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First name: Greta
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Organization: Western Watersheds Project
Title: Deputy Director
Comments:
USDA Forest Service
Attn: Objection Reviewing Officer
210 14th Street, SW
EMC-PEEARS, Mailstop 1104
Washington, DC 20250.

Submitted via https://cara.ecosystem-management.org/Public/CommentInput?project=52904

Re: Objection regarding the Greater Sage-grouse Draft ROD and LMPA for NFS Land in Wyoming (Attached as PDF to this text submission)

Dear Objection Reviewing Officer,

The following objection is submitted on behalf of the members and staff of Western Watersheds Project (WWP), the Center for Biological Diversity, American Bird Conservancy, Prairie Hills Audubon Society, WildEarth Guardians, and Defenders of Wildlife who are concerned with the management of our public lands and the protection of at-risk species.

This Objection is filed pursuant to, and in compliance with, 36 C.F.R. Part 218, Subparts A and B. All parties to this objection have filed timely, specific and substantive written comments in accordance with 36 C.F.R. 218(a).

1.The name and contact information for the Objectors are listed below.

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2.This Objection was written on behalf of Objectors by Greta Anderson whose signature and contact information is listed below.

3.Western Watersheds Project is the Lead Objector for purposes of communication regarding the Objection.

4.The project that is subject to this Objection is "Greater sage-grouse draft ROD and LMPA for the NFS lands in Wyoming." The Responsible Official is Nora Rasure, Regional Forester, USDA Forest Service, Intermountain Region, 324 25th St., Ogden, UT 84401.

5.Objector submitted, timely, specific, and substantive comments during the Public Comment Period on January 3, 2019 and during the scoping periods. All points and issues raised in this objection refer to issues raised in that comment letter or are related to new information. Attached hereto are prior comments and we incorporate their arguments and scientific information by reference.

6.In the following Statement of Reasons, Objector provides the specific reasons why the decision is being appealed and the specific changes or suggested remedies that are sought, along with the related evidence and rationale on why the decision violates applicable laws and regulations.

NOTICE OF OBJECTION

Pursuant to 36 C.F.R. § 218, Western Watersheds Project, the Center for Biological Diversity, American Bird Conservancy, Prairie Hills Audubon Society, WildEarth Guardians, and Defenders of Wildlife are filing an Objection regarding Objection regarding the greater Sage-grouse Draft ROD and LMPA for NFS Land in Wyoming.

CONCISE STATEMENT OF OBJECTION

Objectors take issue with the U.S. Forest Service's failure to adequately protect sage-grouse on forest lands in the western United States and the draft decision's intention to create increased "flexibility" in managing sage-grouse habitat. The sage-grouse has very specific habitat needs, and the proposed action's purported "flexibility" is really just a generalized weakening of the required mitigation and conservation measures proposed by the

2015 land use plan amendments. The draft decision violates specific provisions of the National Environmental Policy Act ("NEPA"), the National Forest Management Act ("NFMA"), the Administrative Procedure Act ("APA") and multiple regulations implementing these statutes.

The greater sage-grouse (Centrocercus urophasianus) is a charismatic umbrella species for the entire sagebrush ecosystem. The U.S. Forest Service is privileged to manage important sage-grouse habitat, and the current planning effort seeks to revise the 2015 land use plan amendments for over 5.2 million acres in the states of Idaho, Nevada, Utah, Wyoming, and Colorado. While the 2015 land use plan amendments didn't go far enough or comport with the best available science regarding the habitat needs of greater sage-grouse, they were superior from a conservation perspective to the current effort. The FS plans to cut 20 percent of the protected area for Wyoming sage-grouse under this plan, significantly and irrevocably harming the stronghold populations in the state and undermining any potential for recovery.

STATEMENT OF REASONS

I. VIOLATIONS OF THE NATIONAL ENVIRONMENTAL POLICY ACT, 42 U.S.C. § 4321.

The regulations implementing NEPA require the Forest Service to disclose and analyze the environmental effects of the proposed action and alternatives to it. 40 C.F.R. § 1500.1(b). Specifically, the regulation explains that "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." Id.

The Forest Service is also required to disclose and analyze the direct, indirect, and cumulative effects of the proposed action on the environment. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8, 1508.25(c)(3), 1508.27(b)(7).

When analyzing cumulative effects, the Forest Service must analyze the effects on the environment resulting from the incremental impacts of the action, and its alternatives, when added to other past, present, and reasonably foreseeable future actions. 40 C.F.R.§ 1508.7.
To satisfy the requirements of the NEPA regulations, the Forest Service must take a "hard look" at the impacts resulting from the proposed action.

A. The 2019 plan weakens protections for the HMAs without discussing the implications of doing so, in violation of NEPA.
The Wyoming proposed plan cuts protected acreage in the state by 25 percent of the designated Priority Habitat Management Areas (PHMA), 15 percent of the General Habitat Management Areas, and adds a pathetically small area of Connectivity Habitat Management Areas (CHMA) for reasons that we've yet to understand. The FEIS states, "Including CHMA is merely a clarification since this designation is a component of PHMA," FEIS at 4-358. Nowhere is it clear that CHMA is a component of PHMA and indeed, it is identified as separate acreage on Table ES-2. In any case, the 6,400-acre CHMA designation is inadequate to ensure true connectivity among habitat types, contains very few management restrictions anyway, and is an unexamined anomaly among the other states in this planning process. It was added between the draft and final EIS, making it impossible for the reader to have commented sooner.

The final EIS also adds restrictions to "winter concentration areas." See, e.g. GRSG-LR-SUA-ST-032-Standard. The final EIS also adds a category, "Winter Concentration Areas" but admits, "No Winter Concentration Areas are currently mapped on NFS lands in Wyoming." FEIS at 1-18. While we appreciate that someday these important areas might get some modicum of protection on FS lands, it is telling that the FS itself is not proposing any protection for these areas that are critical to the sage-grouse lifecycle. As it stands, the FEIS claims to be doing something for winter concentration areas (all lower case) without admitting that it is actually not protecting

these habitats until Wyoming designates Winter Concentration Areas (all caps). There is no analysis of the potential extent of these lands or the cumulative impacts of this "reasonably foreseeable future action." It's confusing and violates NEPA.

In addition to severely cutting the extent of protected habitat by acreage, the proposed action weakens the existing protections for HMAs and presents false and misleading rationale for these changes. For example, in Wyoming, the proposed action removes GHMA from restriction under, for example, GRSG-LR-SUR-ST-029-Standard, GRSG-LR-SUA-ST-032-Standard, GRSG-LR-LOA-ST-032-Standard, among others. The plans instead apply some of the changes to the 6,400 acres of CHMA and the nonexistent-as-of-yet Winter Concentration Areas rather than the remaining 514,300 acres of GHMA in Wyoming. FEIS at ES-10. This is hardly a replacement level of protection.
The analysis of these changes fails to account for the reduced protections in GHMA and instead justifies it by saying that GHMA typically contains lower quality or marginal greater sage-grouse habitat. FEIS at 4-350. The Forest Service rationalizes the changes to GHMA by claiming that they contain less than 10 percent of all leks. Response to WWP comments, 6. This doesn't address the concern of WWP that the proposed action removes mitigation requirements, lessens restrictions and lifts protections. The extent to which GHMA contains leks does not equate to the significance of the habitat to the species, and the USFS failed to assess the full implications of these changes.

Requested remedy: Restore applicability of protections measures to GHMA, clarify the extent of CHMA, designate and identify Winter Concentration Areas in Wyoming. Provide a supplemental NEPA analysis to assess these changes.

