Greater Sage -Grouse Proposed Land Management Plan Amendments and (FEIS)

Regions 2 & 4

Final Response to Objection Issues and Instructions

August 2020

Contents

Introduction

History of the Greater Sage-Grouse Conversation Plan Amendments

Agency actions in 2015 helped to prevent greater sage-grouse from being listed as a threatened species under the Endangered Species Act, but in the four years since the plans were originally implemented, new science and management details have emerged.

The Forest Service (FS) is considering amendments to 19 Land Management Plans (LMPs) in Colorado, Idaho, Nevada, Utah, and Wyoming. The purpose of the proposed land management plan amendments (LMPAs) is to incorporate new information to improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse (GRSG) Plan Amendments, including better alignment with the Bureau of Land Management (BLM) and respective state plans, in order to benefit GRSG conservation at the landscape scale. The FEIS describes and analyzes three alternatives for managing GRSG habitat on approximately 5.2 million acres of national forest system (NFS) lands with GRSG habitat administered by the Forest Service.

Three alternatives were analyzed. In the *No Action Alternative,* use of public lands and resources would continue to be managed under current Forest Service land management plan (LMP) direction, as amended in 2015. The *Proposed Action Alternative* makes modifications to the No Action Alternative to incorporate new information to improve the clarity, efficiency, and implementation of GRSG plans, in order to benefit GRSG conservation on the landscape scale. This alternative was developed to promote continued collaboration with the BLM, states, and stakeholders to improve management, compatibility, and consistency between federal management plans and other plans and programs at the state level, and to continue to provide protection of GRSG habitat. This is the preferred alternative. The *State of Utah Alternative* includes all aspects of the Proposed Action Alternative, with two modifications to LMPs within the state of Utah. Specifically, the Forest Service would remove the General Habitat Management Area (GHMA) designation from NFS lands in Utah and would also remove the Anthro Mountain Habitat Management Area from designation on the Ashley National Forest, but not re-designate it as Priority Habitat Management Area (PHMA). The Greater Sage-Grouse Final ROD amending 13 forests and 19 forest plans will be signed by Acting Regional Forester Frank Beum and Acting Regional Forester Jennifer Eberlien.

The FS published the 2017 NOI, 2018 Supplemental NOI, and 2018 NOA to consider the possibility of amending LMPs for GRSG that were originally amended in 2015 in the states of Colorado, Idaho, Nevada, Wyoming, and Utah (2015 GRSG ROD and LMPA). The FS published a final EIS and draft decisions considering the 55,000 comments received as a result of the 2017 NOI, and the 33,000 comments received from the 2018 NOA.

The forests covered by these amendment are; Idaho (Boise, Caribou-Targhee, Salmon-Challis, and Sawtooth National Forests and Curlew National Grassland); Nevada (Humboldt-Toiyabe National Forest); Utah (Ashley, Dixie, Fishlake, Manti-La Sal, and Uinta-Wasatch-Cache National Forests); Wyoming (Bridger-Teton National Forest); and Wyoming/Colorado (Medicine Bow-Routt National Forest and Thunder Basin National Grassland)

Objectors

Counties:

- Nevada Association of Counties (NACO), Dagny Stapleton
- Wyoming Coalition of Local Governments, Kent Connolley – Contact Constance Brooks
- Custer County, Idaho, Wayne Butts - contact Mary Darling
- Humboldt County, Nevada, Dave Mendiola
- Elko County, Nevada, Curtis Moore
- Eureka County, Nevada, J.J. Goicoechea – contact Jake Tibbetts

Energy Interests:

- Petroleum Association of Wyoming, Esther Wagner
- Western Exploration, LLC (WEX), Darcy Marud

Environmental Coalitions:

- National Audubon Society (lead objector, Nada Culver), National Wildlife Federation, The Wilderness Society, Wyoming Outdoor Council, Colorado Wildlife Federation, Conservation Colorado, Western Values Project, Natural Resources Defense Council, Montana Wildlife Federation and Nevada Wildlife Federation
- Western Watersheds Project (lead objector, Greta Anderson), Center for Biological Diversity, American Bird Conservancy, Prairie Hills Audubon Society, WildEarth Guardians, and Defenders of Wildlife
- Wasatch Audubon, Lynn Carroll
- Animal Advocates of the Inland Northwest, Kerry Masters
- Natural Resource Defense Council (lead objector, Joe Eisenberg)

Individuals:

- Barbara Walsh
- Diane Kastel
- Rosalinda Shearwood
- Richard Burton
- John Stephens
- Lisa Goodrich
- Tom Lefferts

Interested Persons

Counties: Campbell County; Teton County; Nevada Association of Counties; Wyoming County Commissioners Assoc.

Conservation Districts: Saratoga Encampment Rawlins Conservation District; Wyoming Association of Conservation Districts

States: State of Idaho- Office of Species Conservation; State of Wyoming; State of Utah, Resource Development Coordinating Committee

Other: Wyoming Stockgrowers Association

Resolution Meeting

A resolution Meeting was held on December 10th and 11th in Salt Lake City, Utah. Attendees, both in person and on the phone, included representatives from the states of Utah, Idaho, Wyoming and Nevada, county commissioners, county associations and representatives, and the environmental community including Western Watersheds Project and the National Audubon Society as lead objectors for a consortium of groups.

At the end of the meeting, Reviewing Officer Allen Rowley, offered the opportunity for any additional resolution input based on what everyone heard over the two days. The State of Wyoming, Custer County in Idaho, and a joint effort between the State of Utah and the National Audubon Society submitted input.

The State of Wyoming suggested addition language and clarification regarding management approaches and what they are and what they are not.

Custer County in Idaho added additional language regarding Animal predation.

Together, the State of Utah and the National Audubon Society offered language clarifying stipulations and exemptions.

The submitted language has been added in the following applicable sections.

Objection Issue Summaries

Planning

Plan Components and Management Approaches

National Audubon Society et al. alleges that the 2019 Proposed Amendments to the 2015 Plans and Draft RODs do not comply with the requirements of the planning rule or best available science, and risk the overall goal of the 2015 Plans to avoid the need to list the species under the ESA.

Western Watersheds Project et al. is concerned that changes to plan components weaken protections for sage-grouse. They contend that management approaches are not enforceable, are considered "optional plan content", and can be changed administratively after the plan is published, which weakens efforts to sufficiently regulate habitat use. They also contend that the proposed alternatives also eliminate key standards designed to avoid and minimize disturbance to sage-grouse habitats and replaces them with non-binding guidelines. They believe the proposed amendments lack any disclosure or analysis in the FEIS supporting the Forest Service's implicit conclusion that habitat function and population viability will not be impaired.

Remedies Suggested by Objectors: Western Watersheds Project et al. suggests that all standards in the original LRMPA changed to guidelines or management approaches in this planning process should be restored to nondiscretionary Standards in the final plan amendment and also requests that the FS provide a detailed analysis of proposed reductions in protections from nondiscretionary standards to discretionary guidelines and management approaches to habitats and populations in a supplemental NEPA analysis.

Review Response: The primary reasons that plan components were moved into different categories are (1) rule changes in the definitions of the categories of plan components, and (2) corrections of plan components that were incorrectly placed in the wrong category. The 2015 sage-grouse amendment were completed in a transition period which allowed use of a previous 1982 version of the rule. However, these current amendments must now be completed under the 2012 version. Between the two rules, the definitions of the categories of plan components and other plan content were changed or clarified.

In response to comments regarding standards that had been changed to guidelines or management approaches in the proposed amendments, the Forest Service rewrote plan components where possible so that they could meet the new definition of a standard (see, for example, in Nevada GRSG-HB-ST-063-, FEIS p. 2-163). The remaining plan components cannot meet that new definition of "a mandatory constraint on project and activity decisionmaking, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements," either because the Forest Service is not able to make them mandatory, or they do not constrain projects or

activities directly, or for reasons related to the intent of the plan component (36 CFR 219.7(e)(1)(iii)).

Management approaches were introduced to provide direction that does not fit within the definition of a desired condition, objective, standard, or guideline, but is still related to how the Forest Service intends to implement the plan. Management approaches usually describe the processes related to how a plan will be implemented, such as coordination, analysis, assessment, inventory, project planning, or monitoring.

Management approaches are "optional" as to their inclusion in a plan, but they still express the intent of the line officer (see Forest Service Handbook (FSH) 1909.12, chapter 22.4).

See below for responses to each of the specific plan components cited by the objectors. In most cases, the objectors focus on the changes to the category of each plan component, but the actual language for the majority of the plan components stayed the same between the 2015 and 2019 versions.

Wyoming Plans

Objectors cite a category change from a standard to a guideline about powerline siting requirements (GRSG-LR-SUA-ST-027 to GRSG-LR-SUA-GL-031, FEIS p. 2-288). However, the old standard was as enforceable as the new guideline. The plan component was reclassified as a guideline because the original standard allowed for a departure from its terms: "within the 2-mile wide transmission line … *or as close as technically feasible.*"

A second example cited by the objectors is a category change from a standard to a management approach for the administrative response to a hard trigger (GRSG-GRSGH-ST-005 to GRSG-GEN-MA-006, FEIS p. 2-275). The original standard described how a working group will be convened and how a response strategy will be implemented. However, as explained in Forest Service Handbook (FSH) 1909.12, chapter 22.13(4), standards should not direct or compel processes such as analysis, assessment, consultation, planning, inventory, or monitoring. Rather, they are the operational constraints on projects or activities. This direction is more appropriately classified as a management approach.

A final example cited by the objectors is admittedly confusing, because a new management approach (GRSG-GEN-MA-012, FEIS p. 2-278) is incorrectly labeled as an objective. Although the objectors did not cite this in their objection, our review has discovered this error. Objectives are "outcomes" designed to make progress toward attaining desired conditions. They must be clearly stated in measurable terms with specific and reasonable timeframes (such as treat 100 acres within 10 years). This objective does neither and should be changed to a management approach.

Regarding the specifics, the objectors are concerned that this management approach allows habitat management areas to be modified by the state without public input or oversight. However, the language indicates that plan amendments are required if changes are made (with an appropriate NEPA process), and if a new Core Area map is developed before a plan can be amended, the up-to-date map will be considered in project planning with appropriate protections.

Utah Plans

Objectors state that the temporary lands special-use restriction (GRSG-LR-SUA-ST-014, FEIS p. 2-193) should not have changed from a standard to a guideline. However, the original language of the standard said that new lands special-use authorizations "may" be issued, i.e. written like a guideline instead of a standard. As explained in FSH 1909.12, chapter 22.13(2), standards are stated in a precise manner with mandatory or prohibitive wording, such as "must", "shall", "must not", "may not", "shall not" or "XX is not allowed to be authorized."

Objectors are also concerned about GRSG-GEN-MA-010 (FEIS, p. 2-190), a management approach that describes how maps are to be evaluated. This is an appropriate management approach. This language does not say that maps will be changed in this evaluation without a plan amendment. A plan amendment is required to modify where one of more plan components apply to all or part of a plan area (including management areas, 36 CFR 219.13).

Objectors are also concerned about standard GRSG-FM-ST-043 moving to guideline GRSG-FM-GL-042 (FEIS p. 2-202). However, the original plan component was misclassified as a standard instead of a guideline because it allows for a departure from its terms, so long as the purpose of the guideline is met: "do not use prescribed fire in 12-inch or less precipitation zones *unless necessary to facilitate restoration of greater sage-grouse habitat consistent with desired conditions…"*

Nevada Plans

Objectors are concerned about standard GRSG-LR-SUA-ST-018 moving to guideline GSRS-LR-SUA-GL-018 (FEIS p. 2-143). However the original standard allows for a departure from its terms, and is more properly classified as a guideline: "locate upgrades to existing transmission lines within the existing designated corridors or right-of-way *unless an alternate route would benefit greater sage-grouse or their habitats."*

Objectors are also concerned about management approach GRSG-GEN-MA-006 (FEIS p. 2-135) stating that this management approach permits changes to habitat management maps without public notice. As explained earlier, the 2012 planning rule requires a plan amendment when changing where plan components are applied (36 CFR 219.13). The management approach acknowledges that appropriate NEPA and forest planning processes will be followed before updating the map.

Objectors are also concerned about the change from guideline GRSG-RT-GL-087 to management approach GRSG-RT-MA-076 (FEIS p. 2-169). Here, the original guideline says to "consider" seasonal road closures during breeding and nesting decision, which describes a process rather than an outcome.

Idaho Plans

Objectors are concerned about standard GRSG-LR-SUA-ST-014 moving to guideline GRSG-LR-SUA-GL-017 (FEIS p. 2-91). However, this direction provides flexibility on whether or not to authorize infrastructure permits, with guidance to minimize impacts to the GRSG and its habitat.

Objectors are also concerned about the new management approach GRSG-GEN-MA-007 (FEIS p. 2-84), which provides the details about how standard GRSG-GEN-ST-006 will be implemented. However, this direction discusses how coordination will be done with the State of Idaho or how disturbances will be reviewed by the Interagency Technical Team. This is a discussion about process, which doesn't belong in a standard.

Finally, objectors are concerned about management approach GRSG-GEN-MA-004, describing the interagency evaluation process on potential changes to habitat management area map (FEIS, p. 2-82). This describes a monitoring and evaluation process, which is outside the plan component categories.

After careful review of the examples cited by the objectors, my finding is that reclassification of the plan components have not changed their force and effect.

Instructions:

1. One plan component cited by the objectors is admittedly confusing, because a new management approach (GRSG-GEN-MA-012, FEIS p. 2-278) is incorrectly labeled as an objective. Objectives are "outcomes" designed to make progress toward attaining desired conditions. They must be clearly stated in measurable terms with specific and reasonable timeframes (such as treat 100 acres within 10 years). Change to management approach.
2. Include a summary table in the final decision documents that link to the table found in Chapter 2 in the FEIS which lays out changes between 2015 and 2019. Clarify in the Issue/Clarification column the link between plan components and management approaches including why the changes were made as per the Post Resolution Meeting Submittal from the State of Wyoming – Management Approaches.

   Post Resolution Meeting Submittal – Management Approaches:

   "In response to Alan's request for any ideas regarding the draft Record of Decision (dROD) and plans, Wyoming would like to offer the following recommendations regarding reclassification of plan components. Wyoming notes that this information is based on multiple conversations with counties and partners here in Wyoming and does not represent a request to change anything, only to clarify or improve upon discussion that is already within the dROD.

   The primary topic revolves around the USFS's explanation as to why certain plan components changed from a Standard to a Guideline or Management Approach, or vice versus. There seems to be some confusion regarding the application of the 2012 Planning Rule and the lack of change in component definitions but a change in the way the planning process has been applied and how components are developed. The only rationale in the dROD appears to be on page 26 (Wyoming specific) where it says: *"To be consistent with the planning rule, those plan components of the 2015 Greater Sage-Grouse Plan Amendments that do not meet the definitions for plan components in 36 CFR 219.7(e)(1) were changed to management approaches."* While we believe this is accurate and the intent is grounded within the regulations it may merit further explanation. To this

end, the USFS could do a number of things to further clarify rationale in the final ROD including:

- Explain which planning rule the agency was operating under when it issued the 2015 plan amendments and what it required and allowed for with regard to plan components and how this changed with the 2012 Planning Rule. In other words, more explanation of what shifted in USFS policy with regard to interpretation of each rule and how it applies to plan components and what makes a component from 2015 consistent or inconsistent with the 2012 Planning Rule;

- For plan components that were changed from one type of component to another, provide a specific explanation as to why, if that plan component were to remain unchanged (i.e., left as a standard), it would be inconsistent with the 2012 Planning Rule.

- For plan components that were changed from one type of component to another and the language of the component was changed as well, explain why the component as edited is better characterized as the new type of component.

- An explanation articulated by Forest Service personnel, but which is missing from the ROD: One reason for changing a plan component from a standard to a management approach is that previous planning rules did not allow for management approaches. It was not until the Forest Service issued the 2012 Planning Rule that management approaches could be used in a plan. For example, plan components in the 2015 ROD that were standards could still be considered standards under the 2019 ROD but are more accurately characterized as management approaches.

We believe much of this can be clarified within the final ROD and there is a large amount of information contained within the Preamble to the 2012 Planning Rule, including the question and answer section that would help illuminate the nuances of the 2012 Rule.

Again, we are not asking for any changes to specific plan components, simply suggesting there may be room for improvement within the final ROD with regard to rationale for some of the changes from 2015 to 2019. If there are any questions or we can be of assistance in any other way please do not hesitate to reach out to any of us here in Wyoming."

Adaptive Management

Western Watersheds Project et al. contends that the plans alter the adaptive management protocols in ways that are not fully analyzed or disclosed. Further, they believe that the adaptive management triggers do not take into account that various environmental factors may cause the deviation. The draft ROD forces a single response on every possible scenario, and a single response might not benefit sage-grouse if the trigger was tripped as the result of a fire, drought, big game species, etc. They allege that the draft ROD does not provide any untriggering language despite the fact that the soft trigger will still trip management adjustments. They are concerned that the FEIS lacks the rationale for the two types of triggers.

Wyoming Coalition of Local Governments is not opposed to adaptive management if the response to identified triggers includes a range of possible actions as well as flexibility if the factor tripping the trigger is due to no fault of any authorized use or is the result of an anomalous year. They believe that the reliance on a five-year population average ignores long-term trends and variations that extend beyond that scope.

Remedies Suggested by Objectors: Western Watersheds Project et al. suggests the adaptive management scheme for hard triggers being met specifies that interim response strategies shall revert back to prior management once the identified causal factor is resolved, specifically requesting use of the phrase "when the population and habitat rebound accordingly" as the reversion trigger.

Review Response: The objectors state that changes to adaptive management protocols have not been fully analyzed or disclosed. They further point to specific concerns for each state. Overall, they would like more clarity about the adaptive management process to assure an adequate regulatory mechanism. However, practical and flexible management considerations are necessary because of the inherent natural cycle of species populations and the need for interagency and intergovernmental coordination. Therefore, it is not always possible to describe specific response actions in a LMP, nor is this level of specificity required anywhere in the 2012 planning rule which governs this amendment process. In fact, monitoring requirements as well as management approaches for implementing LMPs, can be administratively changed at any time without a formal plan amendment in order to provide flexibility and timely adaptability (*see* 36 CFR 219.13(c)].

The Forest Service shares the concerns of the objectors about the importance of a clear, unambiguous adaptive management protocol, including clarity of likely responses when soft or hard triggers have occurred. Some of the remedies suggested by the objectors will improve this process. However, the details about adaptive management are not appropriate in a LMP, and instead belong in individual intergovernmental strategies for each State. The planning rule is clear that when a species is affected by factors outside the authority of the Forest Service, the agency shall coordinate to the extent practicable with other governmental entities while maintaining or restoring ecological conditions within its authorities (*see* 36 CFR 219.9(b)(2)). Within this framework, the Forest Service is only responsible for the management activities within its control. The broad goals of the planning rule are to integrate resource management and balance ecological, economic, and social sustainability.

Each state has a State-specific Adaptive Management Strategy which accounts for differences in greater sage-grouse populations and habitats within each state and are located in the Appendices to the FEIS (Colorado: Appendix B; Idaho: Appendix C; Nevada: Appendix D; Utah: Appendix E; Wyoming: Appendix F). Hard and soft population and habitat triggers for each state and the makeup of the technical review team are identified in the respective appendices. Coordination with an interagency team, which would include both FWS and the respective state agencies, would be required under the adaptive management and mitigation processes (Chapter 4, Section 4.5.5). The teams (respective of state) would evaluate and determine analysis scale, population and habitat warnings and triggers, causal factors, response, and monitoring process; and would

recommend additional implementation-level activities to the appropriate agency line officer. Determination of causal factors is intended to improve response by identifying the most biologically effective responses rather than make assumptions before a trigger is hit. Identifying causal factors does not imply delaying action but focusing on the most effective actions and includes reverting back to prior management once the identified causal factor is resolved.

With the exception of some specific comments below, this overall strategy is consistent with law, regulation, and policy. The objectors make some good points related to each State-specific strategy. Following are responses and instructions for several objection issues.

Idaho Plans

Objectors request more details about how the Sage-Grouse Implementation Task Force will operate and how members will be appointed. However, such detail is not appropriate in a LMP. Objectors also point to the change which requires protective action only if the causal factor is related to Forest Service management. However, this is consistent with the 2012 planning rule as previously mentioned.

Instruction: Objectors correctly point out that the requirement to address whether causes of population decline are "primary threats" or "secondary threats" (FEIS Appendix C-7) needs further clarification. The responsible official should define, remove, or clarify what the terms "primary threats" and "secondary threats" mean and how these threats are determined.

Nevada Plans

Objectors again refer to the lack of certainty about the management approaches. For Nevada, site-specific actions may be based on recommendations of adaptive management response teams. However, like the Idaho plan above, this flexibility is consistent with the 2012 planning rule.

Utah Plans

For Utah, the objectors are concerned about changing a previous requirement to require immediate changes if hard triggers are tripped – to a new requirement for an intergovernmental review of the causal factor(s) for the declines in the area where the trigger had been met. This change is consistent with the planning rule and also demonstrates a more effective approach by targeting actions to the specific causal factor(s).

Objectors also are concerned about the lack of controls where the causal project or activity is ongoing. However, the 2012 planning rule at 36 CFR 219.15 explains that the application of an LMP to existing authorizations and approved projects or activities are subject to valid existing rights. This determination is best made on a case-by-case basis.

Instruction: Objectors state that the Utah plan has no information about who makes the final decisions for what gets implemented and what to do about ongoing activities. The final decision is made by the appropriate Forest Service line officer. Clarify this in the final decision.

Wyoming Plans

For Wyoming, one group of objectors contend that the 90-day process to defer authorizations for new actions has insufficient detail. Again, this is not required by the 2012 planning rule.

Instructions:

1. Change the wording that the hard triggers should end "when the population and habitat rebound accordingly" instead of "once the identified causal factor is resolved."
2. Reset soft triggers to be consistent with hard triggers. Make it clear in Standard 4 that it applies to both soft and hard.
3. Make it clear that the causal factor language for Wyoming is related to sage-grouse only.

Local Government Coordination

Eureka County, Nevada; and Custer County, Idaho contend the plan amendments are not consistent with State and local plans, laws, policies, and controls to the maximum extent possible. They are also concerned about access and use of roads for emergencies such as fire suppression and evacuations. Under the issue of noise restriction, the Counties also assert that restrictions on noise levels during road maintenance/construction may also be untenable.

Remedy Suggested by Objector: Eureka County, Nevada suggests engaging in a dialogue to ensure that when inconsistencies arise between plans, meetings with local governments occur in order to work towards consistency. Comments have been provided explaining these inconsistencies.

Review Response: Under the 2012 planning rule which governs these plan amendments, the responsible official shall coordinate land management planning with the equivalent and related planning efforts of local governments, along with States, Tribes, and other Federal agencies (36 CFR 219.4(b)(1)]. Although NFMA and the related planning rule merely provide an advisory role for local governments in LMP planning, plan amendments shall include a review documented in the EIS of relevant local government plans and policies (36 CFR 219.4(b)(2)]. The Final EIS did include copies of applicable county plans, but did not include a comparison of plans.

Instruction: The review required for coordination, as per 36 CFR 219.4 has not been included in the EIS and should be completed prior to the final decision.

Monitoring

Western Watersheds Project et al. contend that that Forest Service needs to revisit the information used for the 2019 amendments and the associated impacts because both the 2019 monitoring report and the preliminary 2020 bird count data, that will ultimately inform the 2020 monitoring report, shows continuous decline that has not been taken into account in the Draft Record of Decisions.

Remedy Suggested by Objector: Prepare a supplemental EIS incorporating this new information.

Review Response: The Forest Service (FS) has compiled current information about the greater sage-grouse species and its habitat on National Forest System land in order to fulfill the annual reporting requirement in the 2015 sage-grouse plan amendments, as detailed in each plan's Monitoring Appendix. This report is based on current databases and information available at the time of writing. All data are provisional and some figures may be revised in later years as more complete information is compiled.

The 2019 plan amendments rely on monitoring data to inform responses and project-level decisions. So, there is inherently no need to revisit the 2019 amendments/analyses using the 2019 monitoring data because the 2019 amendments and analyses were structured with the forethought that, as conditions change (whether improvement or degradation), so would management responses under the plans. Therefore, the components under the 2019 plans will continue to be appropriate until such time when the fundamental understanding of the relationships between sage-grouse, their habitat, and their stressors has changed; the data currently being compiled for the 2020 report does not constitute a change in understanding of these fundamental relationships.

The FS has also included additional information such as, sage-grouse habitat improved, adaptive management evaluations, and fire management that may assist in assessing the effectiveness of sage-grouse plan components through time.

This report is part of an ongoing process of annual monitoring. It describes current conditions but is not an analysis or a description of a change of conditions. Although annual reports were produced for the years 2016 and 2017, the 2019 report also includes information from 2018. The 2019 report shows that:

- FS projects improved habitat for sage-grouse on nearly 480,000 acres from 2016-2019.
- Fires burned approximately 260,000 acres of greater sage-grouse habitat on National Forest System lands in 2016-2019.
- Data on habitat degradation are available from 2015-2018, and cumulative anthropogenic disturbance was at 0.03% on greater sage-grouse biologically significant units.
- Greater sage-grouse numbers in western states continue to cycle and are currently within the natural range of variability.
- In the years 2016-2019, the FS made 165 project decisions of National Forest System Lands covered by the 2015 Greater Sage Grouse Amendments, of which 100% were reported to be in compliance with plans.
    - Only 25% of those project decisions occurred within greater sage-grouse habitat management areas.
- The plans emphasize avoidance of surface development in sage-grouse habitat and no exceptions were allowed for fluid minerals development in sage-grouse management areas.
- Adaptive management triggers have been analyzed in several states; triggers were not tripped in Montana or Colorado, but some population and habitat triggers were surpassed in Utah, Wyoming, and Idaho. Specific areas and responses are described in the report.

