activities. Livestock associated infrastructure may provide perches for raptors which prey on breeding sage grouse. Livestock disturbance of vegetation may reduce the quality and quantity of escape cover used by breeding sage grouse.

Important Values

The Proposed ACEC meets the criteria of having important values.

The Proposed ACEC has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern especially when compared to any similar resource.

The Proposed ACEC has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened or vulnerable to adverse change.

These lands have suffered 150 years of livestock grazing disturbance. This has resulted in large losses of riparian area and water flows. Large-scale historical mining disturbance, and deforestation and other impacts have also occurred. Uplands have suffered large amounts of soil erosion, reducing site potential. Any continued livestock grazing disturbance occurs in a landscape that has been altered by historical uses – so adverse impacts of even smaller amounts of disturbance to remaining lands, waters, and sage-grouse habitats may be amplified.

The Proposed ACEC has microbiotic crusts, which are a frontline defense against weed invasion, are very fragile and readily damaged by livestock trampling and cross-country motorized disturbance. Their disturbance promotes invasive species that alter natural processes and fire cycles. Whisenant 1994, Belsky and Gelbard (2000), USDI BLM Belnap et al. 2001 Technical Bulletin on microbiotic crusts

The Proposed ACEC should be recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandate of FLPMA.

Benefits of the Protection of Relevant and Important Values Habitat Recovery Will Provide Long-term Viability for Sage-grouse and Other Sagebrush-dependent Species.

Invasion of cheatgrass is alarming. Unfortunately disturbance and desertification associated with livestock grazing has continued, and has been intensified by facilities disturbance, salting, and overstocking.

These lands are of local, regional and national significance for conservation and recovery of sage grouse and other rare and sensitive species populations.

Fragmented and Disconnected Habitat; Sage Grouse Habitats Require Passive Restoration for Recovery.

Springs, springbrooks, intermittent drainages, and overall water quality and quantity are jeopardized by grazing practices and now climate change

In the past, agencies have treated sagebrush and other upland areas as throwaway landscapes. Sagebrush has been "treated" and subjected to continued chronic grazing disturbance. Uplands have been carved with new fences. Livestock spring developments, water pipelines have proliferated. Agencies have adopted a disjointed, piecemeal approach, and treated uplands as sacrifice area.

Management Actions

This ACEC must be withdrawn from locatable, leasable and fluid mineral development.

New rights-of-way will not be allowed for energy, transmission or other infrastructure or developments. Existing ROWS will be amended.

Livestock grazing will be phased out of occupied habitats over a period of three years. In any areas where grazing might continue longer, Appendix A practices will be applied.

Livestock infrastructure, including fences, spring developments, pipelines, stock ponds and other harmful facilities will be removed (active restoration). Livestock and other disturbed areas will be seeded with local native ecotypes of shrubs, grasses and forbs.

Native upland and riparian vegetation communities will undergo passive restoration, where natural processes return as a result of stopping activities that degrade them or prevent recovery.

Spring and stream flows will be restored to their natural condition to the maximum extent possible as developments are removed through active and passive restoration.

Sagebrush manipulation/treatment is prohibited.

Selective hand-cutting of conifers only in areas where they are shown to conflict with sage-grouse needs will be allowed. Mastication, chaining, and other treatments involving use of large machinery are prohibited. (Active restoration).

Ownership of all public lands will be retained.

Travel will be restricted to designated roads.

No utility corridors will be designated. Existing utility corridors may be retained. Maintenance activity for these areas will be carried out with minimal disturbance.

All lands will be managed as VRM 1 or 2.