B. The plan makes significant management changes without analyzing and disclosing the impacts of or rationale for doing so, in violation of NEPA. In some cases, the table doesn't even reveal the differences among the DEIS and FEIS, limiting the public's ability not just to understand the impacts, but to even identify them.

NEPA requires that an EIS be written in plain language and present information so that decisionmakers and the public can readily understand them and provide informed feedback and conclusions. The EIS must, for example, be organized and written so as to be readily understandable by non-professional laypersons likely to be affected by the actions taken. California ex rel. Lockyer v. United States Forest Serv., 465 F.Supp.2d 942, 946-947 (N.D. Cal. 2006). The Ninth Circuit has characterized this as the "readability" or "understandability" requirement. Id. The EIS must also provide its readers with the information necessary to understand the EIS' statements, assertions, assumptions, and findings, as well as their ramifications. Further, NEPA requires that an EIS promote scientific integrity and contain information that allows a hard look at impacts, not just a one-sided look. NFMA of course requires that Plans promote "ecological integrity" and "diversity of plant and animal communities."

There are numerous places where changes were made between the draft and final EIS that were not identified, analyzed, or disclosed in the comparison of the plans in Section 2.5. Some of these were not even flagged in accordance with the color scheme the agency was supposed to be using to make it easy on the reader to see the changes. We object to these omissions and request preparation of an SEIS in accordance with 40 C.F.R. § 1502.9(c)(i).

We object to the changes since the draft plan that remove the direction for habitat management in seasonal habitat types. The draft EIS included the specific direction, "When breeding and nesting habitat overlaps with other seasonal habitats, habitat should be managed for breeding and nesting desired conditions." The final EIS deletes this direction from GRSG-GEN-DC-002-Desired Condition. It also deleted GRSG-GRSGH-GL-011-Guideline which specified the same thing, and claims that it was "Incorporated into GRSG-GEN-DC-002-Desired Condition," from which it was also deleted. FEIS at 2-278. Thus, the agency has removed an important management instruction directing the highest level of habitat protections in the HMAs. The FEIS does not admit or analyze this.

A small but significant change in the Wyoming plan is the removal of the word "credible" as a modifier to "data" that can be used for shifting dates during which disturbance buffers are applied in PHMA, CHMA, and GHMA. See, e.g. GRSG-TDD-GL-017-Guideline, FEIS at 2-282. The intentional removal of this word can only signify that the FS intends to use any data, weakening the protections these guidelines are intended to afford. The FEIS fails to analyze this change and the color scheme of Table 2.5 fails to highlight this change for the reader.

Elsewhere, the Wyoming plan changes "authorized land uses" to "anthropogenic disturbances" but does not clearly provide the reader with an understanding of the difference. See, e.g. GRSG-TDDD-ST-023-Standard, FEIS at 2-283. The FS has made this change since the draft EIS, making it impossible for us to have raised it earlier.

Anthropogenic disturbance is defined in the FEIS glossary as, "Human-created features including but not limited to paved highways, graded gravel roads, transmission lines, substations, wind turbines, oil and gas wells and associated facilities, geothermal wells and associated facilities, pipelines, landfills, agricultural conversion, homes, and mines." Glossary-423. This differs from the definition of Authorized Use:

Authorized use - An activity (i.e., resource use) occurring on public lands that is either explicitly or implicitly recognized or legalized by law or regulation. The term may refer to activities occurring on public lands for which the Forest Service has issued a formal authorization document (e.g., livestock grazing permit, special-use authorization, approved plan of operation, etc.). Formal authorized uses can involve both commercial and non-commercial activity, facility placement, or event. These authorized uses are often spatially or temporally limited. Unless constrained or bounded by statute, regulation, or an approved forest plan decision, legal activities involving public enjoyment and use of the public lands (e.g., hiking, camping, hunting, etc.) require no formal Forest Service authorization.

Ibid. Thus, though the FEIS fails to admit or analyze this, the new Standards with this revised language apparently no longer apply to disturbances that are not structural and permanent, including widespread permitted activities that have major negative impacts on sage-grouse habitats, such as livestock grazing. In the case of GRSG-TDD-ST-023-Standard, this means that activities that may harm sage-grouse are no longer subject to the compensatory mitigation requirements (weakened though they are as well). In GRSG-TDD-GL-024-Guideline, the restrictions on new land uses only apply to new land uses that create anthropogenic disturbance. FEIS at 2-284. Thus, new land uses like sheep driveways, OHV races, upgrades to road surfaces or many other highly disturbing activities will be exempt from this requirement.

Elsewhere, the Wyoming plan obscures the change from "removing" guy wires to merely "marking" guy wires in PHMA. FEIS at 2-285. The "Issue/Clarification" column does not disclose this change, nor does the color scheme that is supposed to make it easier for the reader to identify. Ibid. Marking is less effective than removing, so this change to GRSG-INFRA-GL-027-Guideline undermines sage-grouse protections.

One seemingly minor change in the Wyoming plan is actually quite a big deal: The FS has altered the requirements for authorizing new land uses "subject to existing rights" rather than "subject to valid existing rights." FEIS at 2-283, GRSG-TDD-ST-023-Standard. The 1872 Mining Law gives exclusive rights to miners who have valid unpatented mining claims. To have a valid unpatented mining claim, there must be a valuable mineral deposit underlying the claim. By removing the requirement for the rights to be validated, the agency is changing the geographic area to which the mitigation will apply. This change occurred between the DEIS and the FEIS, making it impossible for the public to previously comment on it. No analysis accompanies the change, in violation of NEPA. The FS also made this change in other standards, but nowhere did the agency flag the change for the reader using the color scheme of Table 2.5. The new plan thus extends exceptions to more "rights." This is a significant difference between the 2015 plan, the draft plan, and the proposed action, and the FS is unlawfully ignoring the change.

Individually and collectively, these represent substantial changes made to the FS's proposed plan amendments between the DEIS and FEIS stage. The FS's failure to candidly acknowledge that it made these changes and to analyze their environmental effects violates NEPA.

The failure to prepare and circulate for public comment a supplemental EIS analyzing these changes to the proposed amendments also violates NEPA. NEPA requires a supplemental EIS when the agency makes "substantial changes" to its proposed action that are "relevant to environmental concerns." 40 C.F.R. § 1502.9(c); see also Russell Country Sportsmen v. U.S. Forest Serv., 668 F.3d 1037, 1045 (9th Cir. 2011) (where an agency changes the alternatives considered in the draft EIS, supplementation can be avoided only if: (1) the new alternative is a "minor variation" and (2) "qualitatively within the spectrum of alternatives that were discussed in the draft [EIS]."). Here, the changes identified above are not "minor variations" but rather "substantial changes" to the FS plan amendments that are clearly relevant to environmental concerns. By making such changes after the opportunity for public comment pursuant to NEPA passed, the Forest Service unlawfully insulated these decisions from public scrutiny.

Requested remedy: Restore requirement to remove guy wires. Restore prohibited authorizations for all surface-disturbing activities, not just structural "anthropogenic disturbance." Return the wording of GRSG-TDD-ST-023-Standard to "subject to valid existing rights." Provide a full and detailed analysis of proposed changes in protection timeframes in a supplemental NEPA analysis. Prepare a Supplemental EIS.

C. The plan makes significant management changes without analyzing and disclosing the impacts of or rationale for doing so, in violation of NEPA.