- The currently proposed sage-grouse plan amendments incorporated the 2016 and 2017 report's findings into the Environmental Impact Statement for the new amendments. The final Records of Decision for the new amendments will reference the 2019 report and the State bird count in 2020 to ensure monitoring will continue to help to inform future forest planning and project decisions.

The 2019 report is posted on the Intermountain Region Website:
https://www.fs.usda.gov/detail/r4/home/?cid=STELPRD3843381

Instructions:

1. Because it has been a year since the final EIS and draft RODs have been published, acknowledge in the final RODs the updated 2020 population information from the States, in addition to referring to the 2019 annual report.
2. Clarify purpose and intent of the annual monitoring reports. Also make it clear that although greater sage-grouse numbers are low, they remain within historical range of variation and thus there is no change of conditions between 2015 and now.
3. Display the monitoring information in a way that shows net acres burned vs. improved along with any recent data that informs the monitoring report findings. Provide a graph that shows long term context of how these birds cycle into the RODs

NEPA

National Audubon Society
Wasatch Audubon
Western Watersheds Project
Individuals - Richard Burton, Diane Kastel, Barbara Walsh and Edward Thomas Lefferts
National Resource Defense Council
Petroleum Association of Wyoming

The following National Environmental Policy Act (NEPA) issues raised by objectors have been gathered together along with applicable law, regulation and policy, to ensure a framework for what is required and pertinent points are addressed. Issues related to range of alternatives, purpose and need, and proposed action are integrated to provide context.

Range of Alternatives

National Audubon Society et al. contends that the Forest Service failed to analyze and consider a reasonable range of alternatives, and that it must consider alternatives that align with the proposed amendment's purpose and need. They argue that the Forest Service continues to justify its lack of alternatives by incorporating the analysis of the alternatives in the 2015 Amendments by reference yet explicitly stating that these alternatives are considered but not analyzed in detail. The Forest Service should have analyzed a new range of alternatives, distinct from those analyzed for the 2015 Amendments. Continuing to rely on the 2015 alternatives analysis, failing to provide any sort of explanation as to why this analysis is appropriately incorporated into the

2019 FEIS, and incorporation by reference of the 2015 analysis is not an appropriate exercise of an agency's ability to tier to progressively more narrow environmental analyses. The Forest Service must consider an alternative that is more environmentally protective than the Proposed Action to align with the Forest Service's regulatory obligations to manage for species of conservation concern and to maintain ecosystem integrity and ecosystem diversity. Objectors assert that, with recent reports of continuing decline in sage-grouse populations, along with the BLM's sage-grouse amendments, policy changes, and actions that seriously undercut sage-grouse protections, the Forest Service can "arguably" only meet these obligations through a more protective alternative. The Forest Service fails to comply with NEPA by not fully evaluating the additional, more protective alternatives provided by the objector.

Western Watersheds Project et al. alleges that the Forest Service 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 sagebrush focal areas - has changed sufficiently that the range of alternatives from the previous planning effort are no longer adequate.

Remedies Suggested by Objectors: Western Watersheds Project et al. suggests providing a reasoned explanation as to why the 2015 analysis is sufficient and why this analysis obviates any need for alternatives that align with the 2019 Amendments' purpose and need. Complete a new EIS that analyzes a range of alternatives in context of all of the changes since the 2015 plans were created. Include an alternative that corrects the science-based deficiencies of the 2015 plans and the new inadequacies of the weakened prescriptions.

National Audubon Society et al. also suggests thoroughly analyzing alternatives that are more protective for sage-grouse than the proposed amendments. Acknowledge and respond to alternatives proposed during the comment period, including an alternative that is more environmentally protective than the Proposed Action.

Consider a new alternative that strengthens protections for all GHMA, converting it to PHMA, and reinstate SFA protections to PHMA areas.

Include an alternative based strictly on the scientific recommendations of the National Technical Team (NTT) report and the Conservation Objectives Team (COT) 2013 report, and consider fully protecting all of the areas previously identified as priority areas for conservation (PACs). Analyze an alternative in detail that requires all of the objectors' protection measures; best available science recommends these measures as the minimum required to conserve and restore sage-grouse habitats and populations.

Purpose & Need and Proposed Action

In general, there are two schools of thought on this proposal and purpose and need. There are those that appreciate a more moderate approach that impacts the users of the grasslands less, while retaining healthy greater sage-grouse populations, and then there are those that are very concerned about the perceived lessening of protections for the habitat, putting the greater sage-grouse in jeopardy and not meeting the purpose and need. Natural Resource Defense Council requests that the 2015 plans remain in place due to it being a landmark agreement that the overwhelming majority of Westerners support.

Review Response for both Range of Alternatives and Purpose and Need: The FEIS states the "need for further plan amendments is that the FS has gained new information and understanding from the 55,000 comments received as a result of the 2017 NOI, the 33,000 comments received from the 2018 NOA, from within-agency scoping, and from coordination with the Sage-grouse Task Force (with members from state agencies, BLM, USFWS, and the Natural Resources Conservation Service)," and the purpose of the project is to "incorporate new information to improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse Plan Amendments, including better alignment with BLM and state plans, in order to benefit greater sage-grouse conservation at the landscape scale" (p. 1-19).

The Council on Environmental Quality NEPA regulations specify that a purpose and need "statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action" (40 CFR 1502.13). Forest Service planning regulations at 36 CFR 219.13(a) give the responsible official "discretion to determine whether and how to amend the plan and to determine the scope and scale of any amendment."

Given the high level of discretion a responsible official has regarding the purpose and need for action, the purpose and need presented in the FEIS is consistent with regulation and policies. Accepting the purpose and need as compliant with NEPA, regulation, and policy, the remainder of this review is focused on the range of alternatives and the proposed action as they relate to the stated purpose and need. Forest Service Handbook 1909.15 (Ch. 10) notes that "a well-defined 'need' or 'purpose and need' statement narrows the range of alternatives that may need to be considered."

In 2015, the BLM and Forest Service completed five EISs (one for each state, including Colorado, Utah, Wyoming, Nevada, and Idaho) that the Forest Service has considered but eliminated from detailed analysis in the 2019 FEIS. Rather than repeating the alternatives at length in the present FEIS, the Forest Service has incorporated them by reference. In considering the EIS as-a-whole, the apparent intent of this incorporation by reference (FEIS Section 2.2) was to provide contextual background for what was considered in the prior analyses, as it relates to the 2019 purpose and need for action. Based on the more narrow purpose and need for action in the 2019 FEIS, the Forest Service ultimately studied and discussed three alternatives in detail – the No Action, the Proposed Action, and a variation on the Proposed Action for the State of Utah (FEIS Section 2.3).

In addition to incorporating the 2015 alternatives by reference, the FEIS also incorporated the description of the 2015 affected environment by reference and tiered to much of the 2015 environmental consequences sections. However, the material so incorporated was not "briefly described," as directed in the CEQ NEPA regulations. A brief description of the referenced material is required by CFR, and would help the reader to understand the comparison of alternatives and their relationship to the purpose and need.

Some objectors assert that the range of alternatives considered in detail created more inconsistencies between the Forest Service, the State of Wyoming's plan (and MOU), and the BLM, contrary to the stated purpose and need for the Plan Amendments. There is little direct

discussion in the FEIS of how the alternatives meet the purpose and need, and in particular how they align with BLM plans.

It is not apparent that there was a no-grazing alternative proposed by Katie Fite of Wildlands Defense. Also, the alternative that the Wilderness Society and other NGOs proposed, even if it is essentially a 2015 alternative, needs to be discussed and explicitly dismissed.

Instructions:

1. In all tables where the effects analysis and affected environment, including table 3-1, 3-322, table 4-1, page 4-335, and table 4-2 page 4-343, has been incorporated by reference, include a brief introductory description incorporated by reference (including through tiering, as tiering is a form of incorporating by reference).
2. To improve the clarity in the EIS, modify the description text of Section 2.2 to "Alternative Development Framework" to more accurately convey the intent of incorporating this material.
3. Public-proposed alternatives that were essentially 2015 alternatives should be formally eliminated from detailed analysis to meet the requirements of 40 CFR 1502.14. The response to comments mentions alternatives proposed during the scoping period and a conservation alternative that is more environmentally protective. Assuming the latter proposal included some detail as to what would make the alternative more environmentally protective, all of these alternatives should be briefly described and explicitly eliminated from detailed analysis. In addition to this clarification, add explanatory text to clarify that alternatives submitted during the scoping and comment periods were considered but eliminated because they did not meet the more narrow scope of the 2019 purpose and need.
4. Explain in the Record of Decisions how the action alternative(s) analyzed in detail meet all aspects of the purpose and need, including how incorporating new information, better alignment with BLM and the State Plan, benefit the Greater Sage-Grouse.

Tiering

National Audubon Society et al. and Western Watersheds Project et al. believe tiering to what they consider a flawed 2015 EIS is wrong. They contend that the purpose and need and proposed action has changed so much between the original plan amendments and the current version, that tiering is not acceptable.

Hard Look Doctrine

Western Watersheds Project et al. contends that the Forest Service failed to disclose and analyze the direct, indirect, and cumulative effects of the proposed action on the following: invasive species management, guy wire removal, water development, noise, livestock, fluid minerals development, plants, wildlife, water, soil, air, and vegetation.

Remedy Suggested by Objector: Western Watersheds Project et al. suggest taking a "hard look" at the impacts resulting from the proposed action. 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. Fully disclose and analyze the direct, indirect, and cumulative impacts of multiple, related decisions reducing the certainty of implementation of mitigation measures to protect sage-grouse habitat from fluid mineral development.

Cumulative Effects

Western Watersheds Project et al. contends that 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 FEIS never analyzes the effects of implementation of the plan amendments as a whole. The agency can no longer rely on the 2015 EIS to adequately or accurately compare the effects of its actions.

Remedy Suggested by Objector: Western Watersheds Project et al. suggests providing a detailed cumulative effects analysis of the plan amendments in a supplemental NEPA analysis. Restore the certainty of protective measures on FS lands. Ensure that there is a process of unanimous consent to exemptions, waivers and modifications, including expert scientific opinion.

Categorical Exclusions (CE) & Cumulative Impacts

Western Watersheds Project et al. alleges that no future analysis will occur on projects using CEs for a wide range of relevant project-types. They point to the rationale the Forest Service gives for the lack of cumulative effects is that these projects are not in GRSG HMA. Objectors believe that these projects will have impacts to connectivity and corridors that are undesignated habitat for sage-grouse and that no public participation or environmental analysis will be completed. They conclude by stating "the FS has recently introduced a suite of new CEs and removed the ability to comment and appeal these decisions. The FEIS fails to analyze or disclose the relevant changes at this regulatory level in claiming subsequent NEPA will be conducted."

Review Response for Tiering, Hard Look Doctrine, Cumulative Effects, and Categorical Exclusions: The FEIS relies on incorporation by reference in the Affected Environment section, citing a table that "provides the location of baseline information in the 2015 GRSG FEISs (BLM and FS 2015), and, where applicable, additional information contained in the Sagebrush Focal Area Withdrawal Draft EIS (BLM 2016)" (p. 3-322). Similarly, the Environmental Consequences section of the FEIS introduces the heading topic with a statement that the "baseline used for the impact analysis is the current condition or situation, as described in Chapter 3" (p. 3-332).

The FEIS continues in similar fashion when disclosing effects of the No Action alternative, stating the "impacts of the No Action Alternative, or current management, of this LMPA were analyzed as Alternatives in the 2015 GRSG FEIS" and finds "the impacts from implementing the No Action Alternative are substantially the same as those analyzed in the 2015 GRSG FEISs. The Forest Service is tiering to the previous analysis, and Table 4-1 shows where the analysis of

impacts of the No Action Alternative can be found in the 2015 GRSG FEISs" (pp. 4-334 to 4-335).

As for the applicability of tiering, 40 CFR 1508.28 describes tiering as being appropriate when the subsequent statement is from "a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis." The purpose and need for action of the 2019 FEIS clearly states that it is, in part, to "improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse Plan Amendments." Given the reduced scope of the 2019 FEIS, as compared to the 2015 FEISs, tiering to the 2015 analysis is appropriate under 40 CFR 1508.28.

The 2015 EISs discussed the adverse and beneficial impacts of each of the alternative related to the significant issues. In relating this back, the 2019 FEIS provides discussions of the impacts associated with the modifications made to current management that would occur under the action alternatives. As an example, lek buffers were reduced in the 2019 Proposed Action alternative for Idaho. The FEIS states "[l]ek buffers would remain the same in PHMA, which contain approximately two thirds of all known occupied leks. There would be no effect to greater sage-grouse in PHMA." For IHMA and GMHA, the FEIS notes "[t]he reduction of buffers in IHMA would not result in increased development around most leks because disturbance in FS HMAs is limited; however, if development were to occur nearer than the buffers identified in the No Action, those leks would be at an increased risk of being abandoned. GHMA contains very few leks and is lower quality habitat compared to PHMA and IHMA" (FEIS pp. 4-356 to 4-357).

On the topic of reduced lek buffers, the FEIS concludes "[t]he reduced buffer distance in IHMA and GHMA would improve alignment with the Governor's Plan by having the most restrictive management in PHMA and reducing those restrictions in IHMA and further reducing restrictions in GHMA" (FEIS p. 4-357).

The 2015 EISs contain substantive discussion and comparisons of effects, and these analyses are tiered to and incorporated by reference into the 2019 FEIS. However, the discussion of effects presented in the 2019 FEIS do not draw clear connections to the indicators that were used to evaluate the effects of each of the alternatives, nor do the 2019 Draft Records of Decision provide reference to indicators and relative achievement of project objectives.

The concept of tiering is somewhat analogous to an umbrella. A programmatic document generally creates a large umbrella to keep more focused (tiered) projects dry. A programmatic document need not address impacts in fine detail – as long as the tiered project or plan is within the "dripline" of the effects considered in the prior programmatic document, then tiering is generally appropriate. If there is a need for actions beyond the dripline, then additional effects analysis must be completed and disclosed for the actions and effects not under the umbrella of the previous analysis and decision. Altering buffer distances, changing timing restriction on activities, changes to guy wire management, remapping habitat, and reclassifying habitat are several aspects of shifts in management that may have moved the effects beyond those considered in the 2015 EISs. This created the need to analyze the effects of changes outside the umbrella. The 2019 FEIS includes descriptions of effects anticipated as a result of changes in

management, but does not clearly articulate the indicators used for comparing between the three alternatives.

As for the impacts of changes in management direction that the objectors contend the agency is required to re-analyze, the 2019 FEIS provides qualitative discussions, and is not required to present quantitative analyses. While the FEIS makes the information available via web links, and references the reviewer to the corresponding sections in the state-respective EISs, the FEIS does not consistently describe content as required by 40 CFR 1502.21.

In terms of cumulative effects, 36 CFR 220.4(f) describes the process used to assess cumulative impacts as one that "begins with consideration of the direct and indirect effects on the environment that are expected or likely to result from the alternative proposals for agency action." The regulations continue that "[o]nce the agency has identified those present effects of past actions that warrant consideration, the agency assesses the extent that the effects of the proposal for agency action or its alternatives will add to, modify, or mitigate those effects. The final analysis documents an agency assessment of the cumulative effects of the actions considered (including past, present, and reasonable foreseeable future actions) on the affected environment."

The FEIS provides a 37-page listing of actions and wildfires that have occurred or were planned between 2015 and 2017 (pp. 4-372 through 4-409. In assessing cumulative effects, 36 CFR 220.4(f) does "not require agencies to catalogue or exhaustively list and analyze all individual past actions. Simply because information about past actions may be available or obtained with reasonable effort does not mean that it is relevant and necessary to inform decisionmaking." Here, the FEIS appears to have surpassed in meeting CFR requirements by cataloguing projects with potential impacts to sage-grouse management. However, one component that was not addressed in the cumulative effects analysis were the impacts of BLM management.

Related to the list of projects, one objector claimed the cumulative effects analysis ignored projects completed as categorical exclusions. The analysis of cumulative effects in the FEIS correctly bounded the effects analysis per FSH 1909.10, Chapter 10, Sec. 15. By definition, projects that are categorically excluded from further analysis do not individually or collectively lead to significant effects. Future project-level analysis would need to adhere to LMPs, as well as the requirements of NEPA; whether future projects are analyzed as categorical exclusions, environmental assessments, or environmental impact statements is dependent on the likelihood of significant effects.

In conclusion, the use of incorporation by reference and tiering are allowed by regulation and policy. Based on a full review of the objection issues, in context with related law, regulations, and policies, the shortcoming noted is regard to 40 CFR 1502.21 (incorporation by reference), 40 CFR 1508.28 (tiering) – a brief description of content incorporated by reference (and tiered to) was not consistently provided. In regard to cumulative effects and incomplete or unavailable information, the summarization of cumulative effects was unclear as to what effect (whether beneficial, neutral, detrimental, unknown, or unavailable) changes in BLM management would have.

Instructions:

1. Where there is incomplete or unavailable information in regard to cumulative effects, this should be acknowledged, with particular attention to changes/uncertainty in BLM management. Include additional discussion in the final ROD of how certainty regarding other agencies' management was factored into the decisionmaking process. Clarify in Section 4.6 or Section 4.7 of the FEIS (whichever is most appropriate), or in – errata. This should focus on the effects of plan-level framework rather than project-level implementations.
2. In Chapter 4, clarify what indicators/criteria were used to evaluate the changes to effects, if any, from each of the three alternatives evaluated in detail – due to the use of tiering, clarifications should be focused on the two action alternatives.
3. Make it clear in the Final Record of Decisions that the purpose and need portion of improving alignment with the BLM has been achieved to a certain degree but expand on the unknown future of BLM decisions.
4. As noted in the instructions for purpose and need and range of alternatives findings, include a brief description of any information incorporated by reference (including through tiering, as tiering is a form of incorporating by reference). This is a CFR requirement.

Changes between Draft and Final EIS

Several objectors contend the Forest Service violated NEPA by failing to prepare and circulate for public comment a supplemental environmental impact statement (SEIS) to analyze "substantial changes" to the proposed action. The objectors believe the changes identified are not "minor variations" but rather "substantial changes" to the Forest Service plan amendments, and that the changes are clearly relevant to environmental concerns. Two primary issues are that the changes are substantial and require a supplemental statement, and that the effects of changes made between draft and final were not analyzed.

Regarding the changes made between draft and final, the objectors raise issue with how plan content was shifted between standards, guidelines, and management approaches, as well as with some of the deletions that were made. The objectors also contend some changes made between the draft and final statements were not identified using the scheme described in Section 2.5 of the final environmental impact statement (FEIS). To this point, the objectors believe substantial changes were made and an SEIS must be prepared.

Regarding the effects analysis for changes made between the draft and final statement, the objectors claim the FEIS failed to analyze or disclose effects of the changes made. Examples provided in the objections include effects of changes in guy wire management, effects of mineral management by changing from "valid existing right" to "existing right," and changes to invasive plant management strategies. Again, the objectors believe an SEIS is required to incorporate missing analyses.

Remedies Suggested by Objectors: Fully disclose and analyze all of the substantive (non-minor) changes between the draft and final EIS; disclose the changes to invasive species management and analyze the effects of those changes; and provide a full and detailed analysis of proposed changes in protection from noise, development, mitigation, and livestock-related impacts in a supplemental NEPA analysis.

Review Response: Per CEQ regulations, "minor" changes are defined as those changes that are confined to items 4 and 5 of 40 CFR 1503.4(c)) – factual corrections, and explanations of why comments do not warrant further agency response. When minor changes are made between draft and final, "agencies may write them on errata sheets and attach them to the statement instead of rewriting the draft statement. In such cases only the comments, the responses, and the changes and not the final statement need be circulated (§1502.19)" (40 CFR 1503.4).

If agencies make more than minor changes between draft and final, including: modifying the proposed action or alternatives; supplementing, improving, or modifying analyses; or developing and evaluating alternatives not previously given serious consideration, the agency "[s]hall circulate the entire […] final environmental impact statements except for certain appendices as provided in §1502.18(d)" (40 CFR 1502.19).

Regulations not only allow for, but guide agencies to make changes between draft and final environmental impact statements when substantive comments are received, and the prudent response is to make changes. CEQ regulations at 40 CFR 1503.4(a)(1), (2), and (3) allow for changes of substantial depth and degree when these changes occur between draft and final. In Section 2.5 (Comparison of Alternatives), the FEIS "displays the changes made to the Proposed Action Alternative and State of Utah Alternative between the DEIS and the FEIS, by state." As specifically noted in the FEIS, the nature of the changes that are detailed in the FEIS (and highlighted in the objections) are plainly categorized as those described in 40 CFR 1503.4(a)(1) because they "modify alternatives including the proposed action."

The objectors contend that the changes made between draft and final require an SEIS under requirements of 40 CFR 1502.9(c) (1)(i). The regulation part referenced by the objectors (1502.9) pertains to draft, final, and supplemental statements. Out of context, 40 CFR 1502.9(c) (1)(i) indicates that when agencies make any "substantial changes in the proposed action that are relevant to environmental concerns," then a supplemental statement must be prepared. However, in full context of the CEQ NEPA regulations, 'more than minor' changes described in 40 CFR 1503.4(1), (2), and (3) can occur between draft and final without preparing a supplement – the only difference between 'minor' and 'more than minor' changes in an FEIS is whether errata sheets are attached to the draft statement, or if the draft statement is rewritten as a complete and updated final statement. In this context, the intent behind 40 CFR 1502.9(c)(1)(i) (supplemental statements) is illuminated as being more applicable to substantial changes made to the proposed action after an FEIS is issued, or those changes that would substantially alter the scope of a project.

All of the changes made between draft and final are consistent with those outlined at 40 CFR 1503.4(a). The changes made to the proposed action do not require the preparation of supplemental statement.

Two sub-points within the objections claim that not all changes were highlighted, and that not all changes were analyzed. Each are addressed below.

First, from regulatory and policy perspectives, a side-by-side comparison detailing changes made is not required (*see* 40 CFR 1503.4(a)]. One of the objectors specifically claims "the Utah plan removes the requirement to remove guy wires and replaces it with 'marking' guy wires in PHMA and GHMA. FEIS at 2-193. The 'Issue/Clarification' column does not disclose this change." Another objector points to the FEIS at page 2-198 which changes the wording in GRSG-GRSGH-GL-030-Guideline from "when possible" to "when practicable," but doesn't identify this change using the color-coding scheme described in Section 2.5 of the FEIS.

The FEIS at page 2-193 was reviewed, and the change from "remove" to "marking" of guy wires is highlighted using the scheme described in Section 2.5 of the FEIS. The "Issues/Clarification" column notates "Elimination of Sagebrush Focal Areas" and "Habitat Management Areas Designations." Page 2-198 of the FEIS was also reviewed, and the change noted by the objector is not coded per the description in the FEIS. There is no requirement to present changes in the fashion done so in the FEIS, but since this approach was selected and described, it should be consistently applied.

Second, CEQ regulations require the effects of the proposed action and its alternatives be discussed (40 CFR 1502.16) and allows analyses to be supplemented, improved, or modified (40 CFR 1503.4(a)(3)] between draft and final statements – this includes changes in analyses necessitated by changes made to an alternative or the proposed action.

Chapter 4 of the FEIS (Environmental Consequences) was reviewed for discussions on the effects of guy wire removal compared to guy wire marking, and the change in term from valid existing right to existing right – two topics that were specifically noted in objections. The FEIS does not include a discussion of the effects of making these changes. There is no procedural issue with changes made between draft and final, but by not analyzing and disclosing effects, this does constitute a substantive gap under 40 CFR 1502.16.

Instructions:

1. Attach an errata sheet to the FEIS to correct the draft to final change coding issue on page 2-198 that was noted in the objection.
2. Attach an errata sheet to the FEIS to identify the issue/clarification that necessitated the change in wording from "remove" to "marking" on page 2-193 of the FEIS, as noted in the objection.
3. During review, other changes involving the terms "valid existing right" and "existing right" were not coded using the scheme described in Section 2.5. A general review of this section should be completed for consistency, and corrections noted on an errata sheet.

Wildlife

Elko County, NV
Western Watershed Project, et al
Western Exploration LLC (WEX)
Wyoming Coalition of Local Governments

Use of Best Available Science and Ecosystem Integrity

The objectors claim that the Forest Service fails to use best available science in informing their decision. For example:

- The agency does not have enough information about the historic distribution of Greater Sage-grouse to base an EIS on. Fails to recognize that the Ecological Site Descriptions (ESDs) generally reflect existing conditions rather than potential conditions and that the ESDs may or may not represent the needs of greater sage-grouse, which have been well-documented by abundant peer-reviewed literature.
- The proposed plan also notes that mapping errors were the primary reason for the Federal District Court's remand of the 2015 plan amendment. The proposed plan and ROD still contain mapping errors by leaving substantial areas misclassified as PHMA when the best available science and information is that they are not, in their burned state…"Best available science" must be considered such as areas completely or substantially destroyed by wildfire that are simply not habitat and should not be identified as such given the undisputable available information
- WEX should not be subjected to potential land management restrictions, erroneous calculations of mitigation, the need for another plan amendment, revision or amendment of the HMA or potential litigation when the available information is clear these lands are not habitat and will not be habitat for decades to come (if ever).
- Questionable science behind the National Technical Team's (NTT's) recommended conservation measures.
- The 2019 FEIS does not discuss any of the problems that the Coalition identified in the NTT Report, the COT Report and the Monograph and, therefore, the Forest Service has committed the same error it made in 2015. As the Coalition commented, the NTT Report does not conform to the Information Quality Act. The Forest Service's blind reliance on the Monograph violates the basic tenant of NEPA that agencies must perform a hard look especially when comments reveal a persistent and significant scientific controversy.
- Sources often cited by the NTT Report do not directly support the assertions for which they were cited. For example, the NTT Report states that full reclamation bonds should be required to ensure full restoration in all priority greater sage-grouse habitat. However, the source cited only recommends that breeding habitat should be restored to a condition that is once again suitable for breeding. NTT authors extended the recommendation regarding breeding habitat to all habitat, a fundamentally larger area not supported by any research.