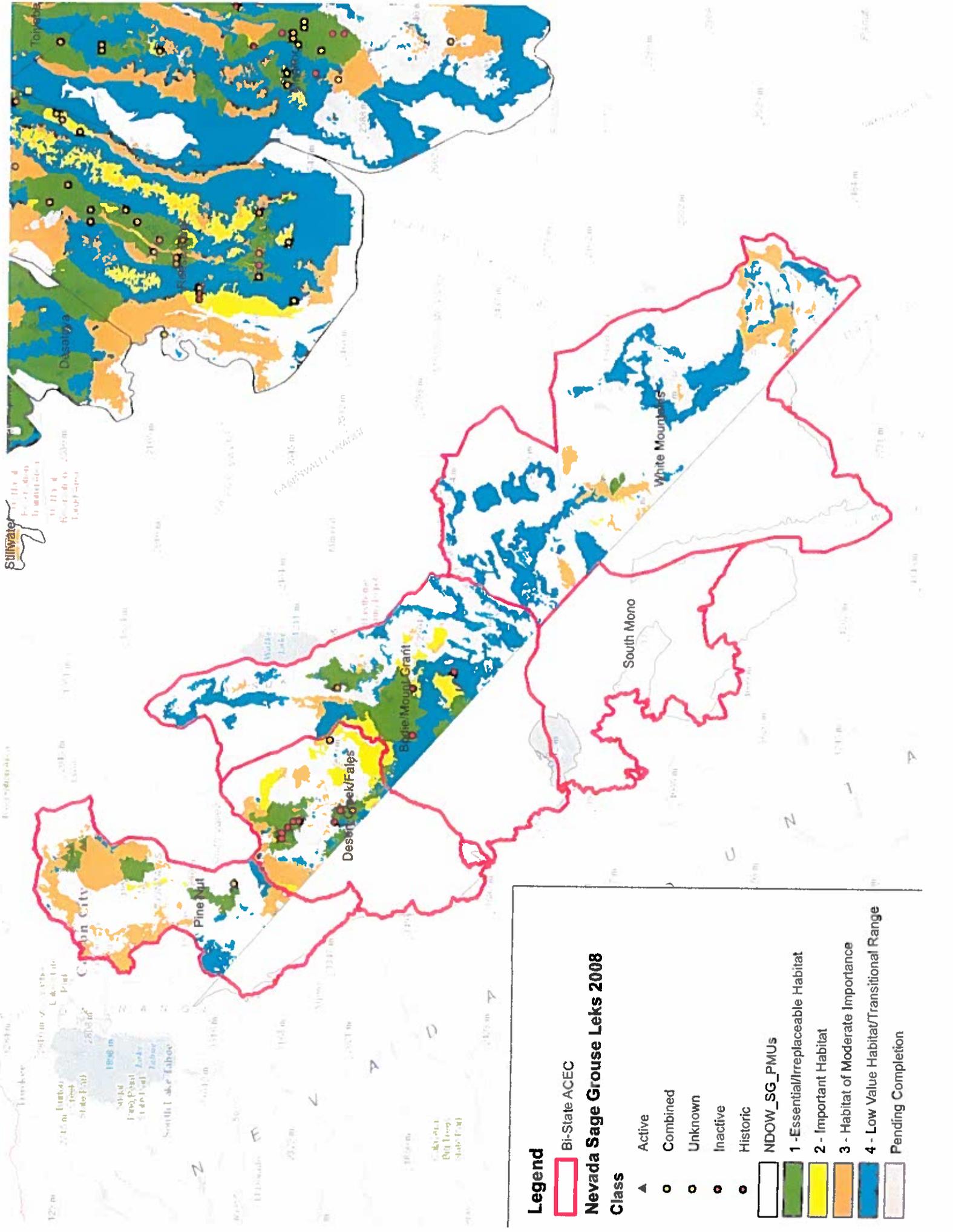
We request a meeting with BLM to discuss this ACEC proposal, and its incorporation into this Sage-grouse EIS process.

Please feel free to contact us if you have any questions, need further information, supporting evidence for, or clarification of issues raised here.

Sincerely,

A handwritten signature in cursive script, appearing to read "Katie Fite".

Katie Fite
Western Watersheds Project
PO Box 2863
Boise, ID 83701
208-429-1679
Katie@westernwatersheds.org



Stillwater
 0 10 20 30 40
 Miles
 0 10 20 30 40
 Kilometers

Legend

Bi-State ACEC

Nevada Sage Grouse Leaks 2008

Class

- ▲ Active
- Combined
- Unknown
- Inactive
- Historic

NDOW_SG_PMUS

- 1 - Essential/Irreplaceable Habitat
- 2 - Important Habitat
- 3 - Habitat of Moderate Importance
- 4 - Low Value Habitat/Transitional Range
- Pending Completion