NEPA requires that an EIS be written in plain language and present information so that decisionmakers and the public can readily understand them and provide informed feedback and conclusions. The EIS must, for example, be organized and written so as to be readily understandable by non-professional laypersons likely to be affected by the actions taken. California ex rel. Lockyer v. United States Forest Serv., 465 F.Supp.2d 942, 946-947 (N.D. Cal. 2006). The Ninth Circuit has characterized this as the "readability" or "understandability" requirement. Id. The EIS must also provide its readers with the information necessary to understand the EIS' statements, assertions, assumptions, and findings, as well as their ramifications. Further, NEPA requires that an EIS promote scientific integrity and contain information that allows a hard look at impacts, not just a one-sided look. NFMA of course requires that Plans promote "ecological integrity" and "diversity of plant and animal communities."

The Final EIS changes the extent to which disturbance in allowed in PHMA by making minor terminology changes that have big implications. For example, GRSG-TDD-GL-021-Guideline changed the limit on oil and gas development from "one pad or mining operations per 640 acres" to "one activity per 640 acres." FEIS at 2-280. "Activity" is not defined in the glossary, but the Table in Chapter 4 of cumulative effects of each foreseeable "activity" gives the reader a clue as to what "one activity" might entail:

USFS, Medicine Bow-Routt NF, Douglas and Thunder Basin RD: Amend an existing special use authorization, named DGL344, to include construction and operation of a new power line segment at Antelope Mine within a new right-of-way in order to provide electricity to an existing entrance guard facility. FEIS at 4-405.

Thus, "one activity" could apparently be all of the components of a project, and without specificity, this is impossible to analyze the effects of, in violation of NEPA.

The Response to Comment boilerplate regarding changes to livestock grazing management fails to address the

substantive comments provided by the public concerning the weakened management proposed.

For example, the Wyoming plan changes GRSG-LG-GL-040-Guideline to reducing the amount of time the inadequate lek protection from sheep bedding and camps must be followed (from May 15 back to April 30). FEIS at 2-293. There is no scientific evidence to support these changes, and the FEIS identifies these significant changes as nothing more than a "clarification" to the plan. Ibid. This is also curious in light of the restrictions on livestock trailing under -041-Guideline which begin on March 15. Ibid. So, it's essentially fine to run the herd over an active lek but not stop exactly on top of it in early March? There is no rational basis for this difference, and the FEIS does not analyze or disclose any other basis either.

The proposed action also changed the guidelines pertaining to fences in sage-grouse habitat, without a single mention of this change in the effects analysis of Chapter 4. Between the draft and final EIS, the agency changed the proposed management from "Existing fences within 1.2 miles of leks should be modified… " to "Existing fences within 0.6 miles of occupied leks should be modified..." FEIS at 2-294. This change fails to identify how many miles of fencing are now precluded from complying with this guideline, and how inadequate this distance is for protecting grouse. This Guideline adds, without stringency, "new stretches of fence with high potential for collisions should be marked." Ibid. This fails to meet the obvious appropriate bar for protecting sage-grouse, which is that new fences with high potential for collisions should not be built, anywhere within 4 miles of sage-grouse leks in order to protect breeding and nesting sage-grouse. "New fences within 0.6 miles of a lek would not be constructed March 15 - June 30, or on the lek itself," (GRSG-LGL-042-Guideline) is contrary to the science that would recommend no new fences within 2 km of a lek, the standard adopted by Idaho, Colorado, and others.

Studies have found that marking fences only reduce sage-grouse collisions by as little as 57%, such that up to 43% of the collisions on unmarked fences continue to occur on marked fence sections (Van Lanen et al. 2017). The BLM's National Technical Team (2011) recommended that unused fences should be removed, and their rights-of-way withdrawn. Removal of this existing fencing would decrease potential raptor perching and subsequently the indirect impacts of raptors preying on grouse as and other prey species. The removal of fencing could also eliminate any direct mortality due to grouse colliding with problem fences.

The proposed action also lowers the percentage of acceptable conifer cover from 10 percent to 4 percent (See FEIS at 2-272) without explanation. This was a new change since the DEIS and WWP was unable to comment on it previously. There is no explanation of this revision in the FEIS and no recent science that we are aware of to support this change.

Elsewhere, the Wyoming plan removes the definition of baseline that excluded recent noises. Guideline-TDD-GL-021 (previously a Standard -014) specifies that in PHMA only (before, it was all HMA), "do not authorize new projects that create noise levels, either individual or cumulative, that exceed 10 dBA (as measured by L50) above baseline noise at the perimeter of the lek (or lek center if no perimeter is yet mapped) from 6 p.m. to 8 a.m. during the breeding season (March 1 to May 15)." FEIS at 2-282. This change cuts into habitat protections in multiple ways. In addition to weakening the applicability of the restrictions (changing from standard to guideline), the agency is now allowing current noise levels to be the baseline conditions onto which new noises are added. Additionally, sage-grouse in Wyoming are inexplicably less protected from new noises than Idaho's sage-grouse, to which restrictions apply until 9 a.m. Nowhere does the FEIS explicitly analyze or disclose the differences between the previous standards and the current guideline, and nor is "L50" or its addition described or assessed.

Advances in science make it increasingly clear that noise from roads or industrial facilities is having a major negative effect on sage-grouse and their ability to make use of otherwise suitable habitats. Noise can mask the breeding vocalizations of sage-grouse (Blickley and Patricelli 2012), displaces grouse from leks (Blickley et al. 2012a), and causes stress to the birds that remain (Blickley et al. 2012b). According to Blickley et al. (2010), "The

cumulative impacts of noise on individuals can manifest at the population level in various ways that can potentially range from population declines up to regional extinction. If species already threatened or endangered due to habitat loss avoid noisy areas and abandon otherwise suitable habitat because of a particular sensitivity to noise, their status becomes even more critical."

The best available science indicates that intermittent noise, particularly that of vehicles on roadways, has a major negative impact on lekking sage grouse. Importantly, these noise restrictions also only apply "at the perimeter" - or worse, from the center of -- the occupied lek during lekking overnight between 6 pm and 8 am.

It is reasonable to suppose that if noise that mimics oil and gas truck traffic causes elevated levels of stress-related metabolites in grouse on the lek (Blickley et al. 2012b), that this physiological response would be substantially similar during other parts of this bird's life cycle. Indeed, these researchers stated, "Noise at energy development sites is less seasonal and more widespread and may thus affect birds at all life stages, with a potentially greater impact on stress levels." Patricelli et al. (2012) recognized this explicitly:

"Second, and much more importantly, if noise levels drop down to stipulated levels at the edge of the lek, then much of the area surrounding the lek will be exposed to higher noise levels (see Figures 3 & 4). This management strategy therefore protects only a fraction of sage-grouse activities during the breeding season-mate assessment and copulation on the lek-leaving unprotected other critical activities in areas around the lek, such as foraging, roosting, nesting and brood rearing."

The federal approach of measuring noise exceedances at the perimeter of a lek (or the center of the lek, in Wyoming only), instead of at the periphery of occupied seasonal habitat, is scientifically invalid because it fails to address existing noise impacts to nesting habitats, wintering habitats, and brood-rearing habitats. The FEIS fails to discuss these impacts of how the changes of the proposed action will affect this species.

In another important change, the plans alter the adaptive management protocols considerably in ways that aren't fully analyzed or disclosed. The Adaptive Management Response identified in the all-new GRSG-GEN-ST-004-Standard is inadequate to assure the agency will act when a hard or soft trigger is met. Despite recognition that "hard triggers are considered a catastrophic indicator…" (FEIS at 2-275), the proposed action in response is to "defer issuances of discretionary authorizations for new actions for a period of 90 days." (Id. at 2-274.) Existing actions that may be triggering the catastrophe are allowed to continue, but within 14 days the FS will work with the Adaptive Management Working Group to initiate a causal factor analysis. The interim response strategy will be implemented within 90 days for the BSU. FEIS at 2-274. It is unclear who comprises the AMWG.