Remedies Suggested by Objectors: The Forest Service should provide management direction for sage-grouse that is 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. WEX requests that burned lands be removed from the categorized HMA as they are not habitat and are not in any condition to potentially be habitat without substantial modification that will require decades of rehabilitation. The proposed plan does not characterize burned land information from 2018 as unavailable, The burned lands appear to still be misclassified.

Review Response: Objectors contend that the Forest Service did not rely on science to improve protections, thereby ensuring ecosystem integrity and the maintenance of viable populations of sage-grouse, but instead proposes an amendment that significantly weakens the protective measures put in place under the 2015 plan. The 2019 DEIS and FEIS tier to the 2015 ROD and FEIS and does use best available science. Both the DEIS and FEIS describe best available science and include citations for new or updated literature that was reviewed and incorporated since the 2015 ROD was signed. Refer to Chapter 3, 3.1.1 Greater Sage-grouse Literature, 2015-2019. What is missing at times is an explanation of how the science was applied.

The objector(s) question the sufficiency of plan components. Plans must include "components to maintain or restore ecological conditions within the plan area to contribute to maintaining a viable population of the species within its range 36 CFR 219.9(b)(2) … 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). It is unclear how the agency evaluated the collective sufficiency of plan components to maintain ecological conditions that were designed to sustain a viable population. The criteria (triggers) used to initiate change, should plan components not work to maintain habitat or populations, is outlined in the DEIS and FEIS section on *Adaptive Management Habitat Analysis* within the Appendix D (starting pg. D-12) – Adaptive Management Plan for Nevada. The existence of soft and hard triggers to initiate adaptive management is critical for high risk management situations, but also underscores the uncertainty and adequacy of plan components to function as designed. The existence of a science consistency analysis may not change risk, but would certainly underscore the extent to which the agency understood risk and took management steps to reduce it to the extent possible.

In two states (Nevada and Wyoming) there were substantial changes in either the designation and/or the total acres in the Habitat Management Acres between the 2015 and 2019 EIS. Even within those two states (Nevada and Wyoming), the agency concludes no effects which indicates the no action and chosen alternative are functionally equivalent. The Forest Service provides a citation of why this changed but no analysis or citations support the conclusion of no effect. On page 4-350 the FEIS states, “2015 GRSG EIS, on the Bridger-Teton NF, 53,000 acres were designated incorrectly as PHMA-Connectivity and did not align with the State of Wyoming mapping effort”. While it would be easy to check if this effort meshed with the Wyoming mapping effort, there does not appear to be citations about the first map being an error. Also the way this is written is the only acres the agency removed were improperly mapped PHMA-Connectivity and did not align with the Wyoming efforts, and that the Forest Service will always

default to the smaller area. There is no citation that supports the agency's conclusion that these 53,000 acres were incorrectly designated and they may have just been dropped because they were not included in the State of Wyoming effort. As described above, this conclusion can be easily supported if there is a publication that states these acres were mapped in error and they have the same protective effect on sage-grouse. Similar statements were made in Nevada where page 4-349 of the FEIS states, "PHMA, GHMA, and OHMA acres have been better classified based on incorporation of current science including new lek locations, improved understanding of sage-grouse space-use from marked birds and modelling work, and removal of areas of non-habitat including areas near town and city centers (Coates et al. 2016)." If the total acres are better mapped in Coates et al 2016 and the total number of acres are similar, it is unclear how the agency concludes there is no effect. Given this discussion, it would have been expected to see an improvement in conditions. It appears, however, Coates et al. (2016) did not use the same habitat management areas as mapped, and they just mapped different areas. How did the agency go from Coates et al. (2016) to the current HMA's and show that this is better than the no action activities (e.g. total leks protected, predicted sage-grouse survival).

Instructions:

1. Clarify and expand on how best available science was used, why that information was considered to be accurate, reliable, and relevant, and document how this information is used.
    - Specifically point to citations that show changes to habitat management decisions in Wyoming are due to map errors and not policy choices, and that they provide the same protection to sage-grouse in the state.
    - For Nevada, clarify how the maps presented in Coates et al. 2016 resulted in better mapped habitat management designations and that they provide the same protection to greater sage-grouse in the state.

Fine Scale Analysis

Western Watersheds Project et al. believes the amendments should maintain a landscape-scale approach, retain management area designations (including general habitat management areas) and prescriptions, and preserve protections from oil and gas development (including prioritizing leasing and development outside habitat). The landscape-scale approach has not been defined and many changes were made between draft and final, including the percentage of acceptable conifer cover from 10 percent to 4 percent without explanation. The objector was unable to comment on it previously. There is no explanation of this revision in the FEIS and no recent science to support this change.

Western Exploration, LLC (WEX) is concerned that the starting point for evaluating potential impacts will be erroneous given the misclassification of certain lands as PHMA.

Remedies Suggested by Objectors: National Audubon Society et al. suggests keeping the SFA designation and the protections it applies. Alternatively, the Forest Service could require that NSO stipulations not be subject to waivers, exceptions, and modifications anywhere within

PHMA. This option would also ensure that the most sensitive lands are protected. Either way—and especially because, the proposed amendments would loosen the criteria for granting waivers, exceptions, and modification—it is important that the best, most critical habitat enjoy full NSO protection safe from loopholes.

Review Response: Objectors prefer a landscape approach to manage sage-grouse habitat that incorporates all habitats, not just breeding habitat, and considers the stressors. They claim this approach is holistic and avoids disjointed management. However, some objectors worry that large management zones may incorporate lands that are not used by sage-grouse and through designation prevent their use for other non-impactful activities. Anything produced by humans is imperfect, including management direction, and prone to error whether a map product or habitat descriptions. Incorporating an expert panel process to review complaints, regarding mapping errors or other management details, may help resolve such concerns.

Nothing in 2012 Planning Rule explains how to manage ecological integrity at the fine scale other than to maintain the composition, structure, function, and connectivity of the species assemblage. Maintaining Ecological Integrity with a purpose of avoiding a downward trend in any ecosystem component (biological or physical) requires a multi-scale (spatial and temporal) approach from sites to entire ecosystems, from short time intervals to long intervals. The project record addresses the numerous threats to maintaining sage-grouse habitat(s). It also references the research on stressors impacting sage-grouse individuals or population viability. Stressors include loss of habitat from fire, invasive species, or human alterations. Other factors include tall structures used as raptor perches, noise pollution, fencing, roads, and other human activities. *How these stressors are managed across scales influences population trends.*

The 'broader landscape' in the 2012 planning rule refers to areas outside the planning area (36 CFR 219.8(a)(1)(ii and iii)] which influences, and is influenced by, the Forest Service planning area. The Forest Service is obligated to manage lands within its plan area(s) to maintain ecological integrity, ecosystem diversity, and species of conservation concern (36 CFR 219.9 (a)(1), (2), and (3)]. Section 219.19 of the 2012 planning rule provides the following definition: "*Landscape.* A defined area irrespective of ownership or other artificial boundaries, such as a spatial mosaic of terrestrial and aquatic ecosystems, landforms, and plant communities, repeated in similar form throughout such a defined area." The Omnibus Public Lands Protection Act of 2009, SEC. 4003. COLLABORATIVE FOREST LANDSCAPE RESTORATION PROGRAM, refers to restoration projects within a landscape that is at least 50,000 acres in size regardless of land ownership.

From a biological perspective, landscapes are typically described by the scale of an individual within a species, its population, or the entire species range. Individuals of a species (not referring to sage-grouse here) may occupy territories averaging 6,000 acres or larger in size. A local population easily occupies 700,000 acres while the species range may be Holarctic. Within the aforementioned areas are multiple ecosystem types and each exhibits environmental variation across the type and also within each individual 6,000-acre territory. Maintaining ecological integrity incorporates maintenance of natural variation across multiple scales to provide for a species requisite resources in support of both individuals and populations. Finer scale

management considerations for individuals must align with broad scale management for the population. Understanding the link between fine and broader scale management considerations leads to a durable management approach. Local knowledge helps inform the fine scale habitats used by sage-grouse for developing the appropriate management for those areas. However, care must be taken to not only assess and understand local habitat use patterns, but also to understand habitat use in adjacent localities, in order to develop appropriate contextual management.

As to changes made between draft and final – reference response in the NEPA section, but also see the instruction below.

Instructions: When management direction changes between versions of documents, ensure the record contains an explanation for the change including the relevant supporting science and *how* it informed the change.

Sagebrush Focal Areas

National Audubon Society et al. alleges that the Forest Service eliminates Sagebrush Focal Area (SFA) without consideration of science. Maintenance and recovery of any species relies on retention and recovery of their habitats--even if temporarily rendered unsuitable. Landscapes contain habitat in various states; changing in their suitability thru time—wax and wane. Arguing that temporarily unsuitable habitat should not be subject to the purpose of maintaining or recovering species will, through time, trend species toward extinction.

Remedy Suggested by Objector: To remedy this misstep, the Forest Service should take one of two paths. First, it could simply choose to keep the SFA designation and the protections it applies. This would be a straightforward way of righting the ship. Alternatively, the Forest Service could require that NSO stipulations not be subject to waivers, exceptions, and modifications anywhere within PHMA. This option would also ensure that the most sensitive lands are protected. Either way—and especially because the Proposed Amendments would loosen the criteria for granting waivers, exceptions, and modification—it is doubly important that the best, most critical habitat enjoy full NSO protection safe from loopholes.

Review Response: The purpose of NEPA is twofold: "(1) to ensure that agencies carefully consider information about significant environmental impacts and (2) to guarantee relevant information is available to the public.

The FEIS states there are few differences between protections in SFA and the protections of PHMA, with which they overlap. Because of this, the document states SFA duplicates protections for PHMA as for the most part they are restrictive – except SFA permits No Surface Occupancy (NSO). The reasons given for dropping these protections were that there was no on-the-ground effect, as evidenced by "which indicates that the potential for development of oil and gas in the areas previously designated as SFAs is very low (Chambers et al. 2017)." (FEIS 4-353). However, it would be difficult for the public to come to this conclusion looking at Chambers et al. 2017 as this is just a broad map of potential future developments. It is not clear how the lack of potential for oil and gas development is addressed in the analysis. If this was done, it would at least partially addresses the concern that there are now standards that apply to

all lands where SFA can be found. For example the following standard can be found in Idaho's Minerals; Fluid-Unleased section (FEIS p. 2-115);

> "GRSG-M-FMUL-ST-067-Standard - In PHMA and IHMA, any new oil and gas leases must include a No Surface Occupancy stipulation. There will be no waivers or modifications. An exception, after review by the Interagency Technical Team, could be granted by the authorized officer if the proposal meets the following criteria:
>
> • There would be no direct, indirect, or cumulative effects to the greater sage-grouse or its habitat; or
>
> • Granting the exception provides an alternative beneficial to greater sage-grouse to a similar action occurring on a nearby parcel; and
>
> • Includes appropriate controlled surface use and timing limitation measures."

While this is restrictive, it is not as restrictive as what is in the no action alternative. It is also not clear where geothermal lines would fit into these restrictions as it only appears in Utah (FEIS p. ES-5). Furthermore the document states "The impacts of sagebrush focal area (SFA) withdrawals were analyzed in the Sagebrush Focal Area Withdrawal DEIS (BLM 2016). The Forest Service has reviewed new information to verify that the analysis in the 2015 GRSG FEISs remains sound; therefore, impacts from implementing the no action alternative are substantially the same as those analyzed the 2015 GRSG FEISs." (FEIS p. 4-334). The circular logic of this statement is addressed elsewhere.

The Forest Service is tiering to the previous effects analysis in 2015 GRSG FEISs. Table 4-1 shows where the analysis of impacts of the no action alternative can be found. This is for all lands which were SFA, so consequently one can conclude there is no real difference, as evidenced by the following quote from the 2019 FEIS and Draft RODs "its 2016 SFA withdrawal EIS, the BLM quantified the possible adverse effects from locatable mineral exploration and mining on the approximately 10 million acres of SFAs proposed for withdrawal, finding that they would be limited to approximately 9,000 acres of surface disturbance over 20 years, with approximately 0.58 percent of greater sage-grouse male birds affected per year." The assumption is made that this includes BLM lands, but it is not readily apparent. The primary issue with the analysis of SFA is in Nevada where the lands have been remapped and reclassified and 105,200 acres of PHMA were eliminated. There does not appear to be any analysis of this change, just a conclusion of no effect.

It is also not clear whether SFA in Wyoming is part of this decision or not. This is important because the tables (e.g. Table ES-2 page ES-10 EIS) still have SFA in the no action alternative. Many of the objection issues relative to SFA suggest these areas will be losing protections. Based on the analysis, this is unlikely as they do overlap IHMA and PHMA and the acres and classification have minimal change. Again the concern lies is there is a reduction of nearly 200,000 of habitat management areas for sage-grouse (Tables 2.1 and 2.2) with a similar loss in PHMA. It is argued that this will not have an effect on sage-grouse as there will be few on–the-ground effects, but this conclusion is hard to understand given this analysis. It appears that the

changes in Nevada are likely SFA that went away with the reclassification. Without a more complete analysis of the effects tables (as described in the previous NEPA section), this is difficult for the reader to discern. It is hard to find the cited BLM text on the Sagebrush Focal Area Withdrawal DEIS 2016 (https://eplanning.blm.gov/epl-front-office/projects/lup/103347/143428/176389/SFA_DEIS_Main_Text.pdf).

In conclusion, the outcome of this analysis may be correct but it is hard to follow. The FEIS makes a good argument for some states but not others.

- Colorado – no SFA;
- Idaho – all SFA is PHMA, which is maintained as is, so clear analysis of effects;
- Utah – no change except to make Anthro Mountain into PHMA added – it appears all SFA was in PHMA, so clear conclusion;
- Wyoming – not a lot of SFA, but not clear where it went (one assumes PHMA but given the loss of acres of PHMA, this may not be true). Given the scale of changes of protection of lands in Wyoming, the loss of 2,800 acres is unlikely to have much of an effect but the effects need to be disclosed; and
- Nevada – loss of SFA combined with reduction of PHMA could likely have an effect over the 2015 plan amendments that had both. The conclusion of no effect determination for this state is hard to follow and the rationale is unclear. (Instructions provided under Sagebrush Focal Areas and No Net Loss in the next section below will help clear up the rational).

Sagebrush Focal Areas and No Net Loss

Review Response: Objectors believe that the "removal of the Sagebrush Focal Areas will jeopardize pristine, irreplaceable habitat that is critical to sage-grouse survival. The expansion of waivers, exceptions and modifications to NSO stipulations in oil and gas leases will negatively impact sage-grouse lifecycle activities, such as breeding, further jeopardizing sage-grouse populations." The analyses for changes to habitat management designations are located in Section 4.5.2 (p. 4-353), FEIS within Table 4-4. See also *HMA designations considered in the 2015 FEIS*. Acreage change in PHMAs was done to align the boundaries more closely with the habitat that was modeled in each respective state. Maps were updated when habitat modeling was updated and areas on known non-habitat were apparent, but only a small percentage of total management area acreage was reduced, and little actual habitat lost protections under management area designations. Changes are described in Section 4.5.1 (DEIS). The changes made are displayed in Tables 2-2 through 2-4 in the 2019 FEIS. Sagebrush Focal Areas are overlaid on other HMA designations; which, with very few exceptions, are PHMAs. Both SFA and PHMA are managed as no surface occupancy (NSO) for fluid mineral leasing. The only difference is that PHMA allows for a limited exception and must meet a stringent series of criteria to be approved (Table 2-6; Table 2-7; Table 2-8; Section 4.5.2, DEIS).

Map adjustments aside, site specific impacts to sage-grouse habitat and populations remain unknown until projects are proposed. However, the 'no net habitat loss' definition found on page

4-354 (FEIS) as written states "retaining an equivalent amount of sage-grouse habitat after a proposed action that is equal to or above baseline conditions that existed before the proposed action," allows for impacts to sage-grouse habitat to occur; increasing the probability of negative consequences to the amount of available habitat or number of individual sage-grouse. A mitigation approach is to create a bank of restored and occupied habitats available to offset future projects where there is 'take' of habitat during the period of their operation.

Audubon objected that the removal of SFAs did not consider science and suggested remedies 1) to keep SFAs, or 2) to retain NSO through all PHMA with no waivers, exceptions, or modifications. The Forest Service used the most current science (Coates 2016) to achieve the highest precision possible for mapped areas retained the restrictions with no Waivers or Modifications allowed under NSO, and also requires strict restrictions when exceptions can be allowed.

Instructions:

1. Explain in the Record of Decisions why SFA protections for greater sage-grouse were removed and show that PHMA protections are similar to those in SFA in areas without mineral withdrawal. Clearly document, by state or management area, all circumstances where PHMA acreage was reduced or moved and acknowledge the potential effects of those changes on greater sage-grouse. Explain the rationale for habitat management area reductions, including improvements to habitat modeling.
2. For Nevada make it clear that there are no waivers or modifications in PHMAs and acknowledge potential effects in the section describing acreage changed from SFAs to PHMAs.
3. For Idaho, Wyoming and Utah, document more clearly what habitat management area changes have been made, if they are affected by removal of the SFA and acknowledge the potential effects of each of those changes on greater sage-grouse.
4. As stated previously, make it clear in the final Record of Decisions that there is 'no measurable effect" of these alternatives.

Habitat Protections

National Audubon Society et al.
Western Watersheds Project et al.
Eureka County, NV
Western Exploration, LLC (WEX)
Kerry Masters

Environmental coalition objectors contend that the Forest Service is reducing needed protections by falling back to general, rather than specific values to protect habitat. There is insufficient information provided to all protective measures for HMA, GHMA, CHMA, PHMA, seasonal habitat types, and leks. There is little relationship between the changes in acreages, boundaries

and best available science. The Proposed Plan Amendments would reduce or eliminate sage-grouse protections in three ways (and this should be changed): 1) remove Sagebrush Focal Area (SFA) designations and the heightened protections afforded to this critical habitat; 2) expand opportunities for waivers, exceptions, and modifications to no surface occupancy (NSO) stipulations for fluid mineral leases; and 3) eliminate General Habitat Management Areas (GHMA) in Utah. The Forest Service should rethink these proposals—all of which push sage-grouse in the direction of an ESA listing—and instead maintain SFA protections; require rigorous standards and protocols for invoking waivers, modifications, and exceptions to NSO stipulations; and maintain GHMA in Utah.

National Audubon Society et al. and Western Watersheds Project et al. also contend that allowing the Forest Service to modify plans at the state scale rather than the scale of a biologically significant unit fails to protect species and to provide sufficient populations of these birds across each of the states.

County objectors are concerned that habitat has been mischaracterized due to fire and find inconsistencies between the 5 states.

Remedies Suggested by Objectors: Do not eliminate the highest tier of habitat protection. Given the importance of SFA to maintaining viable sage-grouse populations, and in light of the role SFA played in FWS's 2015 not-warranted determination, it should not be removed. The absence of a mineral withdrawal does not obviate the need for protections from oil and gas surface occupancy, and the PHMA designation does not provide an equivalent level of protection. Avoid the need for a listing by maintaining SFAs, or else applying NSO stipulations free of waivers, exceptions, and modifications within PHMA. Restore applicability of protection measures to GHMA and PHMA, without exception, particularly regarding standards GRSG-LR-SUA-ST-015 and -016. Provide a full and detailed analysis of proposed removal or weakening of standards in GHMA and PHMA in a supplemental NEPA analysis.

Restore applicability of protections measures to GHMA and PHMA, without exception, including GRSG-GEN-ST-005-Standard, GRSG-LR-SUA-ST-015-Standard, GRSG-LR-SUA-ST-017-Standard, GRSG-LR-LOA-ST-020-Standard, GRSG-WS-ST-024-Standard, GRSG-R-ST-062-Standard, and GRSG-M-NEL-GL-097-Guideline; protections measures to GHMA, including: GRSG-LR-SUA-ST-020-Standard, GRSG-RT-ST-063-Standard; and, of draft proposed GRSG-LR-SUA-ST-016 Standard to IHMA in Idaho. Reset PHMA boundaries to encompass all lands designated as Priority Areas for Conservation by the USFWS Conservation Objectives Team (2013). Disclose all of the changes it made to the plans and describe the impacts of those changes. Require lek buffers of at least 4 miles in PHMA, GHMA, and IHMA. Require disturbance cap of 3% to be applied per-square-mile-section, in addition to any BSU or larger-level calculations. Disallow waivers, modifications, or exceptions to No Surface Occupancy (NSO) requirements for PHMA. Provide a full and detailed analysis of proposed reductions in lek buffers on sage-grouse habitats and populations in a supplemental NEPA analysis. Restore applicability of protections measures to GHMA, clarify the extent of CHMA, designate and identify Winter Concentration Areas in Wyoming. Extend the protections previously provided to SFA to all PHMA. Designate all lands as PHMA that were designated as

Priority Areas for Conservation (PACs) by the U.S. Fish and Wildlife Service (COT 2013). Reconcile information about acreage in the FEIS and ensure the public is able to understand the changes between the existing action (No Action) and the proposed action. Include trigger thresholds and corrective actions required under GRSG-LG-GL-033-Guideline, and change it from a Guideline to a nondiscretionary Standard. Require habitat assessments for sage-grouse on grazing allotments as a nondiscretionary Standard. Revert GRSG-GEN-MA-004-Management Approach to its original wording. Restore original, numeric habitat objectives.

County objectors suggest replacing "restricted" with "avoided unless site-specific conditions dictate otherwise." Use of the term "restricted" could have unintended consequences. Depending on site conditions, it might not always be possible, or necessary to stay 2.0 miles away from a lek. There are situations where cross-country travel may be warranted to aggressively attack wildfire or address other emergency circumstances. The Proposed LMPA defines "habitat", "Unsuitable habitat", "Marginal habitat", "PHMA", and "IHMA". However, the definition of IHMA only applies in Idaho even though burned lands clearly are either unsuitable habitat or IHMA but not habitat that is "occupied" or PHMA. In Nevada, OHMA are areas with "appropriate environmental conditions" for GSG "that are less used by GRSG or have marginal habitat suitability." Burned lands would fit (probably best within "IHMA") but, in Nevada terms, better within OHMA rather than PHMA unless or until they are restored. Under the defined terms used in the Nevada ROD and PLMPA, these lands clearly are not "habitat" and might be considered "unsuitable habitat" which is inconsistent with characterizing these lands as PHMA or GHMA.

Review Response: There are some minor wording differences in GRSG-GEN-DC-002, but it was difficult to find documentation for the difference except for the removal of Sagebrush Focal Areas. There were some minor changes from state to state but for the most part are very minimal. The justification for some of those differences is not clearly presented. In general, there is a description of why PHMA are highest priority (most leks), but not as clear why GHMA get less restrictions as there are still sage-grouse on these lands. IHMA is only in Idaho and receives high protection. OHMA is in Nevada, although it seems to receive less protections.

There have been changes in the levels of protections, especially in Nevada and Wyoming. The biggest effect in these two states were greatly altering where and how much PHMA, OHMA and GHMA was in Nevada, and greatly reducing total acres under protection (-200,000 acres) in Wyoming. There are intermediate changes in Utah as approximately 28,000 acres of GHMA were removed, fewer changes in Idaho and no changes to Colorado. In Idaho, there were reduced restrictions in GHMA and no evidence of restrictions increased in PHMA and IHMA which was the state's rationale. The question this section presents without adequate justification is, if we can reduce protections to habitats this much without an effect, why not reduce protections across the board and still protect the species? This is counter to much of the analysis of the 2015 plan, and there is little analysis or rational included that supports this conclusion.

It is not apparent why the changes were made other than to meet state plans or incorporate new science, but the record doesn't clearly address effects on sage-grouse or other resources. There is

a need to show changes by state, and explain why and what the changes were, and how this will affect sage-grouse.

For example, comparing Table 2.1 (No Action alternative) to Table 2.2 clearly shows the loss of protection of 200,000 (total acreage change), a shift of 200,000 to GHMA and the loss of SFA. With all the changes to reduce acres and protections, the effects determination of sage-grouse runs about a paragraph per state and suggests no effects on these birds. There is also no analysis on activities such as grazing, oil and gas development, or recreation; clearly if you drop protections on 200,000 acres of land it will have either a positive or negative effect on other resources. For example this is found at FEIS p. 4-349; "Nevada: The HMA boundaries in Nevada have been adjusted during this amendment process. PHMA decreased by 105,200 acres, GHMA increased by 298,300 acres, and OHMA decreased by 198,800 acres (Tables 2-4). Overall, there was a negligible change (decrease of 5,700 acres) in total HMA acreage. PHMA, GHMA, and OHMA acres have been better classified based on incorporation of current science including new lek locations, improved understanding of sage-grouse space-use from marked birds and modelling work, and removal of areas of non-habitat including areas near town and city centers (Coates et al. 2016). No impact to greater sage-grouse is anticipated from the HMA boundary adjustment." It is not evident how this conclusion was formed given the last sentence was a general statement above.

As the objectors are suggesting, the Forest Service is moving to less restrictions but not presenting a clear determination of why or when we are doing this, and if this change is too much. There also needs to be added clarity in the differences in state models. Why and how can the effects described, be the same? Colorado didn't do anything and this is a no effect, Wyoming dropped 200,000 acres – again, no effect? There is no analysis that supports a similar conclusion, other than trying to line up with the state plans.