The adaptive management scheme for hard triggers being met specifies that interim response strategies "shall include reverting back to prior management once the identified causal factor is resolved." FEIS at 2-274. This should be changed to "when the population and habitat rebound accordingly."

Finally, the Wyoming plan fails to adequately analyze the proposed plan's change to assessing habitat loss "at a statewide scale" instead of by the Biologically-Significant Unit (BSU) as the 2015 plan had done and as the other states in the FS planning effort have retained. See, e.g., GRSG-TDD-ST-023-Standard, requiring mitigation that provides no net loss to the species measured at the statewide scale. A comparable change of scale was analyzed and the impacts disclosed for the Idaho proposed action (See FEIS at 4-362) but the FEIS completely fails to analyze a much different scaling scheme for Wyoming.

Requested remedy: The FS must disclose all of the changes it made to the plans and describe the impacts of those changes. Require prohibition on new fence construction within 4 miles of leks, and that existing fences within these areas be eliminated. Require that 7 inches of grass height be left behind in breeding, nesting, and brood-rearing habitats, and impose a maximum of 25% forage utilization in sage-grouse designated habitats. Restore original guidance to allow 10% conifer cover, per the original LRMPA. Restore original restriction of

GRSG-GEN-ST-008-Standard to apply to all forms of noise, restrict noise to 25dBA (instead of tying noise levels to 10 dBA above an unspecified and potentially fluctuating ambient level), and require that noise limits be imposed as measured at the periphery of occupied seasonal habitat. Provide a full and detailed analysis of proposed changes in protection from noise and livestock-related impacts in a supplemental NEPA analysis.

The FS must also analyze and disclose the effects of the change in scale at which "No Net Loss" will be measured.

D. The FEIS defers important analyses to future implementation-level decision-making without analyzing or disclosing the public participation opportunities of those decisions, in violation of NEPA.

The response to comments claims that "Project-level actions necessary to execute the LMP-level decisions in the FEIS and ROD are subject to further environmental review under NEPA. This process requires public notification." Response to WWP Comments, #9. This doesn't specify what level of NEPA review projects will receive, and a look at the cumulative impacts section of the FEIS reveals how even major projects get categorically-excluded from NEPA. It also overlooks the proposed new NEPA regulations for FS management that sweep many more projects into qualifying for CXs.

Requested remedy: Require all grazing permits in designated sage-grouse habitats to undergo full NEPA compliance, including an EA provided for public review and comment prior to a decision. Require public notice and comment on all projects.

E. The FEIS changes lek buffers and lek management by redefining protections but fails to admit this weakens protections, in violation of NEPA.

In Wyoming, the proposed action retains the wholly inadequate 0.6-mile radius prohibition on surface occupancy in PHMA and 0.25-mile radius in GHMA. These have been changed from Standards to Guidelines in the new plan, meaning even these small buffers aren't secure. FEIS at 2-282. Moreover, the FS has tweaked the language to apply only to leks within "general areas" for the lek buffers guidelines applicable to GHMA. GRSG-TDD-GL-020-Guideline, FEIS at 2-282. This would seem to suggest that for leks within 2 miles in PHMA, CHMA, or outside of designated HMA, no buffer will be applied that would affect GHMA, even if the relevant area overlaps.

No scientific study ever has recommended that 0.6-mile buffer provides an adequate conservation measure. An interagency team of sage-grouse experts from state and federal agencies performed a comprehensive review of the scientific literature and recommended a 4-mile lek buffer for siting industrial development in sage-grouse habitat (National Technical Team 2011), a prescription in greater accord with the science. Apa et al. (2008, emphasis added) reviews the best available science by a team of sage-grouse biologists, and states,

"Yearling female greater sage-grouse avoid nesting in areas within 0.6 miles of wellpads, and brood-rearing females avoid areas within 0.6 miles of producing wells. This suggests a 0.6-mile buffer around all suitable nesting and brood-rearing habitat is required to minimize impacts to females during these seasonal periods." This report further clarifies, "These suggest that all areas within at least 4-miles of a lek should be considered nesting and brood-rearing habitats in the absence of mapping."

Thus, state experts in this report in effect recommended a 4.6-mile NSO buffer around active leks. This recommendation is buttressed by the findings of Holloran et al. (2007) that yearling sage grouse avoided otherwise suitable nesting habitat within 930m (almost 0.6 mile) of oil and gas-related infrastructure. This means that individual well sites, and their access roads and other related facilities, will be surrounded by a 0.6-mile band of habitat that has substantially lost its habitat capability for use by nesting grouse. Aldridge and Boyce (2007) suggested that even larger buffers of 10 km (6.2 miles) are warranted. Manier et al. (2014) subsequently

reviewed all available science and reported an
"interpreted range" of appropriate lek buffers ranging from 3.1 to 5 miles. WWP et al. provided this information to the agency during the comment period; the FS responded that it analyzed different lek buffers in the 2015 plans. But the FS did not analyze weakening standards to guidelines in the application of the already-too-weak buffers, and has failed again to do so here.

Requested remedy: Require lek buffers of at least 4 miles in PHMA, GHMA, and CHMA. Require disturbance cap of 3% to be applied per-square-mile-section, in addition to any BSU or larger-level calculations. Require a limit of one site per square-mile section in PHMA. Provide a full and detailed analysis of proposed reductions in lek buffers on sage-grouse habitats and populations in a supplemental NEPA analysis.

F.The FEIS fails to disclose or analyze the impacts of a series of related plan revisions reducing safeguards against fossil fuel development.

The FEIS fails entirely to openly disclose, or meaningfully analyze, a series of related changes to the Wyoming plans that operate, in concert with the accompanying changes to Forest Service sage-grouse habitat management in other states, as well as the BLM's March 2019 changes to sage-grouse habitat on BLM-managed lands, to reduce the certainty that sage-grouse habitat will be conserved.

Standard GRSG-M-FMUL-ST-079, which requires that new oil and gas leases in PHMA and GHMA be offered only subject to the Timing, Distance, Density, and Disturbance requirements of the Wyoming Forest Service Plans, would be amended to Standard GRSG-M-FMUL-ST-077, which would apply only to PHMA, Connectivity Habitat Management Areas ("CHMA"), and winter concentration areas. FEIS at 2-306. Although the FEIS apparently never explicitly discusses the impact of this change, it would appear that it strips timing, distance, and density safeguards from a substantial portion of Wyoming Forest Service-managed GHMA, as CHMA is already a subset of PHMA (FEIS at 4-358. The application of Standard GRSG-M-FMUL-ST077 to "winter concentration areas," moreover, appears wholly irrelevant at this time, as hidden in the Glossary is the admission that "[n]o Winter Concentration Areas are currently mapped on NFS lands in Wyoming." FEIS at Glossary-434. The result of this undescribed and unanalyzed change is that 232,300 acres of General Habitat Management areas on the Bridger-Teton National Forest will lose key elements of habitat protection in the 2015 plans - namely the timing, distance, density and disturbance requirements applicable to new fluid mineral leases. The FEIS, neither in its discussion of modifying disturbance caps, FEIS at 4-362 to 4-363, nor elsewhere in its discussion of environmental consequences, even acknowledges this significant reduction in protections, much less provides any analysis of how it may affect sage-grouse populations on over 200,000 acres of the Bridger-Teton National Forest.

The proposed plan is unclear as to the extent to which a new "Management Approach," GRSG-M-FMUL-MA-079, FEIS at 2-307, obliges the Forest Service to require incorporation into lease terms of the stipulations set forth in Appendix G. No matter the import of MA-079, however, those stipulations in Appendix G to the FEIS clearly do not provide for the timing, distance, and density requirements of the 2015 Plan that would be removed from General Habitat Management Areas under proposed Standard GRSG-M-FMUL-ST-077.

Requested remedy: Retain timing, distance, density, and disturbance requirements for fluid mineral leases within Forest Service-managed General Habitat Management Areas in Wyoming.

G. The FEIS fails to analyze a range of alternatives to the proposed action, in violation of NEPA.

WWP's January 2019 comments on the draft EIS identified the agency's failure to consider a range of alternatives, including an alternative based strictly on the scientific recommendations of the National Technical Team report and the Conservation Objectives Team 2013 report, and we also recommended that the agency consider fully protecting all of the areas previously identified as PACs. The agency did not take this

recommendation, analyzing just two alternatives relevant to Wyoming: the status quo and the proposed action. In the Response to Comments, the agency claims that a full range of alternatives were considered in the 2015 plans, but the context in which the 2019 plans occurred - expiration of the withdrawal EO, removal of SFA - has changed sufficiently that the range of alternatives from the previous planning effort are no longer adequate.

WWP's January 2019 comments described how the Wyoming state Core Areas were gerrymandered to exclude important (and undeveloped) sage-grouse habitats that warrant inclusion in PHMA based on the best available science, yet were excluded from protection to allow industrial uses incompatible with sage-grouse conservation. Yet the Forest Service declined to consider in detail the expansion of PHMA boundaries to include these lands for elevated protection. The failure to consider these expanded PHMAs violates NEPA's range of alternatives requirement.

WWP's January 2019 comments described how winter concentration areas should be protected from energy development and mining, and provided best available science describing why these areas should be closed to surface occupancy for surface-disturbing activities and future leasing for mineral extraction. Our comments also outlined reasons why, based on the best available science, winter timing restrictions on these activities are wholly inadequate. The failure to consider these expanded winter concentration area protections violates NEPA's range of alternatives requirement.

Elsewhere in our comments submitted for this EIS, WWP and others requested the following conservation measures to be applied, based on NTT (2011), COT (2013), and the best available science. Designate all habitats designated as Priority Areas for Conservation (PACs) by the USFWS (COT 2013) as PHMA. Allow no leasing in PHMA. Application of 4-mile No Surface Occupancy buffers around leks. Require limits of 3% surface disturbance and one site per square mile, calculated on a per-square-mile basis in addition to calculations based on any larger geographical basis. Require that any surface-disturbing activities result in a "net conservation gain." Exclude overhead transmission lines and renewable energy sites from PHMA. Require that livestock grazing be limited to 30% forage utilization, and maintain 7-inch residual grass height in breeding and nesting habitats. Prevent the siting of livestock-related structures within 1.2 miles of leks. Provide for the voluntary retirement and closure of grazing permits within designated sage-grouse habitats. Prevent vegetation treatments that potentially damage sage grouse habitats within PHMAs. Apply these conservation measures without waiver, modification, or exception. Yet the Forest Service failed to analyze an alternative in detail that requires all of these protection measures, even though the best available science recommends these measures as the minimum required to conserve and restore sage-grouse habitats and populations.

The FEIS's cumulative effects analysis is also inadequate because the cumulative impacts to sage-grouse have changed with the parallel weakening of protections on BLM lands. The BLM plans likewise weaken protections for sage-grouse habitat, remove SFA, allow more modifications, waivers, and exceptions, remove livestock habitat management guidelines, undermine adaptive management processes, and suffer from the same deficiencies as the FS is proposing here. Thus, the cumulative impacts analysis for all alternatives have changed, and the agency can no longer rely on the 2015 EIS to adequately or accurately compare the effects of its actions.

Requested remedy: Complete a new EIS that analyzes a range of alternatives in context of all of the changes since the 2015 plans were created. Expand designated Priority Habitat Management Areas to include areas of high sage-grouse population concentration previously excluded from PHMA (see Attachment 1) Apply No Surface Occupancy buffers of 4.0 miles around leks, and limits on surface disturbance of 3% per square-mile section and one site per square mile section, in addition to larger area calculations for disturbance density. Require that any surface-disturbing activities result in a "net conservation gain." Exclude overhead transmission lines and renewable energy sites from PHMA. Require that livestock grazing be limited to 30% forage utilization, and maintain 7-inch residual grass height in breeding and nesting habitats. Prevent the siting of livestock-related structures within 1.2 miles of leks. Provide for the voluntary retirement and closure of grazing permits within designated sage-grouse habitats. Prevent vegetation treatments that potentially damage sage grouse habitats

within PHMAs. Apply these conservation measures without waiver, modification, or exception. Expand protections for winter concentration areas to include moratoria on future coal, fluid mineral, and leasable mineral leasing, and prohibitions on surface-disturbing activities. Consider a new alternative that strengthens protections for all HMA.

H. The FEIS is improperly limited to sage-grouse impacts and fails to address the likely environmental effects to countless other resources, in violation of NEPA.

Approximately 350 species of plants and wildlife rely on sagebrush steppe ecosystems and coexist with greater sage-grouse. The USFS wholly abdicated its responsibility to analyze the potential impacts to such species. The FEIS claims that "[i]ncreased flexibility for other uses within greater sage-grouse habitat do not necessarily increase potential impacts on other wildlife or plant species." There is absolutely no evidence provided for this conclusion, nor does it suffice for the "hard look" analysis required under NEPA. USFS also failed to analyze potential impacts to numerous other resources that would be impacted by the plan amendments (e.g., water resources, soil resources, air quality, vegetation).

The USFS itself determined in its 2015 FEISs that the added conservation measures for greater sage-grouse would directly impact numerous other resources within the sagebrush steppe. It must likewise analyze how removing protections adopted in 2015 will affect these resources.

Requested remedy: Provide a full and detailed analysis of the effects on other resources impacted by the plan amendments, such as the approximately 350 other species that share the same sagebrush habitat.

I. The FEIS insufficiently analyzes cumulative effects of the plan amendments, including a failure to consider substantial changes in BLM sage-grouse plans since 2015, in violation of NEPA.
Though titled a "Cumulative Effects Analysis," Section 4.7 of the FEIS fails to address the cumulative effect of the proposed plan amendments-themselves, or when added to other past, present, and foreseeable actions. The analysis is improperly segmented in several ways. First, rather than assess the collective effects of all of the plan amendments, this USFS severs the analysis by category of plan change (e.g., modifying lek buffers). The FEIS never actually analyzes the effects of implementation of the plan amendments as a whole. Second, the FEIS fails to analyze the cumulative effect of the plan amendments in combination with other activities. Simply listing these actions in a chart misses the point. Finally, the FEIS also fails to study the cumulative and synergistic impacts of the ecently-finalized BLM greater sage-grouse plan amendments. A cumulative impact analysis must separately describe related projects, their environmental effects, and "consider the[ir] interaction" with the proposed project. Or. Nat. Res. Council Fund v. Brong, 492 F.3d 1120 (9th Cir. 2007). Moreover, for many of these past or future actions, a description of potential effects on sage-grouse is either absent or unhelpful.

Requested remedy: Provide a full and detailed cumulative effects analysis of the plan amendments in a supplemental NEPA analysis.

J. The FEIS fails to analyze and disclose the effects of the "No Net Loss" mitigation strategy.

We object to the elimination of the "net conservation benefit" and "clear conservation gain" strategies from plan amendment, which would be changed to "no net loss." Given that the greater sage-grouse is in deep trouble at present (as witnessed by the 2010 "warranted but precluded" finding for ESA listing and the troubling declines range-wide in 2019), there is a compelling need to recover sage-grouse to healthy population levels. We are concerned that this change, together with other weaken elements of the sage grouse RMPAs, will result in a continued loss of populations and habitats that place the species on a trajectory toward extinction. The FEIS admits that this new strategy will result in fewer acres being restored, improved, or protected. FEIS at 4-355. However, the FS fails to analyze the impacts of this change or to even predict the likely future effects compared to the "No Action" alternative, in violation of NEPA.