Also the document suggests "*Direct and indirect effects of modifying lek buffers in Idaho were discussed in Section 4.5.4. The change to the Proposed Action was to apply the minimum recommended buffer distances to IHMAs and GHMAs documented by a USGS literature review (Manier et al. 2014). Other restrictions in IHMA would ensure responsible development, although there is very little development in IHMA. Although this would be closer to leks, the distance would be within the minimum identified in literature (Manier et al. 2014). The reduced buffer distance in IHMA and GHMA would improve alignment with the Governor's Plan and the best available science supports the distances*." The table in Mainer does not discuss distances less than 2 miles for surface disturbance. It is not readily apparent how the conclusion of no effect was arrived and given the documentation that higher disturbance is now permitted in GHMA, and that this is a third to half the acres. While this conclusion may be justifiable, it would be necessary to see the analysis and how that compares across all states.

The statement above was analyzed in the 2015 FEIS (see Idaho Appendix DD) and said *"The BLM will apply the lek buffer-distances specified as the lower end of the interpreted range in the report unless justifiable departures are determined to be appropriate".* It is not clear what or where to find the justification of these differences or conclusions about the effects. As these are lower protections, they should have some negative effect, even if they are small. If they do not,

why not apply the reduced buffers everywhere? There is additional clarification needed to the analysis to explain this change.

Because of the changes in the new alternative, only Colorado seems to be clearly analyzed as this state had no changes. Nevada and Wyoming change amounts of PHMA and GHMA dramatically (100s thousand acres; see table ES-2) without discussing effects.

Instructions:

1. Clearly state the effect of the loss of acres and protections on sage-grouse and the science used to defend this conclusion. The analysis needs to document why these changes can be made and still be a benefit to sage-grouse; and meets the purpose and need.
    a. For Example: Idaho has changes in some lek protections without rationale or explanation of why it should be different from the other states. Clarify and bolster the analysis.
    b. In Utah, describe the effects of removing protection from GHMA.
    c. In Wyoming, describe the loss of 20% of the PHMA and 16% of GHMA. Clarify what CHMA is and it effects. Clarify the intent behind the rationale and mapping or science. As written, it appears the intent is that the state plan has enough sage-grouse protections, therefore the Forest Service does not have to protect everything. The analysis should demonstrate how this meets the purpose and need of being beneficial to sage-grouse.
    d. In Nevada, evaluate the effect of how changing where the habitat is and the reductions in the amount of PHMA, but with a commitment to increase GHMA, while still working towards the overall benefit of greater sage-grouse.

Historical Range of Greater Sage-Grouse

Elko County, Nevada

County objectors assert that there is little evidence that sage-grouse were historically widespread, thus questioning the need for these types of protections.

Review Response: In each of the 2015 FEISs (incorporated by reference), there is a good description of the historic range of these birds. For example, the Nevada 2015 FEIS section 3-1 to 3-9. There is a range map in the 2019 FEIS but one can also go to the states sites as well;

Nevada Department of Wildlife site (http://www.ndow.org/Species/Birds/Sage-grouse/) states "Sage-grouse were historically very abundant across Nevada and the west. The greater (northern) sage-grouse is the most common grouse species in Nevada and is found throughout the west. However, due to diminishing habitat of slow growing sagebrush due to development, fire, invasive weeds and other factors, an effort is being made to list the sage-grouse as an endangered species.

Overall there is a good review of science showing the sage-grouse are declining (especially in Chapter 3 of the 2015 EIS which was incorporated by reference); this is done through the citation

of the Technical Teams and other science to suggest population were historically higher and covered much of Nevada. The changing baseline is a good point, but objectors pointed to a sample of diary's but did not put them in context with what was presented in 2015 or the recent FEIS. There is still a decline through time since the 1950s so even if numbers were less than thought, they would be at risk.

Peer reviewed science is cited in the 2019 FEIS and the previous 2015 FEIS suggests higher populations and more habitat in the past.

No Instructions

Population Data and Vegetative Treatments

Western Watersheds Project et al.
Natural Resource Defense Council
Western Exploration, LLC (WEX)

Western Watersheds Project et al. and Natural Resource Defense Council contend the Forest Service does not have sufficient population data to warrant choosing any alternative other than the no action alternative. WEX requests that the burned lands be removed from the categorized HMA as they are not habitat and are not in any condition to potentially be habitat without substantial modification that will require decades of rehabilitation. Conversely, the environmental groups recommend retaining burned lands as HMA since they were and are expected to become future occupied habitat.

Remedies Suggested by Objectors: Western Watersheds Project et al. suggests preventing vegetation treatments that potentially damage sage-grouse habitats within PHMAs. Ensure that a new alternative prohibits vegetation treatments harmful to sage-grouse, including a full consideration of the science provided regarding fuel breaks. Develop 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.

Review Response: The Objector's claim that significant change has occurred since 2015. Although the Forest Service maintains that 278,000 acres of NFS lands were burned and analyzed, it was difficult to find documentation in the FEIS for the location of the analyses. Table 4-19 shows acres for three years (2016-2018). Additional detailed information was found in the annual monitoring reports, but not included in either the FEIS or Draft RODs. In the monitoring report, no analyses exists other than soft and hard triggers were not passed for one state. Information was also not locatable regarding the number of acres newly leased for minerals or gas extraction (since 2015) of NFS lands and analyses of those effects on sage-grouse.

The FEIS addresses sources of impacts to sage-grouse and mentions fire as the greatest threat. The FEIS also states new information available since 2015 was reviewed but provides no analysis of the new information and the effects of observed changes to the baseline; concluding impacts remain the same as in 2015.

Wildfire is an unregulated activity on NFS lands and effects GRSG habitat. Prescribed fire is an agency sponsored activity. There was no analytical support for the determination that fire was

not a factor in habitat or population trends since 2015 despite nearly 300,000 acres being burned. Although the FEIS document states fire was analyzed, and was not a factor during these years, the supporting analysis was not in the record. The cumulative wildland fire effects does appear in Chapter 4 (4.7.4).

The Forest Service annual monitoring report for 2016 reported that soft and hard trigger thresholds were not reached during the 2016 reporting period, but, the analysis supporting this statement was not present. It is possible that the analysis was a simple check against pre-established trigger points. Change in management was not triggered. The established soft and hard triggers were set to change management if habitat or population threshold numbers were reached. The FEIS describes Idaho (Appendix C) soft and hard change triggers (10% soft, 20% hard) not being reached. It remains unclear from the FEIS how these triggers were established and if each state had different triggers or if they were range-wide; whether they were for a single year or tracking cumulative change across years. If the supporting information was established in the 2015 amendments and has not changed, additional rationale and explanation should be brought forward to incorporate by reference.

Instruction: Explain how data shows that there are enough acres of habitat, even with the fires, to conserve the greater sage-grouse. For new information gathered since 2015 on habitat or population changes, or changes in threats (new oil and gas leases), show where in the record the analysis resides or, if missing, develop the analysis to support the FEIS statement. Such an analysis would address the objection and remedy requested by Objectors to prevent any negative vegetative treatments within PHMAs.

Sage-grouse Habitat Protections and Restrictions

Perch Deterrents and Guy Wires

Western Watersheds Project et al. are not in favor of the removal of the requirement to retrofit tall structures with perch deterrents within 2 years of signing the ROD, nor the change of removing to marking guy wires. The lack of a specific time frame for the deterrents and the change for the wires is a substantive change that is not analyzed or disclosed in the FEIS.

Remedies Suggested by Objectors: Western Watersheds Project et al. suggests restoring the requirement to provide perch inhibitors on tall structures within 2 years under GRSG-LR-SUA-O-013-Objective. Restore requirement to remove guy wires. Restore requirement to provide perch inhibitors on tall structures within 2 years under GRSG-LR-SUA-O-012-Objective (now -13) and include GHMA. 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. Restore requirement to provide perch inhibitors on tall structures within 2 years under GRSG-LR-SUA-O-012-Objective (now -13). Restore original guidance to allow 10% conifer cover, per the original LRMPA.

Review Response: The solution to this varies depending upon state. They agree to limit on the development of new guy wires and perch inhibitors but differ slightly on old structures. In the response to comments found in the FEIS; "Objective deleted and directed to guideline that requires including protective stipulations for greater sage-grouse and their habitat when issuing or reissuing permits." However, this does not appear true for Colorado (EIS 2-50) and Nevada (EIS 2, and is different in Idaho/Nevada while still keeping limits. Limits are still kept as guidelines "GRSG-GEN-GL-010-Guideline in Colorado. "Development of tall structures within 2 miles from the perimeter of occupied leks, as determined by local conditions (e.g. vegetation or topography), with the potential to disrupt breeding or nesting by creating new perching/nesting opportunities for avian predators or by decreasing the use of an area, should be restricted within nesting habitat." (FEIS p. 2-48 and GRSG-LR-SUA-O-013-Objective).

In nesting habitats, retrofit existing tall structures (e.g. power poles, communication tower sites, etc.) with perch deterrents or other anti-perching devices within 2 years of signing the ROD." (FEIS p. 2-50)

Proximity is altered a bit in Idaho (GRSG-GEN-GL-009-Guideline, FEIS p. 2-87) and often limited to PHMA (GRSG-LR-SUA-O-012-Objective, FEIS p. 2-88). Limits are more protective in Nevada but there was no change (GRSG-GEN-GL-013-Guideline EIS 2-138) for guy wires, which are for safety and stability and are clear they will be used when needed.

The changes made were and are restricted to what is within our authority moving forward. There are differences, but this is because there are differences in state plans. However, it was not apparent what the overall effects of these changes would be between the 2015 amendments and the proposed 2019 amendment, even though one assumes there was little change. It appears that in these two states there is slightly less protection but again, little discussion of effects can be found. If there are not effects between the different guidelines, then why not go to the least costly as the resource extraction group suggests?

Instruction: Clarify in the final RODs why distances changed in GHMA in Idaho and in Utah, and include the effects of addressing new or reissued permits rather than retrofitting existing wires.

Predator Control and Mitigation

Custer County, Idaho alleges insufficient protections, actions, standards or guidelines to reduce predators. Land managers must address terrestrial predators when they address sage-grouse population numbers and create restrictions on land use that increase if sage-grouse population numbers decrease.

Post Resolution Meeting Submittal: Animal Predators

"In response to your request for elaboration of the predator issue raised by Custer County, Idaho in relation to sage-grouse, below is a short objection statement and suggested resolution:

Issue: Moynahan et al. (2007) reported that 54% of nest failures were caused by predation. Gregg et al. (2007) estimated that GRSG mortalities due to predation were as high as 82% during the first few weeks after hatching. Since Moynahan, Gregg and others, new scientific

information has become available that supports these authors and the 2013 Custer County Sage-grouse Management Plan (attached). That information includes the scientific publication "Predation, predator control and grouse populations" (Kämmerle et al 2019 (Attachment 1) https://doi.org/10.2981/wlb.00464). These authors found that scientific studies provided overwhelming proof that predator removal benefits reproductive success of grouse.

Many lives have been changed over the past 30 years as federal agencies have stopped managing land and started listening to preservationists who litigate almost any science-based land management on federal lands. Custer County requests the Forest Service incorporate their local plans (Attachments 2 and 3) into the NEPA process and return to data, scientific analyses and proven results including coordinating with USDA APHIS, State and local government as well as private contractor services to assure predator control measures are requested when sage-grouse population declines are caused in part or whole by predators.

Requested Remedies:

Custer County requests that the Forest Service incorporate the following language into the NEPA process, ROD and permits issued in sage-grouse habitat:

Use the best available science including Federal, State, local government and industry data on predator population numbers to assure that annual population trend causation analyses include predator-prey relationships affecting trends.

Provide a detailed analysis of causes of sage-grouse population trend changes prior to implementing land use restrictions and permit adjustment measures. Causation will be established prior to soft and hard triggers being implemented. Restrictions on land uses and permits will be directly tied to the causation analysis. Adaptive management measures shall revert back to prior management once the identified causal factors are resolved.

The Forest Service will engage in quarterly dialogues with State and local governments to ensure that when sage-grouse population changes are observed, the causal factors of the decline are determined through a robust scientific process.

The Forest Service will add specific language to relevant permits, requiring and memorializing a coordinated Federal, State and local government approach to analysis of causational factors including predator prey relationships and cycles and assure the remedies are directly tied to the causes of population changes.

Please let me know if you have questions or if you would like additional information. Custer County Commissioners and biologists at my company are available to discuss this proposed objection resolution.

Mary Darling on Behalf of Custer County, Idaho"

Review Response: NEPA requires the disclosure of effects but only within our authority influence or control. There is minimal federal nexus for managing corvids (they are migratory so some possibility) and mammals that are predators. State wildlife offices and APHIS are the primary entities holding the authority and responsibility to manage wildlife.

This can be found in the FEIS response to comments, "predator control was evaluated, but not included, in the 2015 GRSG FEIS and, for the same reasons, was not carried forward in the 2018 GRSG DEIS and FEIS (Section 1.5.4). In Nevada, GRSG-P-MA-112-Management Approach (in DEIS; MA-106 in FEIS) identifies that efforts by other agencies to minimize impacts from predators should be supported by the FS."

Discussed in the no action alternative (A) of the 2015 Plans "The BLM/Forest Service would support other agencies in their efforts to minimize impacts from predators. Under a Memorandum of Understanding, the APHIS has primary responsibility for predator damage control on most National Forest System lands for actions initiated by APHIS. The issue of predator control was considered but not analyzed in detail in chapter 2-185 of 2015 Wyoming sage-grouse land use plan amendment. On this same page they considered this in alternative A; (no action); "The BLM/Forest Service would implement strategies and techniques in land management decisions that address predators shown to pose a threat to sage-grouse (Appendix F). The BLM/Forest Service would support and encourage other agencies in their efforts to minimize impacts from predators on sage-grouse where needs have been documented."

Instructions:

1. Ensure all rationale in the RODs make it clear that this was considered in the no action alternative but also enhance RODs supportive language such as "other agencies in their efforts to minimize impacts from predators on sage-grouse where needs have been documented".
2. Include a guideline in the Idaho plan using similar language found in Nevada and Wyoming.

Greater Sage-Grouse Viability and Species of Conservation Concern (SCC)

Objectors allege that 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. They assert "there is 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."

National Audubon Society et al. and Western Watersheds Project et al. allege that the revised sage-grouse plans do not provide for viability, and there is no support for a claim that they do. The objectors believe these plans do not meet the requirements under the 2012 planning rule for either viability or designation of SCC. Objectors state that instead of relying on this science to improve protections, thereby ensuring ecosystem integrity and the maintenance of viable populations of sage-grouse, the Forest Service insists on a Proposed Amendment that significantly weakens the protective measures put in place under the 2015 plan. Collectively, these actions will help push the bird towards an endangered species listing: The removal of the Sagebrush Focal Areas will jeopardize pristine, irreplaceable habitat that is critical to sage-grouse survival. The expansion of waivers, exceptions and modifications to NSO stipulations in oil and gas leases will negatively impact sage-grouse lifecycle activities, such as breeding,

further jeopardizing sage-grouse populations." The USFS only made a viability determination for sage-grouse, despite potential impacts to numerous other SCCs. Finally, the USFS refers to "the BAs and BEs located in the project record" as also supporting its viability determination. Such documents have not been made available for public review.

Remedies Suggested by Objectors: National Audubon Society et al. and Western Watersheds Project et al. suggests supplementing the EIS to adequately assess the environmental effects of the "no action" and other alternatives in light of recent data on baseline sage-grouse population and habitat conditions. Determine the ability of FS 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.

Review Response: The 2012 planning rule requires the Forest Service to "determine whether or not the plan components . . . maintain a viable population of each species of conservation concern within the plan area (36 CFR 219.9(b)(1)]. The greater sage-grouse is not a designated species of conservation concern because none of the forests affected by these amendments have finalized plan revisions under the 2012 planning rule. However, protections for greater sage-grouse are part of the purpose for these plan amendments, and the amendments will have beneficial effects for the species. Therefore, following the requirements of 36 CFR 219.13(b)(5)(1), the Forest Service found that 36 CFR 219.8(a)(1) and 219.9 should be applied to the amendments. The Forest Service applied 36 CFR 219.8(a) by considering the greater sage-grouse as a "species composition" factor for ecological integrity, as defined in 36 CFR 219.19. To determine if the amendment addresses this application of 36 CFR 219.8(a)(1), the Forest Service applied the requirements of 36 CFR 219.9 to the greater sage-grouse as if it were a species of conservation concern in the plan areas for all the amended land management plans.

The 2019 FEIS tiers to the 2015 NEPA analytical documents regarding viability by state (FEIS Chapter 4 pg. 4-333 through 4-448). Within the project record, the State of Utah analyzed site specific sage-grouse viability for Utah's Anthro Mountain (FEIS pg. 4-351) and adjacent areas and determined that population growth was continuing in northeastern Utah. However, human disturbance is increasing in all states FEIS (pg. 3-325). As objectors note, other habitat conditions have also changed since 2015. How the changes in habitat conditions since 2015 and new proposed plan components may affect greater sage-grouse viability has not been thoroughly analyzed in the FEIS. The record does not indicate why the Forest Service relies on viability analyses from 2015.

The Forest Service manages 8% of the distribution of the species, so for some units it may be reasonable to conclude that it is "beyond the authority of the Forest Service or not within the inherent capability of the plan area to maintain or restore the ecological conditions to maintain a viable population" (36 CFR 219.9(b)(2)). That determination would need to be fully documented, as required by 219.9(b)(2)(i) and (ii).

Instructions:

1. Clarify in the Record of Decisions how the Forest Service used new research and data on changed conditions since 2015, which is documented in Chapters 2 and 3 of the FEIS, to

analyze impacts to greater sage-grouse viability in each plan area. Explain how the Forest Service used this new scientific information, along with the baseline data from 2015, to develop plan components that will continue to contribute to maintaining the greater sage-grouse population.

2. Provide clear documentation for how plan components for each resource area help to provide the ecological conditions to benefit populations of greater sage-grouse in each plan area. If applicable, in any plan area for which the Forest Service determines that it is beyond its authority or not within the inherent capability of the plan area to maintain or restore the ecological conditions to maintain a population of the species, provide documentation of the basis for that determination and how plan components maintain or restore ecological conditions within the plan area to contribute to maintaining a viable population of the species within its range.

36 CFR 219 Planning Requirements for Viability and Species other than Sage-grouse

Objectors contend that viability analyses must be conducted for species other than greater sage-grouse in the plan areas as well.

Review Response: Because all of the plans being amended were developed or revised under the 1982 Planning Rule and do not yet have identified species of conservation concern, the Forest Service applies the viability requirements of 36 CFR 219.13(b)(6). The Ashley and the Manti-La Sal National Forests are currently in the plan revision process. The Regional Forester has published lists of potential species of conservation concern for each forest, but these lists have not yet undergone administrative review by the Chief or Chief's delegated authority, as required by 36 CFR 219.56(e)(2); therefore, these are still lists of potential, not designated, species of conservation concern.

A viability analysis for any species in the plan areas would have been required under 36 CFR 219.13(b)(6) if the Forest Service had determined that: (1) the amendment would have substantial adverse impacts to or would substantially lessen protections for that species; AND (2) the species is a potential species of conservation concern. The Biological Assessments and Biological Evaluations analyzed the effects to wildlife and plant species. The Forest Service has not found that these amendments would have substantial adverse impacts to or would substantially lessen protections for any species. The Forest Service will conduct relevant viability analyses for any future projects that are considered.

Instructions: Explain in the Record of Decisions that environmental analysis of the effects to wildlife and plant species found no substantial impacts or substantially lessened protections for any species as a result of these amendments. Explain that 36 CFR 219.13(b)(6) only requires viability analysis for a species when the Forest Service determines that an amendment would have substantial adverse impacts to or would substantially lessen protections for that species. Briefly summarize and cite to relevant sections of the Biological Assessments and Biological Evaluations to demonstrate compliance with 36 CFR 219.13(b)(6),

Biological Assessments and Biological Evaluations

Objectors contend that the "…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.

Reviewer Response: The BAs and BEs are available for public review and are located here as of 16 Oct 2019 and 21 Oct 2019.

No Instructions

Fire in Sage-Grouse Habitat

Western Watersheds Project et al.
Western Exploration LLC (WEX)

The objectors contend that the proposed plans for Nevada and Utah jettison scientific understanding in favor of vague and subjective standards regarding the use of prescribed fire. Whereas the best available science recommends not using prescribed fire in areas with less than 12 inches of precipitation, and the 2015 plan and DEIS followed this, the new GRSG-FM-ST-047 Standard, for Nevada, completely abandons this parameter while the new GRSG-FM-GL-042-Guideline, for Utah, greatly weakens adherence to this parameter. For the Nevada plan, cheatgrass-invaded habitats are less resilient to fire, and fire in these ecosystems may result in cheatgrass dominance. The objector mentions a literature review that suggests some utility in using prescribed fire during the cheatgrass seed maturation period in areas dominated by cheatgrass, but it also recommends suppressing fires in low-resilience habitats with >1% cheatgrass cover. The FEIS fails to analyze or disclose the basis for this last-minute change, which does not comport with the best available science.

For the Utah plan, the new "guideline" is optional, instead of required as a standard. Its application, then, is less certain, yet the FEIS fails to analyze the difference and likely impacts of this change. The objector also contends the Forest Service ignores recent science that fuel breaks are not effective, thus ignoring new information before the agency about effectiveness of fuel breaks generally, and allowing for the introduction and spread of non-native species, contrary to the best available science.

Western Exploration LLC does bring up the point that much of the sage-grouse habitat has been burned over and may never come back. They do not believe the Forest Service should include those areas in habitat mapping areas. The objector claims that some of the habitat determined to be sage-grouse habitat is no longer habitat because fire eliminated the habitat.

Remedies Suggested by Objectors: Prevent vegetation treatments that potentially damage sage-grouse habitats within PHMAs. Ensure that the new alternative prohibits vegetation treatments harmful to sage-grouse, including a full and fair consideration of the science we provided regarding fuel breaks.

Review Response: The objector is concerned about moving the design criteria regarding use of prescribed fire in the zone where annual precipitation is less than 12" of rainfall from the standard section to the guidelines section [Guidelines for Utah (FEIS page 2-202, column

3)]. However, the directive language of that design criteria did not change. The Forest Service decided the language was better suited to being grouped with the guidelines which would be more consistent with the 2012 planning rule. That rationale makes sense.

The objector is also concerned that the design criteria, mentioned above, for Nevada does not include the clause about annual precipitation of less than 12" of rainfall (FEIS page 2-156, column 3). The functional application of the guidance for Nevada will actually be more restrictive than the version from the DEIS as every fuel reduction treatment will have to be evaluated for resistance to annual invasive grasses and the resilience of native vegetation to respond after disturbance, based on ecological site descriptions and/or state and transition models. Note that Nevada is the driest state in the United States with an average annual precipitation of 9.5 inches.

The study that the objector draws attention to (Shinneman et al. 2018) is an Open File Report compiled by the USGS (DOI) in conjunction with the US Forest Service https://pubs.usgs.gov/of/2018/1034/ofr20181034.pdf. The report's conclusions are that fuel breaks are an important strategy to reduce the risks and negative consequences of wildfire on high priority sage-grouse habitat. The report acknowledges that this strategy also comes with inherent risks. The risks associated with fuel breaks include habitat edge effects, introduction of exotic and non-native plant species, and increased potential for vehicular access. The report recommends careful planning, monitoring, adaptive management, and several best management practices to minimize the risk and negative impacts of fuel break construction and prescribed fire use.

Management of wildlife habitat often requires making difficult choices between short-term impacts and long-term improvements or accepting short-term impacts in order to mitigate long-term risks. The balance between preserving functional sage-grouse habitat and mitigating the risk of habitat loss from wildfire is one example of these difficult choices. The Responsible Official's Record of Decision demonstrates an understanding of this dynamic and makes a reasoned choice.

The Objector's proposed remedy is probably not feasible because a prohibition on vegetation treatments could result in a long-term loss of a large quantity of functional habitat from wildfire impacts. The science provided by the objector was available to the FEIS team and has been considered.

No Instructions

Native and Non-native Grasses

Humboldt County, Nevada
Nevada Association of Counties
Eureka County, Nevada

Objectors Humboldt County, Nevada and Nevada Association of Counties support the use of desirable non-native, non-invasive plants in combination with native species for habitat restoration, as native species are often expensive, difficult to obtain, and don't always compete well with invasive species. Counties bear the most immediate socio-economic impacts of

rangeland fires in Nevada.... Desirable non-native species that are more readily available, more cost effective, more competitive with non-native annual grass species, and which provide a similar ecological functionality should also be encouraged for use.

Objector Eureka County, Nevada contends that the plan unjustifiably requires use of native species in habitat restoration and enhancement efforts not considering or using best available science. They also allege that the plan unjustifiably requires use of native species in fuel breaks not considering or using best available science. Fire and invasive species continue to pose the highest threat to sage-grouse and its habitat. Native species are expensive, often difficult to obtain, and don't always compete well with non-desirable invasive species. As such, use of native species can often limit the size and effectiveness of a habitat enhancement or restoration project. For fuel breaks, science has borne out that beneficial non-native species work best (e.g., crested or Siberian wheatgrass, forage kochia, etc.). Desirable non-native species that are more readily available, more cost effective, and more competitive with non- native annual grass species (medusahead and cheatgrass) and provide a similar ecological functionality should also be encouraged for use.

Remedies suggested by Objectors: The County believes that all tools (including desirable non-native plant species) need to be available to maintain ecological processes. Native species are expensive, often difficult to obtain, and don't always compete well with non-desirable invasive species. Strict use of natives can limit the size and effectiveness of a habitat enhancement or restoration project. Desirable non-native species that are more readily available, more cost effective, more competitive with non-native annual grass species, and which provide a similar ecological functionality should also be encouraged for use.

Review Response: Policy (FSM 2070) for selection, use, and storage of native and non-native plant materials that are used in the revegetation, restoration and rehabilitation of National Forest System lands are as follows:

1. Ensure genetically appropriate native plant materials are given primary consideration.

2. Restrict use of persistent**,** non-native, non-invasive plant materials to only those situations when timely reestablishment of a native plant community either through natural regeneration or with the use of native plant materials is not likely to occur. Examples include but are not limited to the following:

    a. When emergency conditions exist where it becomes necessary to protect basic resource values (such as, soil stability, water quality, and prevention of establishment of invasive species).

    b. When native plant materials are not available and/or are not economically feasible.

    c. In permanently, highly altered plant communities, such as road cuts*,* permanent and temporary wildlife openings, log landings, skid trails, temporary roads that have been closed and are used for linear wildlife openings and sites dominated by non-native, invasive species.

d. In designated historical sites where maintenance of historical vegetation communities, including agricultural crops, is needed to maintain historical integrity (FSM 2630).

3. Select non-native plants as interim, non-persistent plant materials provided they will not hybridize with local species, will not permanently displace native species or offer serious long-term competition to the recovery of endemic plants, and are designed to aid in the re-establishment of native plant communities.

4. Base determination and selection of genetically appropriate plant materials on the site characteristics and ecological setting, using the best available information and plant materials.

5. Ensure that development, review and/or approval of revegetation, rehabilitation and restoration prescriptions, including species selection, genetic heritage, growth stage and any needed site preparation, is done by a plant materials specialist who is knowledgeable and trained or certified in the plant community type where the revegetation will occur.

6. Do not use noxious weeds for revegetation, rehabilitation and restoration projects.

7. Cooperate and coordinate within the Forest Service, with other federal agencies, organizations and private industry in the development of native plant materials and supplies.

8. Anticipate plant material needs for emergency and planned revegetation. Develop core plant lists, planting guidelines, plant material sources and seed caches and seed storage facilities.

There are guidelines in all five of the State RODs that native species should be used to maintain restore and enhance sage-grouse habitats.

Forest Service policy (FSM 2070 Vegetation Ecology) directs the agency to give primary consideration to genetically appropriate native species in all treatments including seed. The Forest Service has been investing in the development of native species for restoration that meet this need. The Forest Service rarely purchases native seed on the open market as the BLM does, and the number of acres burned in sage-grouse habitat on NFS lands is much less than acres burned on BLM public lands. The Forest Service works in partnership with Forest Service nurseries, other federal and state partners, and partners and non-federal entities to increase materials for restoration which lowers costs of materials and makes them easier to obtain for the acres of sagebrush on NFS lands that do burn. Mature native plant species compete well in areas that do not have a soil seedbank of persistent and/or invasive non-native seeds. The Forest Service recognizes that seed establishment is difficult when a soil seed bank includes large amounts of long-lived non-native annual grass seed and includes guidelines in this document to address that need.

In response to the statement that Counties bear the most immediate socio-economic impacts of rangeland fires in Nevada.... The Forest Service has much less sage brush habitat than the BLM and less acres burn each year. Counties do not bear the cost of restoration of National Forests and Grasslands. Desirable non-native species that are more readily available, more cost effective, more competitive with non-native annual grass species, and which provide a similar ecological

functionality may be used if native species would not thrive. National Forests manage for species diversity and for multiple uses. Non-native species which are desirable for uses such as grazing are not always as desirable for other uses. Because they have been bred to compete, in the long-term they often displace valuable native species including forbs for pollinators and for sage-grouse. Non-native species do not always support the diversity of insect species that native plants support.

The guidelines that include the use of native species are vague, and give the objectors the impression that the use of genetically appropriate native plant materials is completely optional creating unreal expectations with the objectors. Although it is true that persistent non-native perennial plant species like crested wheatgrass, Siberian wheatgrass and forage kochia are not prohibited from use, it would be the exception rather than the rule to choose these species as anything more than a last resort as the Forests and Grasslands implement the FMS 2070 manual section. Most sage-grouse habitat is managed as native ecosystems or natural plant communities for multiple uses. Having this vague language in the guidelines sets the Forest Service up for unnecessary controversy when working to implement post-fire seeding projects and diminishes the value of native plant material programs that the Forest Service has been working to implement since before the native plant policy was written in 2008.

Instructions: Update the wording of the guidelines to reflect the 2070 manual guidance policy to improve clarity.

Water Rights

Eureka County, Nevada contends the plan amendment does not address the nexus between treatments and appurtenant water rights and State Water Law. Any vegetation treatments involving water (i.e. springs and seeps) must be consistent with Nevada Water law. For instance, a fencing project may be completed to benefit vegetation, but it also may change use of the water source by livestock which could conflict with an existing water right.

Remedy Suggested by Objector: A sentence could be added to this guideline that reads, "Treatments would be consistent with State Water Law and, where appropriate, the Forest Service will work collaboratively with water right holders to implement such projects." Eureka County specifically commented on this and made these exact requests in our comment letter on the DEIS of 1/3/19.

Review Response: A water right is the right to use water for a specific beneficial use at a specific location. Access to Point of Diversion and Place of Use is not granted through a water right. The ability to exercise a water right on land managed by the USDA Forest Service is

usually provided through a special use permit, a grazing permit, or some other type of land use authorization and must be in compliance with the terms and conditions in those authorizations.

Though the objector's concerns are not entirely accurate, proactively addressing this topic would be beneficial. The Remedy Request language ("Treatments would be consistent with State Water Law and, where appropriate, the Forest Service will work collaboratively with water right holders to implement such projects.") is acceptable but could be made more comprehensive by adding language to end of sentence discussing compliance with other state and federal laws.

The Forest Service was acknowledging in all the states that there could be some developments that were neutral to sage-grouse but very beneficial for other resource uses. The Agency wants to protect sage-grouse and still manage water, as it was written in 2015. Proactively addressing this issue by modifying the standard, using some language from the submitted remedy would help clarify this issue and ensure that people understand this is a standard, not a guideline.

GRSG-LG-ST-038-Standard (Nevada)

In PHMA and GHMA, do not approve construction of water developments that would cause net adverse effects to greater sage-grouse habitat.

In 2015 this standard read:

GRSG-LG-ST-040-Standard

In priority and general management areas and sagebrush focal areas, do not approve construction of water developments unless beneficial to greater sage-grouse habitat and consistent with State approved water rights.

Instruction: Add following sentence to the standard: "Treatments would be consistent with State Water Law and the Forest Service will work collaboratively with water right holders to implement such projects in compliance with state and federal laws." (could also use "… in compliance with state and federal land access laws" if more specificity is desired.)

West Nile Virus Mitigation Measures

Western Watersheds Project et al. contends that guidelines associated with nine science-based methods for reducing the risk of transmission of the West Nile virus were changed to a management approach. This management approach is an "optional content" in the plan. Objector contends that a management approach, instead of a standard or a guideline, reduces the certainty that West Nile virus mitigation measures will be implemented and is not disclosed or analyzed in the discussion of environmental consequences in the final EIS.

Remedy Suggested by Objector: Restore the certainty of protective measures on NFS lands. Ensure that there is a process of unanimous consent to exemptions, waivers and modifications, including expert scientific opinion.

Review Response: The page numbers suggested by the objector are not correct but the point is, a change from a guideline to a management approach (or deleted) has been implemented differently by state. It is defined as;

Guideline (GL) – 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. Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements. (Glossary-426)

Management Approach – A management approach is a statement of the principal strategies and program priorities the Responsible Official intends to employ to carry out projects and activities in the plan area. A management approach is optional content in a land management plan, is not a plan component, and can be changed, or added to or removed from a land management plan, following notice to the public. 36 CFR §219.7(e) (2), and §219.13(c). (Glossary-426)

There are, of course, lots of differences in the wording and level of protections, from state to state. Wording and rationale varies among states. Colorado maintains guidelines and provides these methods as examples (FEIS pp. 2-73-74). Idaho changes to management approach but states to utilize rather than providing examples– suggests consistency with 2012 planning rule. (2-122-123). Nevada changes to management approach in DEIS, but removes these for the FEIS and suggests providing examples is unnecessary (FEIS pp. 2-178-179). Utah appears similar to Idaho in that it changes to management approach but states to utilize rather than providing examples– suggest consistency with 2012 planning rule. (FEIS pp. 2-220-221; pp. 2-263-264) Wyoming appears similar to Utah and Idaho in that it changes to management Approach but states to utilize rather than providing examples– suggest consistency with 2012 planning rule (FEIS pp. 2-310-311). Overall, these are similar. When suggested as a guideline, the wording for reservoir construction is "examples". When a management approach is used, then the statement is "utilize". The only exception is Nevada dropping either of these wordings in the FEIS.

No Instructions

Range

Wyoming Coalitions of Local Governments
Western Watersheds Project et al.
Eureka County, NV

The review response for range issues related to Grazing Guidelines, Sage-Grouse Habitats and Grazing, NEPA, including Inadequate Disclosure of Grazing Impacts, Compensatory Mitigation and Grazing, Coordination with Permittees, and Stubble Height are combined and provided in the following the summary of issues.

Grazing Guidelines, Desired Conditions and Best Available Science

Western Watersheds Project et al. requests 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; and, prevent vegetation treatments that potentially damage sage-grouse habitats within PHMAs.

Wyoming Coalitions of Local Governments allege that no literature has been published that shows sage-grouse or its habitat are in jeopardy or are threatened by livestock grazing in Wyoming or Utah. The Forest Service relies on outdated, controversial literature to support actions that will decrease livestock grazing.

Range of Alternatives and Project Specific NEPA for Grazing Permits

Western Watersheds Project et al contend that the Forest Service failed to analyze an alternative in detail that requires all of these protection measures without waiver, modification, or exception, even though the best available science recommends these measures as the minimum required to conserve and restore sage-grouse habitats and populations. Objectors also believe that all grazing permits in designated sage-grouse habitats should undergo full NEPA analysis. Ensure that grazing permits have terms and conditions added to protect sage-grouse habitat within two years. And finally, Western Watersheds Project et al. asks that a supplemental EIS be completed because changes made to the livestock grazing guidelines and desired conditions between the draft and final EIS were not identified, analyzed, or disclosed.

Remedies suggested by Objector (Western Watersheds Project et al.):

Nevada

- Restore original setbacks for sheep bedgrounds under GRSG-LG-GL-038-Guideline (previously -037).
- Restore prohibition on new fence construction within 1.2 miles of leks, and extend this prohibition to all lands within 4.0 miles of leks, to protect nesting habitats used by sage-grouse, rather than protecting lekking habitats only.
- Require that 7 inches of grass height be left behind in breeding, nesting, and brood-rearing habitats.
- Impose a maximum of 25% forage utilization in sage-grouse designated habitats.

Utah

- Restore original setbacks for sheep bedgrounds.
- Require that 7 inches of grass height be left behind in breeding, nesting, and brood-rearing habitats.
- Impose a maximum of 25% forage utilization in sage-grouse designated habitats.
- Prohibit sheep bedgrounds and camps within 4 miles of sage-grouse leks under GRSG-LG-GL-038-Guideline, and make it a nondiscretionary standard.
- Restore the watertight prohibition on construction of water development facilities under GRSG-LG-ST-035-Standard.
- Require that livestock grazing be limited to 30% forage utilization.
- 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.

Idaho

- The FS must disclose all of the changes it made to the plans and describe the impacts of those changes.
- Restore original setbacks for sheep bedgrounds under GRSG-LG-GL-038-Guideline (previously -037).
- Restore prohibition on new fence construction within 1.2 miles of leks.
- Require that 7 inches of grass height be left behind in breeding, nesting, and brood-rearing habitats.
- Impose a maximum of 25% forage utilization in sage-grouse designated habitats.

Wyoming

- 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.
- Impose a maximum of 25% forage utilization in sage-grouse designated habitats.
- Require that livestock grazing be limited to 30% forage utilization.
- 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.

Wyoming and Colorado

- Require that livestock grazing be limited to 30% forage utilization.
- 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.

Nevada, Idaho, Utah

- 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.
- Ensure that grazing permits have terms and conditions added to protect sage-grouse habitat within two years.
- Require public notice and comment on all projects.

Sage-Grouse Habitat & Grazing

Western Watersheds Project et al. alleges that the response to comments does not adequately address weakened range management in the document. The 2015 document provided "specific desired conditions for GRSG based on seasonal habitat requirements." The FEIS does not analyze the change from the 2015 plans, which would proactively incorporate grazing guidelines in two years, to the new proposed plans, which only require the Forest Service to adjust livestock management as appropriate if it is found to be a limiting factor.

Wyoming Coalition of Local Governments believes that Wyoming's draft ROD sets up permittees for failure due to imprecise use of language. The draft ROD requires changes if livestock grazing limits achievement of desired future conditions. Livestock grazing, by its nature, can be interpreted as limiting achievement of desired future conditions. They also allege that the FEIS does not contain sufficient analysis of soils, precipitation, or altitude as they impact the habitat, and that there were insufficient monitoring data to determine which sites are "capable." They also suggest Utah's draft ROD does not require causality when linking the impacts of grazing to limiting the achievement of the desired conditions. They interpret this as meaning "every single cow or sheep on every single allotment" is a factor that limits achievement of the habitat objectives.

Inadequate Disclosure of Grazing Impacts

Western Watersheds Project et al. believes that the Nevada plan does not adequately discuss net impacts, provides inadequate clarifications, does not adhere to the best science, and contains an inadequate discussion of mitigation measures and the success rate of mitigation measures.

Compensatory Mitigation and Grazing

Western Watersheds Project et al. believes that GRSG-TDD-ST-023 and -024 would allow activities that harm sage-grouse without being subject to compensatory mitigation for impacts.

Coordination with Permittees

Eureka County believes that agency cooperation or collaboration with affected grazing permittees should be required.

Remedies suggested by Objector: Eureka County suggests adding specific language to each standard and guideline; or a new overarching guideline added, that requires and memorializes a cooperative and collaborative interaction with affected grazing permittees to address livestock grazing issues.

Stubble Height

Western Watersheds Project et al. contends the FEIS overstates and/or misrepresents the conclusions of studies related to the importance of grass height, and the response to comments fails to remedy this defect. The best available science still supports grass height minimums for

nesting sage-grouse, but the Forest Service instead continues to rely on studies that do not disprove prior findings. 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.

Review Response:

Grazing Guidelines, Desired Conditions and Best Available Science

In order to understand the changes made in the 2019 FEIS and plan amendments regarding grazing and stubble heights, it is important to look back at the 2015 amendments and the rational for relooking at the best available science and the monitoring data between 2016 and 2018.

Based on the new understanding of habitat characteristics, plant phenology and sampling bias (Hanser et al. 2018), the biological foundation for the development of the 2015 Greater Sage-Grouse Plan Amendments grazing guidelines have changed warranting removal of the grazing guidelines, which are not necessary as conservation measures for sage-grouse.

Monitoring of greater sage-grouse seasonal habitats that occurred in 2016 and 2017 showed that in the majority of the cases, nesting, breeding, upland summer, and winter habitats were in suitable condition with grazing being managed consistent with direction in existing land management plans (USDA FS 2018). Existing plan components as amended in 2015, when compared to published scientific findings, are generally compatible with habitat requirements for sage-grouse and monitoring showed that livestock grazing is not affecting the achievement or maintenance of desired conditions described in the 2015 Greater Sage-Grouse Plan Amendments FEIS.

Monitoring associated with droop heights on grasses showed that the existing land management plan direction was also providing for perennial grass at or above the droop heights planned for in the 2015 Greater Sage-Grouse Plan Amendment grazing guidelines (Table 3-5 in 2019 FEIS pp. 3-327-328). While stubble height monitoring was more limited, it also showed that the existing land management plan direction provided sufficient direction for meeting the 2015 Greater Sage-Grouse Plan Amendment grazing guidelines and that existing management plan direction is adequate in addressing potential grazing impacts to seasonal sage-grouse habitats (Table 3-6, 3-7, 3-8, and 3-9 in FEIS pp. 3-328-330). If grazing is determined to be a causal agent for less than suitable habitat conditions, forests may implement specific management changes on those respective allotments. It is more appropriate to address these issues at the forest or allotment level rather than through grazing guidelines applied at a regional scale. Monitoring data specific to the Humboldt-Toiyabe National Forest indicate that many riparian areas and mesic meadows in HMAs are not in proper functioning condition or moving toward desired conditions for sage-grouse brood-rearing habitat. Additional plan components are included in the Nevada proposed action to address this issue.

Western Watersheds suggest tightening up standard GRSG-LG-ST-035, especially in Utah. This standard addresses water developments and states that in PHMAs (CO, ID, UT, NV), IHMAs

(ID), and GHMAs (NV), construction was not to be approved unless beneficial to sage-grouse habitat. Limiting approval or construction of water developments only to situations that are beneficial to sage-grouse can preclude the use of water developments as an effective tool to help ensure proper grazing management.

The 2015 FEISs, and the resulting Record of Decisions, generally attempted to use a "one size fits all" approach for all sage-grouse occupied habitats across the 11-state range of the species. Part of the rationale for that decision was to provide a consistent approach across millions of acres and to avoid a potential listing by the U.S. Fish and Wildlife Service. That effort, in general, also tended to employ a strong conservative and restrictive approach to all or many other resources, uses, and values across the vast landscapes in an attempt to complete the plan amendments and subsequent projects in a timely manners. Numerous comments on the draft EIS in 2015 questioned if the literature citations and research findings used in that comprehensive analysis represented the full scope of the best available science.

It is understandable that groups and individuals with strong environmental concerns, including those who actively advocate for an end to all livestock grazing on public lands, found the 2015 plans to be favorable to their positions. Western Watersheds Project et al., in their objections, allege that "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." It is also understandable that the various states already heavily involved in managing sage-grouse habitats, as well as the commodity-interest groups and individuals, found many of the standards and guidelines to be unduly restrictive or perhaps even impossible to implement as written.

The USFWS, in its Federal Register Notice of October 2, 2015 (Vol. 80, No. 191) stated:

"Since 2010, the already voluminous scientific literature on sage-grouse has been augmented by extensive, newly published research on sage-grouse biology, sagebrush habitat, and impacts to both. We collected this information for our status review through a direct request to our conservation partners and through general literature reviews. We have used this data to inform our understanding of the current status of sage-grouse and how its status has changed since 2010."

Additional newly published research results have become available since 2015. The U.S. Geological Survey (USGS) Report, *Greater Sage-Grouse Science (2015-17) – Synthesis and Potential Management Implications*, was released in February of 2018. Prepared by 24 authors, it is the most recent compilation and objective assessment of the voluminous scientific literature on sage-grouse biology, habitat, and impacts to both.

The need for further plan amendments became apparent because of new science and research, new information and understanding gained from comments received from the NOIs and proposed LMPAs and DEIS, and from coordination with the Sage-grouse Task Force.

The purpose of the 2019 proposed action is to incorporate new information to improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse Plan Amendments,

including better alignment with BLM and state plans, in order to benefit GRSG conservation at the landscape scale (across approximately 5.2 million acres in the 5 states).

Range of Alternatives and Project Specific NEPA

A waiver is defined as a "permanent exemption from an (oil and gas) lease stipulation. The stipulation no longer applies anywhere within the leasehold" (FEIS Clossary-433), modifications are defined as "a fundamental change to the provisions of an (oil and gas) lease stipulation either temporarily or for the term of the lease. A modification may include an exemption from or alteration to a stipulated requirement. Depending on the specific modification, the stipulation may or may not apply to all other sites within the leasehold to which the restrictive criteria applied" (FEIS Glossary-429), and exceptions are defined as "a case-by-case exemption from a (minerals) lease stipulation. The stipulation continues to apply to all other sites within the leasehold to which the restrictive criteria apply. The authorized officer (any employee of the Forest Service to whom has been delegated the authority to perform the duties described in the applicable Forest Service manual or handbook) may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of the greater sage-grouse" (FEIS Glossary-426). None of these descriptors oil and gas and mineral lease stipulations apply to livestock grazing. All the 2015 alternatives were incorporated by reference, which included alternatives that restricted grazing in sage-grouse habitat. Pages 15 through 20 of this document address the incorporation of 2015 alternatives by references.

The Forest Service recognizes many grazing permits are due for NEPA analysis. Each Forest prioritizes NEPA analysis for grazing permits based on locally derived factors. The presence of sage-grouse habitat does not necessarily trigger a NEPA analysis; that is a decision that is made at the Forest or Regional level and is outside the scope of the 2019 amendment.

The "two-year" requirement for changing the terms and conditions of grazing permits was included in the 2015 RODs. An administrative change was made on 12/28/2017 that removed the two-year time frame and changed to "term grazing permits of affected allotments will be modified with new grazing guidance as soon as practicable." It was concluded that the administrative change did not change environmental effects of the amendments (2015). The analysis in the 2019 FEIS concluded that the existing Forest Plan grazing components met the intent to provide for sage-grouse habitat and no terms and conditions for inclusion in grazing permits were included in the 2019 amendment.

There were no substantive changes of grazing guidelines and desired conditions made between the draft and final EIS. Changes made were made to improve clarity, refine use of best available science, and improve alignment with the states (e.g. alignment of lekking season dates).

Grass Heights:

Given the 2018USGS *Synthesis* of scientific literature, and the need to better align with BLM and state plans, the reason for a "one size fits all" solution in the management of sage-grouse habitat across millions of acres in the West is no longer logical.

The national forests and grasslands in the 5-state area cover numerous ecological sites and ecosystems. Trying to use the same set of standards and guidelines in the 19 plan amendments is not the proper management approach across vast landscapes. As just one example, perennial bunchgrasses are not the same species from eastern Wyoming to eastern Idaho, or from Utah to Nevada. Moreover, even when they are the same species – they do not portray the same growth form across the 5-state area, or even in different precipitation zones.

Data were collected across hundreds, if not thousands, of Habitat Assessment Framework (HAF) random sample points during the period 2015-2018. These resulting excessive amounts of inventory data augmented existing shrub and herbaceous information, production and utilization records, and species composition results across the range of the species.

This additional information, coupled with the extensive and unbiased research results documented in the 2018 *Synthesis*, confirm that maintaining a 7-inch grass droop height across all acres does not meet all the habitat needs of the bird: Breeding habitat requirements are different than nesting needs; brood-rearing habitat needs are different, and winter survival cover needs are different yet again. There are ecosystem differences, and scientific documentation, as to why sage-grouse habitat management needs to vary across 5.2 million acres in 5 different states.

What is found in the FEIS and plan amendments include the changes regarding the 7-inch grass droop height across the habitat generally show or confirm the following;

1. 7 inches or more of droop height within the perimeter of the individual sagebrush plant is desirable for nesting habitat and increase the chances for nesting success.
2. The grass droop height will generally be at least equal to the height of the individual sagebrush plant, so areas of sagebrush that are 7 inches or taller will generally provide the required grass droop height that is preferable for sage-grouse nesting habitat.

Results regarding breeding habitat generally show or confirm:

1. Vegetation heights surrounding leks may be of 7 inches or more, regardless of grass and shrub species, but may typically be of any growth form (droop, erect, basal, or any combination thereof).
2. The lek itself – the primary area occupied by displaying males – is generally much shorter than 7 inches, which may relate to several factors such as visibility or for avoiding predation, etc. If there is vegetation of 7-inch height, it is sparse and/or around the edges as the hens approach the lek. Solid vegetation stands of 7 inches or more are generally not selected as ideal lek locations.

Results regarding brood-rearing habits generally show or confirm:

1. Shorter vegetation stands immediately adjacent to the nest site generally afford the chicks the greater opportunity to locate forbs and insects required for their diets.

2. It appears that those immediately-adjacent stands are more often selected as nesting and brood-rearing sites if they are of small acreages surrounded by areas of taller shrub and grass components.
3. The shorter vegetation also affords easier and quicker movement for the chicks to forage as well as return quickly to the nest for protection.
    a. As stated in the FEIS, the existing Forest and Grassland LMPs already contain allowable forage use levels for livestock grazing, including for riparian zones and wet meadows. The allotment-level guidelines, generally in the range of managing for 4-6 inches of residual forage, are the general requirements for meeting or moving toward desired LMP multiple-use conditions. They are also preferable for increasing the forb component of the existing vegetation and providing for the best brood-rearing habitat for sage-grouse chicks.

Grass Heights Summary: The 2015 FEIS and RODs did not intend for the agency to provide or imply 7-inch or higher herbaceous cover across every acre of sagebrush-steppe for all year-round habitat needs or for year-round benefits of sage-grouse populations.

While that amount is likely ideal or required for nesting birds under individual sagebrush plants, providing 7 inches of grass droop height in between sagebrush stands of 10-20% canopy cover, or even between individual plants, is not required for brood-rearing habitat. Areas with those higher levels may even be detrimental to the developing chicks, and/or are not selected as preferable nesting sites by the hens.

Modifications to Other Standards and Guidelines:

A thorough review of the Livestock Grazing standards, guidelines, and other requirements in Tables 2-5, 2-6, 2-7, 2-8, 2-8a, and 2-9 of Chapter 2 of the FEIS, as well as Table 4-9 in Chapter 4 of the FEIS, will reveal that many, if not most, of the changes from the 2015 FEIS are far more subtle than some of the objectors portray.

Restrictions regarding sheep camps and bedgrounds and proper use of stock driveways are generally already stated in existing LMPs as well as in applicable allotment management plans, and are implemented on-the-ground. They do not need to be re-stated here.

Most or all existing LMPs also address allowable forage use percentages as well as stubble heights for livestock grazing; these are designed to achieve allotment-specific objectives and management area requirements. They are stated and managed to meet the needs of any number of resource uses and values, including sage-grouse and other wildlife species' habitat needs. Reducing allowable forage utilization percentages to 30%, or 25%, or even lower is not a specific science or resource management need.

The location and design of management fences; the construction, reconstruction, or removal of fences; the distances of fences from leks; and the mandatory or optional marking of fences are all being managed on a site-specific and lek-specific basis and not on the same mandatory requirements across each state or the entire 11-state range of the species.