Requested remedy: Complete a new EIS that analyzes and discloses the likely impacts of the changed mitigation strategy on the long-term viability of sage-grouse habitat in Wyoming.

K. The FEIS fails to evaluate or disclose baseline habitat and population conditions.

The FEIS fails to analyze the current sage-grouse population and habitat trends either in the affected states or across the sage-grouse range. The FS falsely asserted that conditions "have not appreciably changed" since 2015 without acknowledging that millions of acres of sage-grouse habitat in the West have burned in wildfires since 2015, millions more acres of sage-grouse habitat have been newly leased for oil and gas development, or that sage-grouse populations in all states have showed precipitous declines in recent years---let alone analyzing the effect of these significant changes since 2015. This significant change in baseline conditions mean the FS can no longer rely on the 2015 EIS to adequately or accurately assess the environmental effects of the "no action" alternative. The FS's failure to evaluate these baseline conditions also makes it impossible to understand how the plans will affect conservation of sage-grouse populations locally, regionally, or range-wide.

Requested Remedy: A supplemental EIS that adequately assesses the environmental effects of the "no action" and other alternatives in light of recent data on baseline sage-grouse population and habitat conditions.

II. VIOLATIONS OF THE NATIONAL FOREST MANAGEMENT ACT.

Congress enacted NFMA in 1976 to reform the Forest Service's management of the National Forest System, including by requiring greater recognition of wildlife in its multiple-use management, and to direct the agency to provide for greater public participation in forest management. NFMA directs the agency to "develop, maintain, and, as appropriate, revise land and resource management plans for units of the National Forest system." 16 U.S.C. 1604(a). NFMA requires these plans to "provide for the diversity of plan and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives." Id. § 1604(g)(3)(b).

Under the 2012 planning rule, the agency is supposed to write land management plans that are "sustainable, integrated resource management of the resources within the plan area in the context of the broader landscape, giving due consideration to the relative values of the various resources in particular areas." 36 C.F.R. § 291.1(b).

Under § 219.3, the Forest Service is required to use the "best available scientific information to inform the planning process.

A. The 2019 plan changes important aspects of management from mandatory "standards" to "guidelines" and "management approaches," and thereby weakens the enforceability of the plans themselves.

The FS EIS defines the difference between 'Standards' and 'Guidelines' and 'Management Approaches' on page 2-32.

*Standards are a mandatory constraint on project and activity decision-making
*Guidelines are a constraint on project and activity decision-making that allows for departure from its terms, so long as the purpose of the guideline is met.

For example, the proposed action for Wyoming changes GRSG-LR-SUA-ST-027-Standard to GRSG-LR-SUA-GL-031-Guideline (FEIS at 2-288) without analysis of how the optional application of the power line siting requirements will affect PHMA. By making this something that can be departed from, the FS is removing the certainty of the regulatory mechanism, but this change is not discussed or disclosed in the FEIS.

Worse still, Management Approaches are not enforceable, considered "optional plan content," and can be changed administratively after the plan is published. This falls under the requirements for administrative changes (36 CFR § 219.16 (c)(6)) which requires only that the public be provided notice of such changes in any way that the responsible official deems appropriate.

This is an egregious weakening of the adaptive management approach, as indicated by the change from GRSG-GRSGH-ST-005-Standard to GRSG-GEN-MA-006-Management Approach. This would seem to indicate that the adaptive management response can now be altered without further public input. The FS made this change (from standard to management approach) between the draft and final plans, making it impossible to get clarification on the intention behind this during the comment period. (The substantive issues with the AM changes are outlined above.)

Habitat Management Areas can also be modified by the state, without public input or oversight. See, e.g. GRSG-GEN-O-012 "Objective." FEIS at 2-278. This contradicts what the agency said in response to comments from the Environmental Protection Agency, e.g. "Management areas can only be changed using a plan amendment." The USFS claims that that a plan amendment is required and "this process would require review by the state wildlife agencies as well as a public notification," (See Response to WWP's comments #8) fails to admit that the only public notification requirement is such as deemed necessary by the responsible official. 36 C.F.R. § 219.16(c)(6). Thus, the agency is misleading the public about future implementation of the proposed action.

Requested remedy: For all Standards in the original LRMPA changed to Guidelines or Management Approaches in this planning process (including but not limited to each of the protection measures listed in the above section), restore them to nondiscretionary Standards in the final plan amendment. Provide a full and detailed analysis of proposed reductions in protections from nondiscretionary Standards to discretionary Guidelines and Management Approaches to sage-grouse habitats and populations in a supplemental NEPA analysis.

B. The proposed action fails to use the best available science and misrepresents the science it is using to justify weakening habitat standards related to livestock grazing.

Similarly, the FS ignores recent science, provided by WWP and others in our earlier comments, that fuel breaks are not effective: "A new study by Shinneman et al (2018) recognizes that habitat fragmentation and degradation problems caused by fuelbreaks in sage-grouse habitat and surveyed the available science finding no evidence that fuelbreaks reduce the size or severity of fires in sagebrush habitat." WWP et al. comments at 20. Despite this, and despite having provided a weblink to the research, the FS persists in discussing fuel breaks. See GRSG-FM-GL-054-Guideline. This ignores the new information before the agency about effectiveness of fuel breaks generally, and allows for the introduction and spread on non-native species, contrary to the best available science.

The Wyoming plan significantly weakens the grazing protections afforded to GRSG from the 2015 plans. Rather than apply a specific set of grazing guidelines to grazing allotments, and adjust grazing to meet these guidelines, the new proposed action only recommends adjusting livestock grazing, "as appropriate," if "livestock grazing is determined to be a causal factor limiting achievement of [unspecified] desired conditions for seasonal habitats on capable sites." GRSG-LG-GL-038-Guideline. The preceding "Desired Conditions" that specified the "desired habitat conditions (Table 1)" in the 2015 plans have been replaced with a guideline that says, "Livestock grazing may be used as a tool to maintain or move towards desired habitat conditions." FEIS at 2-291. The desired habitat conditions are no longer specified. Ibid. Desired habitat conditions are also no longer specified under GRSG-GRSGH-DC-002-Desired Condition, which previously referenced Table 2 in the 2015 plan, and now simply cites to vague, aspirational habitat conditions such as "sufficient perennial grass cover to deliver overhead and lateral concealment from March 15 through June 30." Sufficiency is not defined. FEIS at 2-272. This is so vague as to be meaningless and it completely ignores the years of scientific inquiry into what sage-grouse need

to survive. (The FS has also removed reference to specific habitat conditions from GRSG-FM-GL-046-Guideline, FEIS at 2-298.)

The FEIS claims, "Subsequent to 2015, there have been several publications that document the bias of plant phenology and timing of measurements of grass heights, which resulted in an over-estimate of the importance of grass height as a significant factor in nesting success (Gibson et al. 2016, Sage Grouse Initiative 2017, Smith et al. 2017a, Smith et al. 2017b)." FEIS at 3-326. This overstates and/or misrepresents the conclusions of those studies, and the response to public comments fails to remedy this defect. In fact, the conclusions of those studies were much more nuanced.