The change regarding allowing water developments from those "that are beneficial to GRSG habitat" to those "that would not cause harmful effects" is not a substantial change and is intended to provide reasonable flexibility. This meets the intent to avoid or minimize impacts to to the greater sage-grouse. Not all water facilities have the potential for serious adverse effects to sage-grouse because of West Nile virus or some other concern. Many water developments are beneficial to sage-grouse as well as to numerous other wildlife species. Again, the ability to make site-specific decisions rather than a "one size fits all" approach is beneficial to sage-grouse.

There are only a few changes to timing limitations, and most are intended to tie to specifics on known lek locations and elevational differences.

The Forest Service already has agency directives found in 36 CFR 2209.13 and policy issued in April of 2014 in effect, regarding vacating or closing grazing allotments and on how to respond to voluntary relinquishment of grazing permits, including those at the request of an external interest group. Those policies do not need to be included here.

Grazing permits are allowed by law to be issued for ten years, and renewal is subject to meeting requirements. Permit terms and conditions can be modified for specific reasons and in specific ways. Completion of site-specific NEPA analyses on the permitted allotments is when permits may be modified if any management changes are needed.

Extensive HAF data collections across virtually all of the greater sage-grouse habitat over the last three years, coupled with extensive existing vegetation monitoring data, have concluded that sage-grouse habitat needs are currently being met across most of the bird's range. As embodied in some of the existing state management plans, and stated in many of the state and county comments, proper livestock grazing is a de-minimus practice for sage-grouse habitats and populations, and in most areas is beneficial for maintaining or achieving desired plant community components and needed vegetation conditions for sage-grouse.

Forest Service allotment management plans (AMPs) seldom if ever plan for excessive or heavy livestock grazing unless it is to achieve a very specific vegetation objective over a very specific area of rangelands. Nor does the agency condone excessive or heavy grazing levels, and grazing permit actions are taken if stated objectives in LMPs and AMPs are not being achieved.

The objectives stated in the 2019 FEIS to 1) use all of the best current available science, 2) be more responsive to and consistent with existing state management plans, and 3) to be consistent with BLM plans whenever possible are being achieved with the Proposed Action Alternative.

The objections raised by state governments have been addressed to a large degree, and coordination and cooperation between the parties during administration of the permits does need to be a constant and in the areas where allotment management changes may become necessary, coordination will occur using the Agency's permitting process.

Objections raised by environmental groups and some individuals that want to return to all standards and guidelines contained in the 2015 FEIS and RODs across the 11-state range of the species, and to be even more restrictive against proper livestock grazing, are sometimes citing only the best available science that is restricted to narrow point of view and does not reflect all

best available science, does not always mesh with the Forest Service's mission or multiple use, and may not be in the best interest of the bird's year-round habitat needs.

Lastly, when grazing allotments undergo site-specific NEPA analyses, including those in designated sage-grouse habitats, all interest groups and members of the public have the opportunity to review and comment on the environmental analysis documents prior to a decision.

Lek definitions:

Although there appear to be differences of opinions as to the various definitions of leks, it appears the management requirements for all lekking situations are conservative regardless of how often each lek has been used in the last 10 years and how many males appeared on the lek during that time period.

The Nevada draft ROD states, on page 19, that "…it is important to clarify terminology that may have caused confusion. The Nevada Department of Wildlife (NDOW) is the agency responsible for developing lek count protocol, collecting and coordinating lek count data, and maintaining the state lek database. NDOW classifies leks as active and/or pending. In the 2015 FEIS, the terms "active", "occupied", or an unqualified "lek" were used interchangeably, but all fit into the NDOW definition of active and/or pending. This caused confusion, so language was clarified to ensure the correct definition for lek activity is used. This clarification will not have an effect on greater sage-grouse."

In addition, using the term "generally" when applying different timing limitations to the lekking season dates does apply "some wiggle room" in how the limitations are applied. That is a proper change from the "one size fits all" approach across the entire range of the greater sage-grouse. The location of the leks, especially in regard to elevational differences, could and should employ a slight difference in the timing of lek avoidance if a one-week or two-week use period difference exists on-the-ground.

As for the issue regarding definitions of Leks in the FEIS, the following definitions from the 2019 Glossary are included here:

Lek – A courtship display area attended by the male greater sage-grouse in or adjacent to sagebrush-dominated habitat.

Lek cluster – A group of leks in the same vicinity, among which GRSG may interchange over time and representing a group of closely related individuals. A lek cluster boundary is defined by minimal GRSG movement between clusters, so demographic rates are influenced by birth/death rates rather than immigration/emigration. Lek clusters are defined by the USGS (Coates et al. 2017).

Lek Perimeter – The outer perimeter of a lek and associated satellite leks (if present). Perimeters of all leks should be mapped by experienced observers using accepted protocols, by state. Perimeters may vary over time as population levels or habitat and weather conditions fluctuate. However, mapped perimeters should not be adjusted unless grouse use consistently (2+ years) demonstrates the existing perimeter is inaccurate. The lek location must be identified and recorded as a specific point within the lek perimeter. This point may be the geographic center of

the perimeter polygon calculated though a GIS exercise, or a GPS waypoint recorded in the field, which represents the center of breeding activity typically observed on the lek (WDFG 2012).

Active lek – Any lek that has had two or more males observed at least twice in the last five years.

Pending lek – Any lek that has two or more males observed only once in the last five years.

No instructions

Compensatory Mitigation and No Net Loss

Diane Kastel
Petroleum Association of Wyoming
National Audubon Society et al.
Western Watersheds Project et al.
Western Exploration LLC
Wyoming Coalition of Local Governments

National Audubon Society et al. and Western Watersheds Project et al. assert that the 2019 plans would remove a requirement that any sagebrush habitat damaged by development be offset with restoration projects elsewhere, instead leaving it to states to enforce that mandate and that in Utah and in parts of Wyoming, areas outside sage-grouse habitat would not be prioritized for oil and gas development. The 2015 plans contained concrete and enforceable language that mandated the use of compensatory mitigation and required a "net conservation gain," that set a higher bar than the "no net loss" standard proposed in most of the state appendices. A discretionary policy for compensatory mitigation would erode the protections upon which the decision not to list the sage-grouse was based. The FEIS fails to analyze and discuss the effects of the "no net loss" mitigation strategy in the Idaho plan. Changing the "net conservation benefit" and "clear conservation gain" strategies to "no net loss" will result in a continued loss of populations and habitats that place the species on a trajectory toward extinction. The Forest Service should analyze and disclose the effects of the "no net loss" strategy in the Wyoming plan.

Conversely, other objectors remind the Forest Service that mitigation is not mandated in NEPA and that while there must be discussion and analysis, ultimately the agency is free to decide the merits of the project. They point out that the suggestion that another agency (especially a state agency) can mandate off-site mitigation has been rejected by the United States Supreme Court. They also believe that "no net loss" is accomplishing what the "net conservation gain" standard was intended to accomplish which is to provide an "uplift for the species". The 2019 FEIS never discloses the Forest Service's authority to require mitigation, regardless of the standard, for projects and operations that comply with the Forest Service statutory multiple use mandate.

Minimizing impacts is not the same as compensatory mitigation and the Forest Service may not conflate the two distinct terms. There is ambiguity in the process for determining compensatory mitigation. With regard to wildlife habitat, such as sage-grouse PHMA or GHMA, the Forest

Service is only authorized to "maintain and protect" habitat that may be affected by operations on National Forest System lands. Authority for the net conservation gain standard relied on Secretary Order 3330 (Improving Mitigation Policies and Practices of the Department of the Interior) and the Presidential Memorandum issued on November 3, 2015 (Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment). Both the order and guidance have been rescinded by the Executive Order 13783 (Mar. 28, 2017) and Secretary Order 3349 which acknowledged that the Secretary of Agriculture lacks the authority to require any improvement above the original or baseline conditions. The 2019 Draft ROD mitigation standard clearly fails to conform to the clarification provided by the President and Interior Secretary. Objectors also disagree with "any language that requires, implies, or otherwise opens to the door for mitigation to improve, benefit, uplift sage-grouse or its habitat."

Remedies Suggested by Objectors: Petroleum Association of Wyoming and Western Exploration LLC request modification of GRSG-TDDD-MA-025-Management Approach - If, after avoidance and minimization, a proposed project still exceeds timing, density, disturbance, distance or noise requirements (from most up to date WY Executive Order), include an alternative using the Wyoming Compensatory Mitigation Framework as the primary means to evaluate and quantify debits, and calculate the number of credits required for compensatory mitigation. Refer to Appendix F for the Mitigation Framework and work collaboratively with the State point of contact (Wyoming Game and Fish Department's Habitat Protection Program) when applying the Wyoming Mitigation Framework.

Western Watersheds Project et al. suggests in Colorado, Wyoming, Utah, and Idaho the Forest Service should reinstate the "net conservation gain" standard for compensatory mitigation, recognizing that this standard encompasses a holistic vision of sage-grouse management centered on improving carrying capacity and viability.

Wyoming Coalition of Local Governments suggest that all "conservation uplift" or "improve" language should be deleted to match statutory authorities and Standards GRSG-TDDD-ST-023 and GRSG-GEN-ST-005 should be deleted entirely as they are inconsistent with law.

Western Watersheds Project et al and National Audubon also request a new EIS that analyzes and discloses the impacts of the changed mitigation strategy on the long-term viability of sage-grouse habitat in Idaho and Wyoming.

Review Response: The draft ROD and LMPA for Wyoming forests is clear by stating that direction contained in standards, guidelines, and management approaches 014 through 025 have been formatted to align as close as practicable to the current WY Executive Order. Also, a number of the stipulations in the Draft ROD Attachment D (Management Approach for Fluid Minerals: Stipulations) state that the WY Compensatory Mitigation Framework will be the primary mechanism to calculate credits and debits that adequately offset the effects of disturbance. Draft ROD Attachment G states the Forest Service may emphasize use of the State of Wyoming's GRSG Compensatory Mitigation Framework to the extent consistent with federal law, regulations, and policy. The clear references to the State's Framework combined with the Forest Service's commitment to working with the State of Wyoming through the 2008 Memorandum of Understanding between federal agencies and state fish and wildlife agencies,

the Forest Service intends to align itself with Wyoming's framework to the extent allowed by law.

The NEPA analysis the Forest Service is required to complete for a surface use plans of operations (SUPO) would be where compensatory mitigation, if needed, would be analyzed. Management Approach GRSG-TDDD-MA-025 reinforces that Forest Service's strategy is to use the WY Compensatory Mitigation Framework to determine the level of compensatory mitigation to be considered in project-level NEPA analysis.

The Forest Service has statutory and regulatory authority to require mitigation to improve sage-grouse habitat (see above references). From the aforementioned authority, it would not be unreasonable to rely upon the State's compensatory mitigation framework to achieve "no net loss" of sage-grouse habitat as a means to minimize impacts to surface resources. The draft ROD and plan amendment does contain language about "uplift for the species" or "improve", however that language does not appear in any content that will amend the Land Use Plans for forests in Utah and Wyoming. Therefore, it would seem the argument of the objectors is moot in that the language in question is not incorporated into any controlling plan amendment content.

Compensatory mitigation consists of compensating for residual project impacts that cannot be avoided or minimized by providing substitute resources or habitats, often at a different location than the project area. To quantify impacts and offsets, sage-grouse habitat is measured in terms of functional acres. Functional acres of habitat accounts for both the quality and amount of habitat available for meeting life history requirements. The goal of the compensatory mitigation plan is to achieve a defined mitigation standard of no net loss, based on the amount of functional acres that have a residual impact after accounting for measures to avoid and minimize project impacts. A compensatory mitigation project has to meet no net loss, but a reasonable amount of uplift is preferable, by providing habitat uplift through restoration that is equal to or exceeds the difference between baseline (i.e., pre-project) functional acres and post-project functional acres. Compensatory mitigation must be reasonably related to the impact being offset and impacts to sage-grouse habitat must be offset by benefits to sage-grouse habitat. With that said the type of seasonal sage-grouse habitat being impacted does not need to match the type of seasonal habitat restored, but only if it benefits the sage-grouse. The USFS should collaborate with the States to target compensatory mitigation and other sources of conservation funding to the sites and conservation actions with the highest probability of aiding or benefitting the species.

The FEIS and draft ROD/LMPA are consistent with law, regulation, and policy on its reference to "include an alternative" in GRSG-TDDD-MA-025-Management Approach. The Forest Service has the authority and responsibility to mitigate impacts for proposed surface use plans of operations (SUPO) and is required to comply with NEPA when processing a SUPO. The CEQ regulations and Forest Service regulations and directives provide adequate direction to Forest Service personnel on the NEPA process, including the development of alternatives.

Without a specified level of the improvement over baseline expected for compensatory mitigation to achieve a "net conservation gain", information is lacking to conduct a meaningful environmental analysis (40 CFR 1502.22) of the impacts associated with use of "no net loss"

versus "net conservation gain". Accordingly, it is not necessary to complete a new EIS to analyze the effects of the change from "net conservation gain" to "no net loss" in the Forest Service's greater sage-grouse mitigation strategy.

Instructions:

1. Include language in Management Approach GRSG-TDDD-MA-025 to clarify that use of the phrase "include an alternative" is in reference to the Forest Service NEPA process.
2. Include language in the RODs stating that without a specified level of improvement over base line, that information is lacking to conduct a meaningful environmental analysis per 40 CFR 1502.22.
3. Emphasize the language that shows collaboration with the States to prioritize and/or address the greatest threat and or weakest link impacting populations, when replacing the most rare, most critical sage-grouse habitat.
4. Revise the following sentence to say that a project has to meet no net loss, but that a reasonable amount of uplift is preferable. Now, it says that no net loss provides uplift.
    a. A compensatory mitigation project meets this no net loss standard by providing at least an equal amount of functionally equivalent (or better) habitat acres that are focused on the most critical habitat needs. At a minimum, compensatory mitigation should provide acres that are equal to the difference between baseline (i.e., pre-project) functional acres and post-project functional acres, but methods of creating uplift in quality and quantity of greater sage-grouse habitat should be considered.

Renewable Energy

Western Watersheds Project et al.
Eureka County, NV

Eureka County contends that solar and wind energy developments are treated differently (solar is not allowed in general habitat, yet wind is) and seem to preclude use of compensatory mitigation for net-conservation gain. It is not stated that such developments could be allowed if they can meet the "net conservation gain" standard.

Remedy suggested by Objector: Western Watersheds Project et al. suggests excluding overhead transmission lines and renewable energy sites from PHMA.

Review Response: The 2015 FEIS, pp. 4-71 to 4-80 addresses impacts of infrastructure and wind energy development. WY EO 2019-3, Appendix B p.4 - A two mile wide transmission corridor has been established through core population areas in south central and southwestern WY in order to avoid and minimize negative impacts to GRSG (this corridor does not appear to impact NFS lands). EO also provides for consideration of new overhead transmission line development within ½ mile of existing transmission lines in core areas and outside of existing corridors in core areas only when it can be demonstrated to minimize negative impacts to

GRSG. The 2019 FEIS, p 2-37 states the proposed LMPA that was analyzed in the 2015 FEIS incorporated guidance from specific State Conservation strategies, as well as additional management based on the NTT recommendations. FEIS, pp. 2-285 to 2-289 and p. 2-291 contains standards and guidelines for infrastructure, special use authorizations, and wind development.

Western Watershed Project et al. requests that overhead transmission lines and renewable energy sites be excluded from PHMA in Wyoming and to apply this protective measure without waiver, modification, or exception. Western Watershed Project et al. says their recommendation is based on NTT (2011), COT (2013) and the best available science. The FEIS is also based on NTT, COT, and the best available science and generally does restrict overhead transmission lines and wind development in PHMA, but does provide for exceptions when impacts to sage-grouse or its habitat can be limited. The purpose of the plan amendments is to identify and incorporate appropriate sage-grouse conservation measures into the plan in the context of the Agency's multiple use mandate. Western Watershed Project et al. recommendation does not align with that purpose or with the current WY Executive Order on GRSG Core Area Protection.

No Instructions

Discretionary Activities

Western Exploration, LLC contends standards included in the ROD and proposed plan amendment should include specifications that apply only to discretionary activities "(not nondiscretionary activities for exploration and development of locatable minerals or in any manner inconsistent with Federal law including the Mining Law and MMPRDA)."

Remedies Suggested by Objector: Western Exploration, LLC suggests an additional exception be included or it otherwise be made clear that if the proposed action is needed to exercise a valid existing rights (VER) or an existing authorized use for GRSG-LR-SUA-ST-015-Standard. Alternatively, a simple reference that this does not apply for non-discretionary activities or inclusion of the words "for discretionary uses". The following standards should include activities specified as "discretionary" for which the standards will be applied: GRSG-GEN-ST-007; GRSG-GEN-ST-009; GRSG-LR-ST-016; and GRSG-LR-SUA-ST-017.

Review Response: Lands not withdrawn from operation of the General Mining Act, as amended, are open to mineral entry and uses that are reasonably incident to mining operations. The Forest Service manages such uses under the authority of the 36 CFR 228 Subpart A. The objector's issue is the prohibition of "discretionary" activities within GHMA and PHMA in several standards for ancillary activities associated with mining operations authorized by the General Mining Act.

The Forest Service can require reasonable mitigations or other measures to minimize adverse environmental impacts on National Forest System surface resources from mining operations conducted under the General Mining Act, as amended (36 CFR 228.1). Mining operations authorized under a plan of operation include "all functions, work, and activities in connection with prospecting, exploration, development, mining or processing of mineral resources and all

uses reasonably incident thereto, including roads and other means of access on lands subject to the regulations in this part, regardless of whether said operations take place on or off mining claims." (36 CFR 228.3).

As stated in the preamble to the final regulations of August 24, 1974 the Forest Service recognized the statutory right of miners under the General Mining Act and the Organic Act to go upon and use the open public domain lands on NFS lands and that the exercise of that right could not be unreasonably restricted (see 39 FR 31317). Accordingly, the regulations require that the authorized officer analyze any proposed plan of operation "considering the economics of the operation along with the other factors in determining the reasonableness of the requirements for surface resource protection" (36 CFR 228.3).

During the environmental analysis of proposed plans of operations, the Forest Service has the ability and responsibility to insure the operations proposed by the operator are reasonably incident to mining under the Mining Laws, minimize adverse environmental effects to the extent feasible, and comply with applicable state and federal environmental laws (36 CFR 228.8). The Forest Service can require modification to proposed plans of operations to insure these requirements are met. All mining operations, including ancillary uses of NFS land outside of the claim or claims where a valuable mineral deposit is located (e.g. access/haul roads, utilities, pipelines, monitoring sites, timber clearing/removal, development rock storage facilities, tailings impoundments) should be adequately addressed and described in a complete plan of operations and evaluated in a single NEPA document that is responsive to the proposed plan. Ancillary uses are defined as activities necessary to support the primary mining operation.

Even though an approved plan of operations under 36 CFR 228 Subpart A is the overriding authority for operations conducted pursuant to the Mining Laws, there are situations where other authorizations (such as road use permits, special use permits, timber sale permits) may be required.

All permits for ancillary uses reasonably incident to and necessary for mining activities issued to the operator should be addressed and approved as part of the plan of operations, or as a condition of plan approval and appended to the plan when the permit is subsequently executed. As such permits that would be viewed as "discretionary" are an integral part of the plan of operation and are covered as part of the NEPA disclosure and decision process and are nondiscretionary because they are incidental to activities conducted under the mining law. Issuance of other permits/authorizations are done on a procedural basis as required by the operating plan.

Absent any statutory authority for the prohibition of non-discretionary activities (including those authorized by "discretionary" permits) within PHMA and GHMA, the Forest Service regulations can only require that the environmental effects of activities that are reasonably incident be minimized by reasonable mitigations.

In conclusion, issuance of "discretionary" permits (such as location of utilities or other ancillary facilities) that are reasonably incident to mining operations are regulated under the 36 CFR 228 Subpart A and are included as non-discretionary activities under the approved plan of operation.

Instruction: Clarify that the prohibition of "discretionary" permits does not apply to activities or facilities that are reasonably incidental to operations conducted under the General Mining Act as amended.

Economic Feasibility

Western Exploration, LLC contends that that the economic feasibility to the proponent must be considered for non-discretionary mining activities.

Remedy Suggested by Objector: Western Exploration, LLC suggests GRSG-LM-ST-097-Standard should include reference to feasibility in mandating mitigation to protect greater sage-grouse and their habitats and feasibility must consider the proponent's economic feasibility to implement certain mitigation in compliance with federal law including, but not limited to, the General Mining Law.

Review Response: For Locatable Minerals, 36 CFR 228 Subpart A requires that the Forest Service include economic considerations when determining the reasonableness of requirements for surface resource protection. During the environmental analysis of proposed plans of operations, the Forest Service has the ability and responsibility to insure the operations proposed by the operator are reasonably incident to mining under the Mining Laws, minimize adverse environmental effects to the extent feasible, and comply with applicable state and federal environmental laws (36 CFR 228.8). The Forest Service can require modification to proposed plans of operations to insure these requirements are met.

As stated in the preamble to the final regulations of August 24, 1974 the Forest Service recognized the statutory right of miners under the General Mining Act and the Organic Act to go upon and use the open public domain lands on NFS lands and that the exercise of that right could not be unreasonably restricted (see 39 FR 31317). Accordingly, the regulations require that the authorized officer analyze any proposed plan of operation "considering the economics of the operation along with the other factors in determining the reasonableness" (36 CFR 228.3).

For Locatable Minerals, mitigations required by the Forest Service include the consideration of economic and technical factors during the NEPA process.

No Instructions

Coal and Phosphate Mining in Idaho

Western Watersheds Project et al. contends standards and guidelines limiting new and expanded coal mining in sage-grouse habitat in Idaho should not be eliminated "although there appear to be no active federally-leased coal mines in Idaho at this time." Another objector also alleges that GHMA was overlooked in the proposed guideline revisions to non-energy leasable minerals, although in Idaho phosphate mining is within GHMA on FS lands.

Remedies Suggested by Objector: Western Watersheds Project et al. suggests retaining Standards CMUL-ST-092 and -093 and Guideline CML-GL-094. Include GHMA in GRSG-M-NEL-GL-088-Guideline.

Review Response: Statutory responsibility for the administration of the mineral leasing acts rests upon the Department of Interior. Specifically, the Mineral Lands Leasing Act of 1920, the Mineral Leasing Act for Acquired Lands of 1947, and the Federal Coal Leasing Amendments Act of 1975 (PL 94-377).

The Forest Service manages federal coal resources in partnership with Department of Interior agencies, the Bureau of Land Management (BLM) and the Office of Surface Mining, Reclamation and Enforcement (OSMRE), along with state agencies. The Forest Service has principal responsibility to manage use of surface resources, and ensure lands are reclaimed to support on-going land uses. The BLM manages leasing federal coal resources and must have consent of the Forest Service before leasing NFS lands.

The Federal Coal Leasing Amendments Act of 1975 gives the Forest Service full consent authority, meaning the Forest Service may deny mineral development or specify conditions under which development may take place for coal leasing on all national forest lands. In addition, per 43 CFR 3420.1-4, *General requirements for land use planning*, the Secretary of Interior may not hold a lease sale under this part unless the lands containing the coal deposits are included in a comprehensive land use plan or land use analysis. The major land use planning decision concerning the coal resource shall be the identification of areas acceptable for further consideration for leasing which shall be identified by specified screening procedures identified at 43 CFR 3461.5 and include an estimate of coal development potential.

The following is excerpted from the 2012 Pocatello, Idaho BLM Resource Management Plan;

Objective ME-1.2. *Coordinate with federal agencies (e.g., BIA, BOR, USFS, and USFWS) on minerals development proposals related to the federal mineral estate where such agencies have surface management responsibilities.*

> **Action ME-1.2.1.** The federal mineral estate will be managed consistent with laws, policies and established requirements.
>
> **Action ME-1.2.3.** Leasable and salable mineral resources will be available for development according to related laws and regulations and at the discretion of the BLM after full coordination with the surface management agency.
>
> **Action ME-1.2.4**. Leasable minerals on the Caribou National Forest will be managed consistent with the Caribou National Forest Plan (USFS 1996).

Objective ME-2.5. *Manage approximately 582,400 acres of the federal mineral estate (leasable minerals) as open to solid minerals leasing (e.g., phosphate) subject to standard lease terms, and conditions.*

The BLM RMP identifies estimated acreages to be managed as open to mineral leasing, however the actions outlined above indicate the BLMs regard for the related laws, regulation and coordination requirements with the Forest Service before undertaking leasing actions. Per 43 CFR 3420.1-4 (e)(1), only those areas that have development potential may be identified as acceptable for further consideration for leasing. The applicable Forest Plans in Idaho have not identified areas of moderate to high coal potential or acreages available to coal leasing as it is recognized that these resources are not present. The Forest Service maintains full consent

authority and may deny mineral development or specify conditions for coal leasing on NFS lands, which was not abolished in the lifting of the 2017 moratorium on new coal leasing.

The project record includes the BLM's 2016 Sagebrush Focal Areas Withdrawal Environmental Impact Statement which utilized information from the USGS Sagebrush Mineral-Resource Assessment (SaMiRA) project. The SaMiRA was initiated in November 2015 in response to the proposed withdrawal of approximately 10 million acres of Federal lands from mineral entry for the purposes of protecting greater sage-grouse and its habitat from potential adverse effects of locatable mineral exploration and mining. The Mineral Resource Assessment was initiated and supported by the BLM to (1) assess locatable mineral-resource potential and (2) to describe leasable and salable mineral resources for the seven Sagebrush Focal Areas and Nevada additions. Chapter C of the *Mineral Resources of the Sagebrush Focal Areas of Idaho, Montana, Nevada, Oregon, Utah, and Wyoming* summarizes the status of locatable, leasable, and salable mineral commodities and documents the geology and mineral resources of North-Central Idaho SFA which extends from east-central to south-central Idaho.