?Gibson et al. 2016 study actually found that 50 percent of previous studies measuring grass height at predicted hatch date showed positive support for grass height affecting nest survival of greater sage-grouse, with the two papers not supporting this hypothesis for GRSG being Gibson 2015 and Davis et al. 2014. [Gibson 2015 is Dr. Gibson's dissertation, in which he describes positive effects of nest site selection and average residual grass height and average live grass height, with a net positive effect of local selection on nest survival. Davis et al. 2014 admits that "grass height likely influenced nest success" and that the results of the study were consistent with previous studies. Though Gibson 2016 classes this as "no support" for the survival hypothesis, it shouldn't be interpreted to mean that grass height doesn't matter.]
?The Sage Grouse Initiative 2017 paper is a summary of the Gibson and Smith studies, is not a peer-reviewed science-based article that the FS should be citing in support of its management changes.
?Smith et al. 2017a reanalyzed existing datasets from three independent studies across the range of sage-grouse, including two using methods "now known to be biased."
?Smith et al 2017b isn't listed in the Appendix H and it is unclear to what the agency is referring.

In fact, a different Gibson, et al. 2016 paper found that females selected for areas with taller residual grasses or live grasses, "which suggests that females also selected areas with greater vertical cover from grasses near nests." Although residual grasses did not provide an appreciable benefit to reproductive success, the study did not reach that conclusion regarding live grasses. See Gibson, et al. 2016. Indeed, the local scale habitat selection was correlated with reproductive success, meaning that the immediate vegetation communities and structures do make a difference to the bird. Notably, the study did not compare grass heights throughout the season, just within 3 days of predicted or actual date of hatch, and nor did it discuss what the average live grass height was. Ibid.

None of the referenced studies provide the support the agency needs to undergird its decision to remove management parameters related to grass height. Instead, the best available science, and indeed, the preponderance of evidence, has established that at least 7 inches (18 cm) of residual stubble height needs to be provided in nesting and brood-rearing habitats throughout their season of use. According to Gregg et al. (1994: 165), "Land management practices that decrease tall grass and medium height shrub cover at potential nest sites may be detrimental to sage grouse populations because of increased nest predation.... Grazing of tall grasses to <18 cm would decrease their value for nest concealment.... Management activities should allow for maintenance of tall, residual grasses or, where necessary, restoration of grass cover within these stands." Hagen et al. (2007) analyzed all scientific datasets up to that time and concluded that the 7-inch threshold was the threshold below which significant impacts to
sage grouse occurred (see also Herman-Brunson et al. 2009). Prather (2010) found for Gunnison sage grouse that occupied habitats averaged more than 7 inches of grass stubble height in Utah, while unoccupied habitats averaged less than the 7-inch threshold. According to Taylor et al. (2010:4),

"The effects of grazing management on sage-grouse have been little studied, but correlation between grass height and nest success suggest that grazing may be one of the few tools available to managers to enhance sage-grouse populations. Our analyses predict that already healthy populations may benefit from moderate changes in grazing practices. For instance, a 2 in increase in grass height could result in a 10% increase in nest

success, which translates to an 8% increase in population growth rate."

The exception to this 7-inch rule is found in the mixed-grass prairies of the Dakotas, where sparser cover from sagebrush and greater potential for tall grass have led to a recognition that a 26-cm stubble height standard is warranted (Kaczor 2008, Kaczor et al. 2011). Foster et al. (2014) found that livestock grazing could be compatible with maintaining sage grouse populations, but notably stubble heights they observed averaged more than 18 cm during all three years of their study, and averaged more than 10.2 inches in two of the three years of the study.

Doherty et al. (2014) found a similar relationship between grass height and nest success in northeast Wyoming and south-central Montana but did prescribe a recommended grass height. While there are those who have attempted to cast doubt on the necessity of maintaining grass heights to provide sage-grouse hiding cover, based on timing differences in grass height measurements between failed nests and successful nests, these concerns have been refuted for Wyoming. The significance of the Doherty et al. (2014) study was explicitly tested by Smith et al. (2018), who confirmed that grass height continued to have a significant effect on nest success for this Wyoming study after correction factors were applied to the data.

Connelly et al. (2000) reviewed the science of that time and recommended an 18-cm residual stubble height standard. Stiver et al. (2015) recommended 18 cm grass height for all breeding and nesting habitats, and explicitly stated that this and other established measures should not be altered unless scientific evidence definitively indicates that the 7-inch threshold is inappropriate.

WWP's comments pointed out that the best available science still supports grass height minimums for nesting sage-grouse, but USFS instead jettisoned an quantitative criteria and failed to analyze or disclose the potential impacts of this change.

Requested remedy: The Forest Service should retain the scientifically-derived stubble-height standard of 7 inches in breeding, nesting, and brood-rearing habitat for Wyoming until and unless it is replaced with a preponderance of evidence and a majority opinion that grass height isn't an important variable in sage-grouse nest success. Provide a full and detailed analysis of grass height standards, including an accurate and comprehensive review of the best available science, in a supplemental NEPA analysis.

C. The proposed action fails to properly analyze and maintain viability of species of conservation concern.

The Forest Service has failed to comply with its obligations under the 2012 planning rule regarding viability of Species of Conservation Concern (SCC), such as greater sage-grouse.

Specifically, the 2012 Planning Rule requires the Forest Service to first "determine whether or not the plan components . . . provide the ecological conditions necessary to . . . maintain a viable population of each species of conservation concern within the plan area." 36 CFR 219.9(b)(4). If the Forest Service "determines that the plan components . . . are insufficient to provide such ecological conditions, then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area."

The Forest Service has disregarded these mandates in two key ways. First, USFS made a viability determination only with regard to the greater sage-grouse, despite the potential impacts of the proposed plan amendments on numerous other SCCs within the sagebrush ecosystem. Second, the analysis in the FEIS does not support the Forest Service's conclusion that the amended plans will maintain viable populations of greater sage-grouse in all plan areas to which the amendments would apply. There is in fact virtually no discussion of sage-grouse viability in the FEIS. Where it is discussed, the Forest Service provides no support for its conclusions about viability.

As just one example, when discussing the elimination of the Anthro Mountain PHMA, the Forest Service acknowledged that this area has nearly half of the known leks on the Ashley NF but nonetheless concluded-based only on the observation that other PHMA areas remain intact-that slashing protections for this vital area will "not necessarily result in a loss of greater sage-grouse viability on the Ashley NF." This type of speculative statement fails to meet USFS's duty under Section 219. Though the example here applies to Utah, it typifies the failure in the Wyoming plans as well.

Finally, we observe that the USFS refers to "the BAs and BEs located in the project record" as also supporting its viability determination. Such documents either do not exist or have not been made available for public review. We hereby request a copy of any such biological evaluation/assessment and an opportunity to comment on that analysis.

Requested Remedy. We request that USFS, through a supplemental EIS or biological evaluation/assessment, determine the ability of forest service lands to maintain viable populations of greater sage-grouse under these proposed plan amendments. Such analysis must consider the current population trends of greater sage-grouse, the full impact of these weakening amendments, and the many other synergistic threats to the species.

III. VIOLATIONS OF THE ADMINISTRATIVE PROCEDURE ACT

The APA requires a reviewing court to "hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Id. § 706(2)(A). An agency must "articulate[] a rational connection between the facts found and the decision made." Olenhouse v. Commodity Credit Corp., 42 F.3d 1560, 1574 (10th Cir. 1994) (citing Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)). Under this standard, [a]n agency's decision is arbitrary and capricious if the agency (1) entirely failed to consider an important aspect of the problem, (2) offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise, (3) failed to base its decision on consideration of the relevant factors, or (4) made a clear error of judgment. Superior v. U.S. Fish & Wildlife Serv., 913 F. Supp. 2d 1087, 1100-01 (D. Colo. 2012) (citing New Mexico ex. rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 704 (10th Cir. 2009) (internal citations omitted)).

The proposed plan for Wyoming differs from the proposed plans for other states, without any rational reason for doing so. The differences between and among plans is sufficient demonstration that the management recommendations are not based in science, but in politics. The proposed actions are baldly arbitrary and capricious and should be set aside.

Requested remedy: The FS should provide management direction for sage-grouse that is universally informed by the best available science, and that recognizes the need for the federal government to mitigate and compensate for past and ongoing federal agency actions that resulted in habitat degradation and sage grouse decline.

In closing, thank you for your consideration of this Objection. If you have any questions, or wish to discuss the issues raised in this objection letter in greater detail, please do not hesitate to contact me.

Thank you,

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(on behalf of all of the Objectors identified above)

Literature Cited

Aldridge, C.L., and M.S. Boyce. 2007. Linking occurrence and fitness to persistence: Habitat-based approach for endangered greater sage-grouse. Ecol. Appl. 17:508-526.

Apa, T., J. Bohne, T. Christiansen, J. Herbert, B. James, R. Northrup, D. Olsen, A. Robinson, P. Schnurr, T.O. Smith, and B. Walker. 2008. Using the Best Available Science to Coordinate Conservation Actions that Benefit Greater Sage-grouse Across States Affected by Oil & Gas Development in Management Zones I-II (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming). Unpublished multi-state report of game and fish agencies, 10 pp. Online at http://www.ourpubliclands.org/files/upload/ti-State_ScienceGroupDocument_FINAL_01-28-08.pdf.

Blickley, J. L. and Patricelli, G. L. 2010. Impacts of Anthropogenic Noise on Wildlife: Research Priorities for the Development of Standards and Mitigation. Journal of International Wildlife Law & Policy, 13: 4, 274 - 292. http://dx.doi.org/10.1080/13880292.2010.524564.

Blickley, J.L., and G.L. Patricelli. 2012. Potential acoustic masking of greater sage-grouse (Centrocercus urophasianus) display components by chronic industrial noise. Ornith. Monogr. 74: 23-35.

Blickley, J.L., D. Blackwood, and G.L. Patricelli. 2012a. Experimental Evidence for the Effects of Chronic Anthropogenic Noise on Abundance of Greater Sage-Grouse at Leks. Conserv. Biol. 26:461-471.

Blickley J.L., Word K.R., Krakauer A.H., Phillips J.L., Sells S.N., et al. 2012b. Experimental Chronic Noise Is Related to Elevated Fecal Corticosteroid Metabolites in Lekking Male Greater Sage-Grouse (Centrocercus urophasianus). PLoS ONE 7(11): e50462. doi:10.1371/journal.pone.0050462.

Braun, C.E. 2006. A blueprint for sage-grouse conservation and recovery. Tucson, AZ: Grouse, Inc., 20 pp. Available online at https://emwh.org/issues/sage%20grouse/A%20Blueprint%20for%20sage%20grouse%20conservation%20and%20recovery%20braun.pdf. Site last visited 4/19/19.

Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildl. Soc. Bull. 28:967-985.

Doherty, K.E., D.E. Naugle, J.D. Tack, B.L. Walker, J.M. Graham, and J.L Beck. 2014. Linking conservation actions to demography: Grass height explains variation in greater sage-grouse nest survival. Wildlife Biology 20:320-325.

Gregg, M.A., J.A. Crawford, M.S. Drut, and A.K. DeLong. 1994. Vegetational cover and predation of sage grouse nests in Oregon. J. Wildl. Manage. 58:162-166.

Hagen, C.A., J.W. Connelly, and M.A. Schroeder. 2007. A meta-analysis of greater sage-grouse Centrocercus urophasianus nesting and brood-rearing habitats. Wildlife Biology 13:42-50.

Herman-Brunson, K.M., K.C. Jensen, N.W. Kaczor, C.C. Swanson, M.A. Rumble, and R.W. Klaver. 2009. Nesting ecology of greater sage-grouse Centrocercus urophasianus at the eastern edge of their historic distribution. Wildl. Biol. 15: 395-404.

Holloran, M.J., R. C. Kaiser, and W. A. Hubert. 2007. Population response of yearling greater sage-grouse to the infrastructure of natural gas fields in southwestern Wyoming. Completion report. Wyoming Cooperative Fish and Wildlife Research Unit, Laramie, WY, USA.

Kaczor, N. 2008. Nesting and brood-rearing success and resource selection of greater sage-grouse in northwestern South Dakota. M.S. Thesis, South Dakota State Univ., 85 pp.

Kaczor, N. W., K. C. Jensen, R. W. Klaver, M. A. Rumble, K. M. Herman-Brunson, and C. C. Swanson. 2011. Nesting success and resource selection of greater sage-grouse. Pp. 107-118 in B. K. Sandercock, K. Martin, and G. Segelbacher (editors). Ecology, conservation, and management of grouse. Studies in Avian Biology (no. 39), University of California Press, Berkeley, CA.

Manier, D.J., Bowen, Z.H., Brooks, M.L., Casazza, M.L., Coates, P.S., Deibert, P.A., Hanser, S.E., and Johnson,

D.H. 2014. Conservation buffer distance estimates for Greater Sage-Grouse-A review: U.S. Geological Survey Open-File Report 2014-1239, 14 p., http://dx.doi.org/10.3133/ofr20141239.
National Technical Team (NTT). 2011. A Report on National Greater Sage-grouse Conservation Measures. Available online at www.blm.gov/pgdata/etc/medialib/blm/co/programs/wildlife.Par.73607.File.dat/GrSG%20Tech%20Team%20Report.pdf.
Patricelli, G.L., J.L. Blickley, and S.L. Hooper. 2012. The impacts of noise on greater sage-grouse: A discussion of current management strategies in Wyoming with recommendations for further research and interim protections. Unpubl. report prepared for: The Bureau of Land Management, Lander Field Office and Wyoming State Office, Cheyenne and Wyoming Game and Fish Department, 25 pp.
Prather, P.R. 2010. Factors affecting Gunnison sage-grouse (Centrocercus minimus) conservation in San Juan County, Utah. PhD Dissertation, Utah State Univ., 134 pp.
Smith, J.T., J.D. Tack, K.E. Doherty, B.W. Allred, J.D. Maestas, L.I. Berkeley, S.J. Dettenmaier, T.A. Messmer, and D.E. Naugle. 2018. Phenology largely explains taller grass at successful nests in greater sage-grouse. Ecol. and Evol. 8: 356-364.

Stevens, B.S., D.E. Naugle, B. Dennis, J.W. Connelly, T. Griffiths, and K.P. Reese. 2013. Mapping sage-grouse fence collision risk: Spatially explicit models for targeting conservation implementation. Wildl. Soc. Bull. 37: 409-415.
Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl, eds. 2015. Sage-Grouse Habitat Assessment Framework: A Multiscale Assessment Tool. Technical Reference 6710-1. Bureau of Land Management and Western Association of Fish and Wildlife Agencies, Denver, Colorado.
Taylor, R. L., D. E. Naugle, L. S. Mills. 2010. Viability analysis for conservation of sage-grouse populations: Miles City Field Office, Montana. BLM Contract 09-3225-0012; Number G09AC00013. Final Report. Prepared for Bureau of Land Management, Miles City Field Office. Miles City, MT.
Van Lanen, N.J., A.W. Green, T.R. Gorman, L.A. Quattrini, and D.C. Pavlacky Jr. 2017. Evaluating efficiency of fence markers in reducing greater sage-grouse collisions with fencing. Biol. Conserv. 213: 70-83.