In support of the SaMiRA mineral assessment and specific to coal resources, the study references data from the National Coal Resource Assessment and Data System (NCRDS) including a 2013 update of the Conterminous U.S. Coal Fields map, compiled from NCRA data and information from other published maps. Additional information on the map sheet show coal formations, current production by State, coal rank definitions, and charts showing historical trends of coal production. Annual coal production for Idaho is presented for the years spanning 1990 through 2009, and for 1985 and 1986. Idaho had no coal production for this time span.

The Forest Service is correct to declare in the FEIS there are no commercially available coal resources in Idaho. This is based on information found in the project record for the Caribou – Targhee Forest Plan and points to the lack of important coal producing districts and the low occurrence and development potential of coal presented in the SaMiRa mineral assessment and the additional references USGS relied upon for its conclusions. While the BLM RMP does not explicitly exempt coal from lands managed as open for solid mineral leasing nor does it preclude a member of the public at large from requesting the BLM complete a leasing analysis for coal, the development potential for large, economically important coal mines in Idaho is low.

Removing Standards CMUL-ST-092 & -093, Guideline CML-GL-094 are appropriate as they are inapplicable when there is no coal lease potential in Idaho and the Forest Service maintains exclusive consent authority for coal leasing on NFS lands.

In addition, the objector incorrectly states that GHMA habitat occurs within areas of existing phosphate mines on USFS lands in Idaho. On NFS lands in Idaho where phosphate mining occurs, GHMA mapped habitat occurs north of known phosphate deposits and lease areas (see 2015 ROD-Map 4, pg. 104). At present, no leases exist within the area of mapped GHMA. Phosphate leases occur within GHMA areas on BLM administered lands within southeastern Idaho.

Objectors are also concerned about the removal of general habitat from a guideline regarding issuance of prospecting permits (GRSG-M-NEL-GL-088, FEIS p. 2-127), stating that habitat will not be protected from phosphate mining. There is an analysis of any potential effects due to

phosphate mining projects in the FEIS beginning on p. 4-377 indicating minimal impacts to general habitat.

Instruction: Include a more specific reference to the SaMiRa MPR in the project record and associated USGS reference data in support of SaMiRa assessment. The information speaks to mineral potential and occurrence for both coal and phosphate in the Idaho habitat areas of concern. Include pertinent GIS data/maps in the project record that show leasing areas relative to HMAs.

Employee Camps

Western Watersheds Project et al. contends that new language gives more discretion to the agency in determining the application of certain standards, specifically employee camps. The effect of this standard is really more of a guideline, and the EIS fails to analyze and disclose the impacts.

Remedies Suggested by Objector: The objector suggests restoring non-discretionary requirements regarding employee camps under GRSG-M-FMUL-093-Standard (now -080). Restore non-discretionary requirements regarding employee camps under GRSG-M-FMO-086-Standard (now -078).

Review Response: The Forest Service oil and gas regulations require review and approval of a surface use plan of operations (SUPO). SUPOs must be consistent with forest plan and demonstrate that operations will be conducted in a manner that minimizes effects on surface resources, prevents unnecessary or unreasonable surface resource disturbance, and maintains and protects fisheries, wildlife, and plant habitat.

GSSG-M-FMO-ST-076 Standard – In priority and important habitat management areas, do not authorize employee camps (Fluid Mineral Operations in Idaho, DEIS, p. 2-73)

GRSG-M-FMO-ST-078-Standard - In PHMA and IHMA, do not authorize employee camps, *when feasible*. (Fluid Mineral Operations in Idaho; FEIS p. 2-120)

GRSG-M-FMO-ST-091-Standard In PHMA and GHMA, do not authorize employee camps. (Fluid Mineral Operations in Nevada; FEIS p. 2-176) Note: Eliminated Sagebrush Focal Area language, but retained other language from no action standard.

It was not clear in the project record where the phrase "when feasible" was introduced into the aforementioned standard between the DEIS and FEIS.

In the case of the Idaho standard, the standard as written in the DEIS was to "not authorize employee camps" in priority and important habitat management areas, but the phase "when feasible" was added between DEIS and FEIS. The addition of "*when feasible*" into the standard provides some flexibility to the authorized officer to consider authorization of employee camps when it can be accomplished consistent with the mitigation strategy management approach for NFS lands in Idaho. The Forest Service oil and gas regulations provide authority to condition surface use plans of operation to avoid, minimize, and compensate for impacts to GRSG habitat.

The proposed action standard is a change from the no action alternative which provided no discretion in authorizing employee camps in priority and important GSRSG habits.

In the plan amendment for Nevada, the employee camp standard has not changed from the no action alternative and still directs the Forest Service to not authorize employee camps. (From a practical standpoint, it would have been preferable to provide some flexibility in the Nevada standard, similar to the Idaho approach. Given the remoteness of potential well sites in Nevada, the forest would have to approve a project-specific plan amendment to authorize an employee camp on NFS land.)

It is not recommended to adopt the proposed remedy to restore the non-discretionary standard regarding employee camps on fluid mineral leases in Idaho without the opportunity for waiver, exception, or modification. The change proposed by the Forest Service to this standard is consistent with the purpose and need of the FEIS, provides the opportunity to achieve habitat equivalency, and aligns with the State's sage-grouse mitigation strategy.

Instruction: Clarify the change in the Idaho standard regarding employee camps from DEIS to FEIS.

Leasable and Fluid Minerals

Surface Occupancy Stipulations

National Audubon Society et al.
Western Watersheds Project et al.
Wyoming Coalition of Local Governments

Both the National Audubon Society, et al and Western Watersheds Project, et al suggest language changes that correlates more closely with the Forest Service's statutory authority. The amendments should update and strengthen the requirements in the 2015 plans regarding applications of waivers, exceptions and modifications for surface occupancy. The proposed action would eliminate the requirement that exceptions to "No Surface Occupancy" requirements on fluid mineral leases be granted only after "unanimous concurrence from a team of agency sage-grouse experts from the U.S. Fish and Wildlife Service, the Forest Service, and the state wildlife agency." The FEIS inaccurately dismisses the effect of these changes. It fails to acknowledge that the expanded exception process will both reduce expert wildlife input into exception decisions, and also substantively expands "authorized officer" discretion to allow previously-prohibited surface disturbance.

The Proposed Amendment would allow waivers and modifications to No Surface Occupancy (NSO) stipulations in Wyoming, when these were not previously allowed under the 2015 plans. The objector contends the FEIS changes the extent to which disturbance is allowed in PHMA by making minor terminology changes that have big implications. Without specificity, it is impossible to analyze the effects of, in violation of NEPA. The lek definition being changed from "occupied" to "active or pending" are reductions in the protections being provided by the Nevada plan. While the FEIS frames this as a "clarification," it is not at all clear that this is not a

significant management change, and nowhere is this change analyzed or disclosed elsewhere in the FEIS.

Conversely, the Wyoming Coalition of Local Governments allege that the 2019 FEIS fails to disclose and analyze the number of acres where an NSO stipulation made it impossible to develop fluid minerals, regardless of whether there are active leks or sage-grouse present in these habitat areas. The interrelationship between the "closed" acres and the "NSO" acres includes significant cumulative and connected impacts and the Forest Service has not explored that relationship in the FEIS. The Forest Service has not adequately disclosed the problems with the supporting literature for one site per 640 acres (Wyoming), the controversy surrounding the methodology, and the credibility of the NTT Report in general. No leasing on an area that exceeds 5,000 acres is a de facto withdrawal of PHMA from mineral development (Utah) and the Forest Service does not have unilateral authority to implement a de facto withdrawal of minerals in sage-grouse habitat without complying with the mandatory procedures of a withdrawal or land management decision, including full disclosure and analysis of the energy resources foregone. Under the 2019 Draft ROD, production would be limited to the edges of PHMA because NFS lands designated as sage-grouse habitat cannot be developed through horizontal or directional drilling. The Forest Service has not disclosed this fact nor weighed the merits of closing these lands to mineral development. The Forest Service does not explain how the exact same factors supporting an exception (i.e. no direct, indirect, or cumulative impacts to sage-grouse) are not equally valid for a waiver or modification. The Forest Service has not demonstrated how an exception is any different in purpose or effect from a waiver or modification and, therefore, fails to connect the decision to use only exceptions to reasonable facts that justify that decision.

Remedies Suggested by Objectors:

Western Watersheds Project et al. requests decline to adopt reductions in lek buffers, and consider an alternative that would instead adopt science-based No Surface Occupancy (NSO) buffers of not less than 4 miles around active and suitable lek sites.

National Audubon Society et al. requests the following changes be made to the Proposed Amendments:

- The Forest Service should commit to consultation with the U.S. Fish and Wildlife Service and state wildlife agencies before granting NSO exceptions;
- The Forest Service should hold a 30-day public notice and comment period before granting NSO exceptions;
- The criteria for granting exceptions should be tightened and strengthened, to at least the same level as in the Draft Plan Amendments;
- Waivers and modifications should not be allowed under the Wyoming plan, and the missing stipulation (Stipulation WY2 in the Draft Amendments) should be included in the Proposed Amendments;

- A public database should be created to track all requests and approvals of NSO exceptions, waivers, and modifications.

Western Watersheds Project et al. (Nevada) GRSG-GEN-GL-011-Guideline (FEIS at 2-137) needs to be changed to a nondiscretionary standard. Retain requirement for unanimous Forest Service, Fish and Wildlife Service, and state agency consent for any exceptions from NSO Requirements for PHMA.

Western Watersheds Project et al. (Utah) Decline to adopt reductions in lek buffers, and consider an alternative that would instead adopt science-based NSO buffers of not less than 4 miles around active and suitable lek sites. Retain non-waivable NSO standards for Sagebrush Focal Areas. Retain all original fluid mineral management standards for the Anthro Mountain Habitat Management Area. Disallow waivers, modifications, or exceptions to NSO Requirements for PHMA. Designate all habitats designated as Priority Areas for Conservation (PACs) by the USFWS (COT 2013) as PHMA. Allow no leasing in PHMA. 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.

Western Watersheds Project et al. (Wyoming) Expand designated Priority Habitat Management Areas to include areas of high sage-grouse population concentration previously excluded from PHMA (see Attachment 1). Apply NSO 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."

Remedy is the following language: (Wyoming) In priority and connectivity habitat management areas, do not authorize new surface occupancy or surface disturbing activities may be authorized on or within a 0.6 mile radius of the perimeter of occupied leks. In priority and connectivity habitat management areas, limit the density of activities related to oil and gas development or mining activities to no more than may exceed an average of one pad or mining operation per 640 acres, using the current Density Disturbance Calculation Tool process or its replacement in the Responsible Official's discretion. In GHMAs, do not authorize new surface occupancy or surface disturbing activities on or within a 0.25 mile radius of the perimeter of occupied leks.

Remedy is the following language: (Utah) GRSG-M-FMUL-ST-065-Standard - In PHMA, any new oil and gas leases or geothermal leases must include a NSO stipulation only when the deciding officer determines that energy development would adversely affect sage-grouse on the site and that mitigation measures would be insufficient. There will be no waivers or modifications. An exception, after review by an interagency technical team, could be granted by the authorized officer if: • There would be no direct, indirect, or cumulative effects to the greater sage-grouse or its habitat; or • Impacts could be fully offset through mitigation; and • The exception will include appropriate controlled surface use and timing limitation stipulations

Retain non-waivable NSO standards for Sagebrush Focal Areas. Retain all original fluid mineral management standards for the Anthro Mountain Habitat Management Area. Disallow waivers, modifications, or exceptions to No Surface Occupancy Requirements for PHMA.

Remedy: 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 NSO 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.

Remedy: Expand designated Priority Habitat Management Areas to include areas of high sage-grouse population concentration previously excluded from PHMA (see Attachment 1) Apply NSO 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."

Restoring the certainty of protective measures on Forest Service lands. Ensure that there is a process of unanimous consent to exemptions, waivers and modifications, including expert scientific opinion.

Post Resolution Meeting Submittal: Surface Use Stipulations

> Greater Sage-grouse Post Resolution Meeting
> State of Utah and National Audubon Society
> January 2020
>
> “Braden Sheppard, from the State of Utah, and myself met to resolve Audubon's objection to the Forest Service removing the controlled surface use and timing limitation stipulations from Stipulation C (Appendix G, p. G-4).
>
> Upon meeting, both the State of Utah and Audubon believe the USFS should update Stipulation C in G-4 to reflect the exception language in the Draft ROD and FEIS that identifies that an exception to GRSG-M-FMUL-ST-066-Standard may only be granted if:
>
> 1) There would be no direct, indirect, or cumulative effects to the greater sage-grouse or its habitat; or 2) Impacts could be fully offset through mitigation; and 3) the exception will include appropriate controlled surface use and timing limitation stipulations.
>
> *See* FEIS at 2-213 and ROD at 59. Please updated Stipulation C to match the language in the plan. Also, the State and Audubon believe that the term "mitigation" is a broad statement that encompasses avoiding, minimizing and compensating to off-set impacts. However, it may be helpful to include next to mitigation in parentheses the following: “(i.e. ‘"minimize" and "compensate")” since an exception would include more than avoiding impacts.
>
> Next, the State and Audubon look forward to the USFS addressing objections and incorporating our resolution. Please let us know if you require further clarification on the language above.

> We are considering if we can address another issue but I'm not sure if you received other ideas for ongoing discussion or the window is officially closed. One issue that also seemed like we were getting traction as a group was to try to find some meaningful language to use instead of "no net loss" or "net conservation gain," since both those terms were causing difficulties and not capturing what the group seemed to agree we needed.
>
> Thank you again for your efforts in this objection resolution process.
> Nada Culver
> Vice President, Public Lands and Senior Policy Counsel
> National Audubon Society"

Review Response Background statutory requirements and project record: Locatable Mineral Operations: Under the authority of the Organic Act and the General Mining Act, as amended, the Forest Service cannot prohibit reasonably incident mining operations on lands open to mineral entry.

The Mineral Lands Leasing Act of February 25, 1920, (41 Stat. 437, as amended; 30 U.S.C. 181 et seq.) authorizes the Secretary of the Interior to issue leases for the disposal of certain minerals (coal, phosphate, sodium, potassium, oil, oil shale, gilsonite, and gas). The act applies to NFS lands reserved from the public domain, including lands received in exchange for timber or other public domain lands, and lands with minerals reserved under special authority.

Per the 1987 Leasing Reform Act, the BLM cannot lease NFS lands for oil and gas over the objection of the Forest Service and the Forest Service has approval authority over all surface disturbing activity on oil and gas leases on NFS lands. Forest Service oil and gas regulations provide authority to condition leases and surface use plans of operations to ensure lease activity minimizes effects on surface resources and protects and maintains fisheries, wildlife, and plant habitat.

The Mining and Minerals Policy Act of December 31, 1970, (84 Stat. 1876; 30 U.S.C. 21a) states that the continuing policy of the Federal Government is to foster and encourage private enterprise in the development of economically sound and stable domestic mining and minerals industries and the orderly and economic development of domestic mineral resources.

Section 7 of the Endangered Species Act requires Federal agencies to consult with the U.S. Fish and Wildlife Service (Service) when any action the agency carries out, funds, or authorizes (such as through a permit) *may affect* a listed endangered or threatened species.

The Federal Register Notice dated 10/01/2015: The U.S. Fish and Wildlife Service (Service) determined that the greater sage-grouse, a large ground-dwelling bird unique to North America, does not warrant protection under the Endangered Species Act (ESA).

Issue developed from scoping comments: Remove language that requires consensus with FWS and allow more exemptions; Allow WEMs and flexibility if other existing protections (e.g. Compensatory Mitigation) achieve desired conservation goals (Project Record #271)

Modifying lek buffers (see FEIS Section 4.5.4.)

The 2019 FEIS incorporates by reference an analysis of an alternatives that included a lease stipulation requiring a 4 mile NSO buffer in PHMA and CHMA (*see* 2015 WY FEIS/LMPA Alternative B, p 2-179). Analysis of alternative that includes NSO stipulations without opportunity for WEMS in PHMA and GHMA (*see* 2015 WY FEIS/LMPA Alternative C, p 2-131); Elimination of Sagebrush Focal Areas (*see* Section 4.5.4 of FEIS); and Eliminate GHMA and Anthro Mountain Habitat Management Area (*see* Section 4.5.1 of FEIS, p 4-217 to –218).

Discussion of impacts to projected number of oil and gas wells by alternative (see Section 4.83 of 2015 WY FEIS/LMPA, pp 4-108 to 4-117).

"Some areas that were not included as PACs [priority areas of conservation] may still have great potential for providing important habitat if active habitat management is implemented. For example, removal of early-stage juniper stands may render currently unsuitable habitat into effective habitat for sage-grouse (this is also true for degraded habitats within PACs). State and federal agencies should actively pursue these opportunities. Successful habitat management efforts could increase connectivity between PACs, and will enhance management flexibility in conserving the species", and "Where consistent with state conservation plans, sage-grouse habitats outside of PACs should also be addressed." p.33 Conservation Objectives Team Report (rationale for including protective measures in GHMA).

"Sage-grouse habitats outside of PACs may also be essential, by providing connectivity between PACs (genetic and habitat linkages), habitat restoration and population expansion opportunities, and flexibility for managing habitat changes that may result from climate change. There may also be seasonal habitats outside of PACs essential to meeting the year-round needs of sage-grouse within PACs but that have not yet been identified. Therefore, maintaining habitats outside of PACs may be important (Fedy et al. 2012). Conservation of sage-grouse habitats outside of the PACs should be closely coordinated with each state. For those states with sage-grouse management plans, or similar documents adequately addressing the conservation of sage-grouse that have been developed in coordination with FWS, decisions on management of those areas should defer to those plans. Conservation of habitats outside of PACs should include minimization of impacts to sage-grouse and healthy native plant communities. If minimization is not possible due to valid existing rights, mitigation for impacted habitats should occur." p.36 Conservation Objectives Team Report (rationale for including protective measures in GHMA).

"Identify areas and habitats outside of PACs which may be necessary to maintain the viability of sage-grouse. If development or vegetation manipulation activities outside of PACs are proposed, the project proponent should work with federal, state or local agencies and interested stakeholders to ensure consistency with sage-grouse habitat needs" and "Actively pursue opportunities to increase occupancy and connectivity between PACs. Some areas that were not included as PACs may still have great potential for providing important habitat if active habitat management is implemented." p.37 Conservation Objectives Team Report (rationale for including protective measures in GHMA).

https://www.usgs.gov/media/files/mou-conservation-and-management-greater-sage-grouse: 2008 MOU between Federal and State agencies to provide for cooperation in conservation and management of GRSG.

Review Response by Requested Remedies:

Proposed remedy to maintain lek buffers, apply NSO without WEMs, adopt more restrictive measures, retain "net conservation gain", retain sagebrush focal areas and non-waivable NSO, retain Anthro Mountain Habitat Management Area and associated waivers, and consider an alternative of NSO buffers of not less than 4 miles around active and suitable lek sites: The objectors cite studies which they offer to be in their view as the best available science to counter what the scientific studies which the Forest Service reference as its best available science. Section 4.2 of the FEIS describes the use of best available science in preparing the proposed plan amendments and scientific references are provided in Appendix H.

Proposed remedy to add missing WY2 stipulation to proposed amendment: The DEIS contained Stipulation WY2 which stated No Surface Occupancy in PHMA or CHMA when anthropogenic disturbance is 5% or more of suitable habitat in surrounding area using the Density Disturbance Calculation Tool. This stipulation was not carried forward into the FEIS or the draft WY ROD. Table 2-9 in the FEIS provides a comparison of alternatives and describes changes between DEIS and FEIS, but it does not discuss changes made to stipulations. It is not clear in the FEIS why Stipulation WY2 was dropped.

Proposed remedy for Forest Service to commit to consultation with USFWS and state wildlife agencies: Since the USFWS determined the greater sage-grouse does not warrant protection under the ESA, the Forest Service is not required to consult with the USFWS for federal actions that may affect the species or its habitat. However, the Forest Service is committed to coordinating with the USFWS on management of GRSG, including processing requests for waivers, exceptions, or modifications. Through agreements such as the 2008 Memorandum of Understanding (MOU) with WAFWA, FS, FWS, BLM, USGS, FSA, and NRCS, MOU's with the States, and State Sage-grouse Executive Orders, Mitigation Strategies, and Adaptive Management Plans. These existing agreements represent the Forest Service's commitment to consult with Federal and State wildlife agencies.

Proposed remedy to provide for a 30-day public notice and comment period before granting WEMs: Per Forest Service regulations at 36 CFR 228.104, requests for waivers, exceptions, or modifications are processed in conjunction with a surface use plan of operations, for which the authorized officer must ensure compliance with NEPA and the associated requirements for public notice and comment. Accordingly, it is not necessary to adopt the remedy to specify a 30-day public notice and comment period.

Proposed remedy to expand provisions for waivers, exceptions, and modifications on NSO stipulations (WY): The FEIS Section 4.5.5 discusses including waivers, exceptions, and modifications on no surface occupancy (NSO) lease stipulations. The 2015 plan amendments included a standard that allowed no waivers or exceptions in PHMA's and only allowed exceptions if certain criteria was met, including a unanimous concurrence from a FS/FWS/State team of GRSG experts. The change was made to address an issue generated from the scoping process. The proposed WEM language clarifies the authorized officer as the deciding official rather than the appearance of abrogating Forest Service authority to other entities. Using a

management approach to expand the use of WEM's in PHMA is consistent with Forest Service oil and gas regulations while still ensuring that environmental review must demonstrate that approving a WEM to NSO would not impair the function of GRSG habitat. Approval of a WEM would require interdisciplinary analysis and review through the NEPA process and a finding that the proposed development will not impair the function or utility of the site for sage-grouse. Interdisciplinary analysis of the NEPA process and coordination between the Forest Service, the USFWS, and State wildlife agencies will continue to ensure wildlife expertise are engaged in requests for WEMs. (Stipulation WY2 [NSO when anthropogenic disturbance > 5% in PHMA] was in the DEIS, but not included in the FEIS, and it is unclear on why it was not carried forward.)

Create a public database to track all requests and approvals of NSO WEMS: Beyond the scope of the FEIS/LMPAs. However, since a WEM represents an adjustment of the terms of an oil and gas lease, BLM's LR2000 database would be a readily available means to track WEMs that are approved.

WY Coalition of Local Governments claim FS failed to disclose and analyze the number of acres where NSO stipulation made it impossible to develop. The 2015 WY FEIS discloses both the amount of acres subject to NSO (pp. 4-108 to 4-117) and the projected number of wells by alternative (Table 4-43, p. 108). The use of directional/horizontal drilling is discussed in Chapter 3 (p.3-119) which provides an indication of NSO areas that could be developed using that technology.

The issues raised by the objectors relate to the forest plan standards and guidelines and lease stipulations to maintain diverse habitat and viability of greater sage-grouse. The federal government's minerals policy is to foster and encourage the economic and sustainable domestic mineral development. The Forest Service administers and manages the National Forest System lands for multiple use. The Forest Service oil and gas regulations provide the authority for the Forest Service to authorize leasing and development subject to terms and conditions to minimize impacts to surface resources and to maintain and protect fisheries, wildlife, and plant habitat.

Several objectors propose more restrictive conservation measures as a remedy to the proposed plan amendments. More restrictive conservation measures were analyzed in the 2015 FEIS range of management alternatives and were not selected as the preferred alternative.

The 2019 FEIS supports that the proposed plan amendments were developed using best available science, improve clarity, efficiency, and implementation of the 2015 Plan amendments, including better alignment with BLM and state plans to better sage-grouse and its habitat.

Instructions:

1. Provide an explanation in the ROD of why WY2 stipulation (No Surface Occupancy when anthropogenic disturbance exceeds 5%) from DEIS was not included in FEIS and draft ROD.

2. Update Stipulation C in G-4 to reflect the exception language in the Draft ROD and FEIS that identifies that an exception to GRSG-M-FMUL-ST-066-Standard may only be granted if:

    a. There would be no direct, indirect, or cumulative effects to the greater sage-grouse or its habitat; or

    b. Impacts could be fully offset through mitigation; and

    c. The exception will include appropriate controlled surface use and timing limitation stipulations.

Fluid Mineral Stipulations

Petroleum Association of Wyoming requests a process consistent with the State of Wyoming and the BLM that considers exceptions to timing stipulations outside of PHMA. The "Forest Service's exception provisions include a substantive standard that differs from the State of Wyoming's standard for granting exceptions, the Forest Service's exception provisions also appear to require the Forest Service to prepare an "environmental record of review" — a duplicative and thus unnecessary process". Design features on infrastructure and fluid mineral development should not apply within GHMA.

Remedies Suggested by the Objectors:

Petroleum Association of Wyoming requests that the Forest Service revise its exception language to align with the State and BLM's exception process. Specifically, Stipulations W1 - W8 in Attachment D of the ROD, Management Approach for Fluid Minerals: Stipulations, and in Appendix G, of the Final EIS, Management Approach for Fluid Minerals: Stipulations be revised as follows: The authorized officer may grant an exception on a case by case basis subject to appropriate site-specific analysis, mitigation requirements, and consultation with the State of Wyoming and consistent with the applicable State Management strategy (currently Governor of Wyoming's Executive Order 2015-4) if a review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life history, or behavior needs of the GRSG. The Forest Service can and does grant exceptions if the Forest Service, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The Forest Service will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance.

The objector requests that the Forest Service revise the listed Management Measures so that they do not apply in GHMA in the following plan components (Wyoming):

- GRSG-TDDD-GL-024-Guideline - To reduce impacts to sage-grouse in GHMA, new land use authorizations that may create anthropogenic disturbances may be issued, but should be collocated, as practicable, within existing designated corridors, rights-of-way, disturbances, or non-habitat areas. The authorization should consider design criteria to

avoid and minimize impacts to the greater sage-grouse and its habitat (Draft ROD p. 53; FEIS p. 2-284).

- GRSG-M-FML-GL-082-Guideline - Compressor stations should be located on portions of a lease that are non-habitat and are not used by the greater sage-grouse and if there would be no direct, indirect, or cumulative effects on the greater sage-grouse or its habitat (Draft ROD p. 60; FEIS pp. 2-307-308).
- GRSG-M-FML-MA-083-Management Approach - If locating compressor stations in nonhabitat or areas that would have no impact on greater sage-grouse is not possible, work with the operator to use mufflers, sound insulation, or other features to reduce noise consistent with GRSG-TDDD-GL-022-Guideline (Draft ROD p. 60; FEIS p. 2-308).
- GRSG-M-FML-MA-084-Management Approach - In greater sage-grouse HMA when authorizing development of fluid mineral resources, work with the operator to avoid and minimize impacts to the greater sage-grouse and its habitat, such as locating facilities in non-habitat areas first and then in the least suitable habitat (Draft ROD p. 60; FEIS p. 2-308).
- GRSG-M-FML-MA-085-Management Approach - In PHMA and GHMA on existing leases, operators should be encouraged to reduce disturbance to greater sage-grouse habitat. At the time of approval of the Surface Use Plan of Operation portion of the Application for Permit to Drill, terms and conditions should be included to reduce disturbance to greater sage-grouse habitat, where appropriate and feasible and consistent with the rights granted to the lessee (Draft ROD p. 60; FEIS pp. 2-308-309).
- GRSG-M-FML-MA-087-Management Approach - In greater sage-grouse HMA, where the federal government owns the surface and the mineral estate is in non-federal ownership, coordinate with the mineral estate owner/lessee to apply appropriate conservation measures, and design features to the appropriate surface management instruments to the maximum extent permissible under existing authorities (Draft ROD p. 61; FEIS p. 2-309).
- GRSG-M-FMO-GL-090-Guideline - In greater sage-grouse habitat management areas, during drilling operations, soil compaction should be minimized and soil structure should be maintained using the best available techniques to improve vegetation reestablishment (Draft ROD p. 61; FEIS p. 2-310).
- GRSG-M-FMO-GL-091-Guideline and GRSG-M-FMO-MA-092-Management Approach - West Nile virus management measures (Draft ROD p. 61; FEIS pp. 2-311 – 2-313).
- GRSG-M-FMO-GL-093-Guideline - In greater sage-grouse HMA, to keep habitat disturbance at a minimum, a phased development approach should be applied to fluid mineral operations, wherever practicable, consistent with the rights granted under the lease. Disturbed areas should be reclaimed as soon as they are no longer needed for mineral operations. (Draft ROD p. 61; FEIS p. 2-313)

Petroleum Association of Wyoming suggests revising exception language to align with the State and BLM's exception process, specifically, Stipulations W1 - W8, Management Approach for Fluid Minerals. Revise specific Plan Components so that they do not apply in GHMA.

Review Response: The Forest Service oil and gas regulation at 36 CFR 228.104(a) states that when submitting a surface use plan of operations, an operator may request to modify (permanently change), waive (permanently remove), or grant an exception (case-by-case exemption) to a lease stipulation. In addition, 36 CFR 228.104(b)(1) specifies that when reviewing requests to modify, waive, or grant exceptions to lease stipulations, the authorized Forest officer shall ensure compliance with NEPA and any other applicable laws, and shall ensure preparation of any appropriate environmental documents. The language for granting exceptions to the stipulations outlined in Attachment D of the WY draft ROD references "…a review…" without specifying that an environmental analysis is a required part of the review. The review to ensure NEPA compliance when considering a request for an exception to a stipulation may be satisfied by either preparing a new environmental analysis or relying upon an existing environmental review that has undergone review for new information/changed circumstances (FSH 1909.15 Chapter 10, Section 18). Only if the review of the exception request finds that additional environmental analysis is needed, an analysis would be required per the cited regulation and performed concurrently with the analysis performed for the proposed surface use plan of operations.

The Wyoming draft ROD and LMPA reiterates regulatory direction at 36 CFR 219.9(b) for species of conservation concern (for purposes of analysis, GRSG assumed to be SCC), stating that the plan component and other plan content in the amendments are designed to provide conservation protection for greater sage-grouse and habitat sufficient for a viable population on each planning unit. (p. 44 Wyoming – ROD and LMPA) The premise of providing conservation protection is expanded upon in each fluid mineral stipulation's criteria for granting an exception to the stipulation requirement (Attachment D – Fluid Mineral Stipulations; Wyoming – ROD and LMPA) The stipulation criteria for granting of an exception generally states actions that would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavior needs of the sage-grouse may warrant the authorized officer to grant an exception. This criteria was identified as Forest Service management actions to manage sage-grouse habitat on federally managed lands in the *Biological Assessment to analyze the effects of Amending BLM and USFS Land Use Plans to address: Wyoming Greater Sage-Grouse Proposed Land Use Plan Amendment and Final Environmental Impact Statement, March 2015* (p. 21). Additionally, the stipulation states the Forest Service can and does grant exceptions if the Forest Service, in conjunction with the state agency, determines that granting an exception would not adversely impact the population being protected. It is expected that the state agency will comply with the protocol contained in the Governor of Wyoming Executive Order 2019-3 in coordinating with the Forest Service on a determination of adverse impacts to sage-grouse populations. Lastly, the exception language says the Wyoming Compensatory Mitigation Framework will be considered as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance.

The draft RODs mention of a "review" for consideration of an exception for a fluid mineral stipulation is consistent with the Forest Service oil and gas regulations regarding exception processing and would not result in duplicative nor unnecessary environmental review. Also, Forest Service review of an exception includes consideration of conservation protection criteria taken from a joint FS/BLM Biological Assessment prepared by qualified specialists; relies on adverse impact determinations made in conjunction with the state agency; and utilizes the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance. Accordingly, the draft ROD's language governing exceptions to fluid mineral stipulations is consistent with regulation and policy and adequately aligns with the state's policy on sage-grouse protection.

The objector requested the Forest Service remove the phrase "include an alternative" from GRSG-TDDD-MA-025-Management Approach, asserting that it is unclear, does not provide sufficient guidance to implement, and would encourage the Forest Service to diverge from the State of Wyoming's Compensatory Mitigation Framework. Per the 2008 MOU with the Western Association of Fish and Wildlife Agencies, the Forest Service agrees to consider State conservation strategies to manage sage-grouse populations and their habitats which would include Wyoming's Compensatory Mitigation Framework. The subject management approach (MA) referenced in the FEIS/ROD is a statement of intent, as prescribed under 36 CFR 219.7(f)(2), of the Forest Service's principal strategy regarding how it intends to carry out projects within the plan area. It is clear from the content of the management approach that the agency's principle strategy is to use the State of Wyoming's Compensatory Mitigation Framework to evaluate/quantify debits and calculate the number of credits required when compensatory mitigation is needed. Mitigation associated with a proposed action or alternative for an oil and gas project is required to be addressed in the processing of a surface use plan of operations (SUPO) and its associated NEPA document. (36 CFR 228.107) The draft Wyoming ROD and LMPA standards, guidelines and management approaches numbered 014 through 025 (pp. 52 - 53) have been formatted to align as close as practicable to the Wyoming Sage-grouse Executive Order, further demonstrating the Forest Service's intent to not "diverge" from the state Executive Order. Given that processing of a SUPO requires preparation of a NEPA document which much address measures to minimize resource impacts, it is appropriate for the subject management approach to "include an alternative" that incorporates compensatory mitigation needed for a proposed project on NFS lands. Accordingly, I find that the wording of the subject management approach should be clarified to better reflect the incorporation of compensatory mitigation into the NEPA process for review of project proposals, but it nonetheless is clear about instructing Forest Service personnel on the use of the State of Wyoming's Compensatory Mitigation Framework.

The objector states that certain guidelines and MA components should be revised to not apply to General Habitat Management Areas (GHMA) because they blur the distinction between Priority Habitat Management Areas and GHMA, thus decreasing the incentive to avoid development in PHMA. The 2015 FEIS stated that changes in management of GRSG habitat are necessary to avoid the continued decline of populations across the species range (p. 1-5). The changes in management were accomplished through amendments to the affected Forest Service Land Use

Plans in 2015 and will be further refined with amendments described in the draft ROD. Forest Service planning regulation require that plan components to maintain a viable population of each species of conservation concern within the plan area. Greater sage-grouse is a species of conservation concern. The responsible official must use best available science to inform the planning process (36 CFR 219.3). *Forest Service Biological Evaluation for the Greater Sage-Grouse Conservation Effort to Amend the Bridger-Teton and Medicine Bow National Forest Plans and the Thunder Basin National Grassland Management Plan May 13 17, 2015* establishes that the two primary factors that warranted sage-grouse to be listed as threatened the large-scale loss and fragmentation of habitats across the species range and a lack of regulatory mechanisms to ensure its conservation and threats across the range of sage-grouse habitat. The species range includes both PHMA and GHMA. Since GHMA is occupied seasonally or year-round, the best available science suggests it still warrants some level of protection.

The State of Wyoming Executive Order 2019-3 "highly recommends" consideration of protective measures when designing projects in sagebrush habitats outside of designated core areas. In order to be more in alignment with the WY EO, the Forest Service LMPA proposes a tiered approach to managing sage-grouse habitat with requirements for PHMA being more restrictive than requirements for PHMA. Accordingly, the draft ROD's application of mitigation measures to GMHA is warranted by the need to sustain the viability of sage-grouse habitat and populations across the range of habits in Wyoming, while at the same time are less restrictive than mitigation measures for PHMA so as to incentivize development on GHMA.

Instruction: The wording of the subject management approach could be clarified to better reflect the incorporation of compensatory mitigation into the NEPA process for review of project proposals, but it nonetheless is clear about instructing Forest Service personnel on the use of the State of Wyoming's Compensatory Mitigation Framework.

Leasable Minerals

National Audubon Society et al. believes that it is critical that the Forest Service track all waivers, exceptions and modifications requested and granted, and make that information available to the public. The importance of prioritizing oil and gas leasing and development outside sage-grouse habitat should be emphasized. Prioritization cannot serve its purpose to "limit future surface disturbance" in sage-grouse habitat if it does not actually limit leasing. The Forest Service can exercise its authority to ensure meaningful prioritization is carried out. Prioritizing leasing and development outside of GHMA and PHMA is strongly supported by the best available science, as noted in letters submitted by sage-grouse scientists. By doing this, the Forest Service will best comply with its mandates to support species and ecosystem viability, sustainability, and diversity for sage-grouse, which is especially important given that the grouse is designated as a SCC.

Western Watersheds Project et al. contends the proposed plan amendments are without justification or adequate disclosure and would eliminate a series of key standards requiring specific conditions of approval on development on fluid mineral leases within the Anthro Mountain Habitat Management Area (Utah). Further, replacing the non-waivable NSO standard for Sagebrush Focal Areas with the possibility of exceptions, combined with the changes to

Standard FMUL-ST-074 (UT), GRSG-M-FML-ST-082 (ID), GRSG-M-FMUL-ST-070 (CO) that increase individual officers' latitude to grant exceptions, substantially increases the likelihood that habitat-damaging oil and gas activities will be allowed within Sagebrush Focal Areas, the highest priority zones for sage-grouse conservation. The FEIS states that the elimination of non-waivable NSO protection for SFAs will not increase habitat destruction. This ignores the fact of non-waivable NSO protection for SFA areas protects those areas from "active oil and gas development," and that elimination of that standard will substantially increase the likelihood of new incursions. They are also concerned that the Forest Service proposes to eliminate certain plan components without analysis which would weaken guidelines and standards. The FEIS does not acknowledge or analyze these changes. They request certain conservation measures to be applied.

Remedies Suggested by Objectors:

Western Watersheds Project et al. 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.

National Audubon Society et al. recommends the following approaches for prioritizing leasing and development outside sage-grouse habitat.

- Leasing: Based on the limited amount of Forest Service lands with sage-grouse habitat and the fact that issuance of a lease is an irretrievable commitment of resources (See, e.g., Pennaco Energy, Inc. v. U. S. DOI, 377 F.3d 1147, 1160 (10th Cir. 2004)), we recommend that the Forest Service require a higher showing of protection before leasing can occur in habitat. In addition, since the NSO stipulations and other protective lease stipulations that are in use are less certain to apply, given the broadening of opportunity for waivers, exceptions and modifications, the best way to protect habitat is to avoid leasing altogether - relying on the first and most effective tier of the mitigation hierarchy. Recommend that the Forest Service not consent to leasing in PHMA or GHMA when there is existing anthropogenic disturbance in a Biologically Significant Unit at or above three percent (3%) in Colorado, Idaho, Nevada or Utah, or five percent (5%) in Wyoming. Once the existing surface disturbance levels have been reduced, then leasing can resume.
- Development: Decisions to approve applications for permits to drill in sage-grouse habitat will be based on the following evaluation of factors: Where applications for permits to drill are in high quality/intact habitat, are not in proximity to existing disturbance and/or require additional infrastructure to be developed, they will not be prioritized and opportunities will be evaluated to relocate permits; where applications for permits to drill are not in areas with high or moderate potential, they will not be

prioritized; where applications for permits to drill are able to use existing well pads and infrastructure and otherwise avoid surface disturbance and noise impacts to leks, they are more suitable for processing and approval. Applications for permits to drill outside priority habitat should be considered for approval prior to parcels in PHMA.

Western Watershed Project et al. (Wyoming) - 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. Allow no leasing in PHMA. Application of 4-mile No Surface Occupancy buffers around leks. Require that any surface-disturbing activities result in a "net conservation gain." Exclude overhead transmission lines and renewable energy sites from PHMA.

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

Colorado - Fully disclose and analyze the direct, indirect, and cumulative impacts of multiple, related decisions reducing the certainty of implementation of mitigation measures to protect sage-grouse habitat from fluid mineral development. Disallow waivers, modifications, or exceptions to No Surface Occupancy Requirements for PHMA. Maintain binding standards and guidelines for avoiding development in habitat. Retain protective stipulations for coal leasing.

Complete a new EIS that analyzes a range of alternatives in context of all of the changes since the 2015 plans were created. Include an alternative that corrects the science-based deficiencies of the 2015 plans and the new inadequacies of the weakened prescriptions. 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. 26-16 CO

Review Response: There is no statutory, regulatory, or Forest Service policy requirements related to prioritization of lands considered for oil and gas leasing or for development proposals once leases are issued. The Forest Service planning and minerals regulations, respectively CFR 219.10 (a) (s) and 36 CFR 2800 provide authorities and a process for determining if lands are available or not available for leasing. If lands are determined to be available and then subsequently nominated by industry for lease, the Forest Service shall authorize BLM to lease the specific lands subject to verification of certain criteria, including that leasing must be

consistent with the forest plan. The regulations also require the leasing availability analysis to identify areas of leases where surface use is prohibited.

Prioritization by definition infers that available lands can be leased, but at a different importance or urgency than other lands. Creating such a process for leasing is an administrative function to be carried out in coordination with the BLM and not a land use planning function and therefore beyond the scope of the FEIS. BLM, the federal government's minerals manager, implemented guidance in 2018 to say that it does not need to lease and develop outside of sage-grouse habitat management areas before considering any leasing within sage-grouse habitat. Instead, the use of no surface occupancy, timing and/or controlled surface use stipulations can be used as the means to encourage lessees to acquire leases outside of sage-grouse habitat due to fewer restrictions.

The Forest Service should not include a prioritization approach to energy and mineral leasing into its land management plans as recommended by objectors. Prioritization is an administrative function and not a land use planning function, and therefore beyond the scope of the FEIS. The Forest Service and the BLM continue to work cooperatively with stakeholders, including state agencies, operators, landowners, and leasing proponents to avoid and minimize impacts to designated sage-grouse habitats. In terms of leasing and development, prioritization of energy development is accomplished by using stipulations to incentivize development outside of the most sensitive greater sage-grouse habitats.

No instructions

Valid Existing Rights

Western Exploration, LLC - 28

Objector does not like the removal or the word "valid" from "existing rights" and contends that no analysis was conducted to consider or evaluate travel and transportation management restrictions in relation to VERs. This could pose interference issues with development of the Projects.

"WEX notes the removal of a definition of "valid existing rights" which is a legal term of art and the definition included now in the Glossary at 426 for "existing rights." While WEX appreciates the apparent scope of the definitions of ERs and Authorized Uses, WEX has concerns that clarity is necessary to avoid inconsistent applications and potential interference with legal rights. While the current definition of "ERs" includes reference to such rights being established through permits, the prior definition was clear (consistent with the law and the agencies' administration/implementation) that permits and licenses in effect are VERs. This is both accurate and critical and WEX's circumstances demonstrate that given the tens of millions of dollars invested over the course of decades, the existing exploration permits in place and the acknowledged high potential of the WEX projects in the USGS report for the proposed mineral withdrawal - all of which were jeopardized and significantly adversely impacted by the 2015

LUPAs and proposed mineral withdrawal that arose from the 2015 LUPA. WEX appreciates the numerous statements in the draft ROD and Proposed LMPA that make clear that site specific information will be considered as well as acknowledgement that decisions will be made consistent with applicable law and VERs (and that management direction would not apply to non-habitat). Unfortunately, no analysis is conducted to consider or evaluate travel and transportation management restrictions, which WEX noted in its previous comments submitted in scoping and on the DEIS that this could pose interference issues with development of the Projects and requests clarification by USFS that such decisions shall be made mindful of both VERs and existing disturbance along with potential mitigation measures rather than outright prohibitions. WEX continues to request clarification that existing roads will be recognized without limitations where such access is necessary to VERs and hard rock mineral exploration and development. The definition of VERs should continue to expressly include all existing permits and ancillary uses authorized under the Federal Mining Law which are necessary to ensure reasonable access and use for exploration and development of valuable minerals as protected by Federal law."

Remedy suggested by Objector: Request clarification that existing roads will be recognized without limitations where such access is necessary to VERs and hard rock mineral exploration and development. The definition of VERs should continue to expressly include all existing permits and ancillary uses authorized under the Federal Mining Law which are necessary to ensure reasonable access and use for exploration and development of valuable minerals as protected by Federal law.

Review Response: The General Mining Act guarantees a right of reasonable access to lands open to mineral entry. This includes ancillary facilities that may be required for the exploration, development, production and reclamation of a mineral deposit.

The term "valid" was removed to reduce confusion. In operations subject to the General Mining Act the term "valid existing right" is generally used in the context of mining claims that were filed in areas that subsequently withdrawn from mineral entry. Through a mineral examination it would have to be shown that the mining claim supported the discovery of a valuable mineral deposit (ie. one that could be mined at a profit), before any mining operations could continue.

Given that previously large areas were proposed to be withdrawn from mineral entry, it was decided to remove the term "valid" from the definitions so there was no confusion as to whether there was an withdrawal in place or that any mining claims within PMHA or GMHA areas would be required to go through the mineral examination/valid existing rights determination process before any mining related operations could be authorized.

The right of access or the development of a mineral deposit are not changed and authorization is subject to the existing requirements to minimize adverse environmental impacts on National Forest System surface resources (36 CFR 228.1). The EIS does not change the statutory right of reasonable access.

No Instructions

Noise Restrictions

Custer County, ID
Humboldt County, NV
Nevada Association of Counties
Western Watersheds Project et al.
Eureka County, NV
Wyoming Coalition of Local Governments
Wasatch Audubon

County objectors contend that noise restrictions are too onerous and do not have supporting science that shows that benefits outweigh the significant economic hardship they would cause. Noise limitations on unauthorized activities, or activities pending authorizations can have a significant impact on the ability of the Counties to provide administrative or emergency functions, the ability to expand or improve infrastructure, or conduct administrative functions or services, including those not yet authorized (no language is included to create exceptions for these). The recommended noise levels are not based upon any standardized, repeatable data collection, or accepted methods of sound measurement.

Counties would like the Forest Service to eliminate the noise standard or create an exception for public health, public safety, reauthorizations or renewals, and routine administrative functions. Any noise limits set should be limited to specific actions at the time new permits are issued, upon sufficient proof that such limits are necessary and where other mitigation is not possible and that the necessary science is provided to support the restriction. No studies have been performed that determine which frequencies have more (if any) or less impact on sage-grouse. Consider the noise limitations in the amendments and consider all other studies and scientific information.

Conversely, Western Watershed Project et al. and Wasatch Audubon Society contend the proposed plan alters without analysis the management of noise-related disturbance in sage-grouse habitat. There is no analysis of the change in noise between the draft and final EIS and the standard no longer applies to a range of activities that could nonetheless highly imperil sage-grouse. 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. The FEIS does not explicitly analyze or disclose the differences between the previous standards and the current guideline, nor is "L50" or its addition described or assessed.

Remedies Suggested by Objectors:

Custer County, ID requests a complete elimination of the noise standard or an exception for public health, public safety, reauthorizations or renewals, and routine administrative functions. If any noise limits are set, they are limited to specific actions at the time new permits are issued, upon sufficient proof that such limits are necessary to a particular project's specific time, place and activity where other mitigation is not possible and that the necessary science is provided to support the restriction.

Humboldt County, Eureka County, and Nevada Association of Counties specifically, regarding Table 2-7, at page 2-23, NACO suggested that GRSG-GEN-ST-009-Standard be modified to read: "Do not authorize new surface disturbing and disruptive activities that create permanent or long-term and sustained detrimental noise levels ... ". Language similar to, or identical to the language of GRSGLR-ST-15-Standard would be helpful here. For instance, language creating an exception for public health, public safety, re-authorizations or renewals, and routine administrative functions.

Wyoming Coalition of Local Governments suggests that no studies have been performed that determine which frequencies have more (if any) or less impact on sage-grouse, and therefore, requests the Forest Service consider the noise limitations in the RMP amendments and consider all other studies and scientific information that is available.

Western Watersheds Project et al. (Nevada) requests restoring original restriction of GRSG-GEN-ST-008-Standard to apply to all forms of noise, whether sustained or not, and require that noise limits be imposed as measured at the periphery of occupied seasonal habitat. Retain original GRSG-M-FML-ST-097 and GRSG-M-FML-ST-081.

Western Watersheds Project et al. (Utah) requests restoring original restriction of GRSG-GEN-ST-006-Standard to apply to all forms of noise, whether sustained or not, and require that noise limits not to exceed 25 dBA be imposed as measured at the periphery of occupied seasonal habitat. Retain original GRSG-M-FML-ST-079.

Western Watersheds Project et al. (Idaho) requests restoring original restriction of GRSG-GEN-ST-008-Standard to apply to all forms of noise, whether sustained or not, and require that noise limits be imposed as measured at the periphery of occupied seasonal habitat. Retain original GRSG-M-FML-ST-081.

Western Watersheds Project et al. (Wyoming) requests restoring 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.

Wasatch Audubon Society requests changing the wording in GRSG-GEN-ST-006-Guideline in the FEIS to say do not authorize new infrastructure or facilities that create sustained or frequent intermittent noise levels of >10 dB above ambient baseline at the perimeter of an occupied lek.

Review Response: The statutory underpinning for evaluating viability of species expressed in 16 U.S.C. §1604(g)(3)(B) requires the Secretary to promulgate regulations that shall include, but not be limited to:

> (3) specifying guidelines for land management plans developed to achieve the goals of the Program which –
>
> (B) provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives….

FSM 2670.22 #2 regarding objectives for sensitive species states "Maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System Lands."

The FEIS (p. 2-71) documents that for the state of Colorado, the noise restrictions did not change from the no action alternative (2015), and is consistent with the State's Plan.

The FEIS (p. 2-86) documents that for the state of Idaho, the noise restrictions were clarified to be consistent with Idaho State's plan. In addition, the FEIS added a management approach (GRSG-GEN-MA-009), which supports the standard GRSG-GEN-ST-008. This management approach states that "When implementing GRSG-GEN-ST-008-Standard, in coordination with the State of Idaho, specific noise protocols for measurement and implementation will be developed as additional research and information emerges and as needed and mutually agreed to. These measures would be considered at the site-specific project level where and when appropriate."

The FEIS (p. 2-282) documents that under the no action alternative for Wyoming, the timing restriction for noise disturbing/disruptive activities was from 6 pm to 8 am from March 1 to May 15 each year. This timing restriction is consistent with the State of Wyoming's executive order (EO) WY 2019-3, Appendix E, page 8, which replaced EOs issued in 2015 and 2017. This means that the no action alternative (2015 plan) has the same timing restriction for noise as the proposed 2019 plan, and protection for sage-grouse is not "inexplicably less" as asserted by the objector.

For best available science, the FEIS addressed the objector's concerns in multiple sections. First, the FEIS (p. 3-319) described how the agency relied on science, describing that "To inform the consideration of whether to amend some, all, or none of the 2015 Greater Sage-Grouse land management plans (LMPs), the BLM requested the USGS to develop an annotated bibliography of greater sage-grouse science published since January 2015 (Carter et al. 2018) and a report that synthesized and outlined the potential management implications of this new science (Hanser et al. 2018)."

Research relied on (FEIS p. H-4) indicates that for the state of Wyoming, the Governor's Executive Order "is helping safeguard critical sage-grouse habitats at the State-wide scale." (USGS 2018). In addition, the research states that "Anthropogenic noise disrupts sage-grouse breeding behaviors (Blickley and Patricelli, 2012), increases stress levels (Blickley and others, 2012b), and decreases lek attendance (Blickley and others, 2012a). Consequently, management recommendations were developed based on these studies to limit anthropogenic noise sources to less than 10 A-weighted decimals (dBA) above ambient noise (that is, noise in the absence of anthropogenic activities, typically less than or equal to 20 dBA) in breeding, nesting, and brood-reading habitats in addition to simple protections around leks (Patricelli and others, 2013)." The study also notes that "Two recent studies on energy development did not produce new information on the effects of noise on sage-grouse (Smith and Dwyer, 2016; Green and others, 2017). They do provide a review of potential energy and noise effects (Smith and Dwyer, 2016) and mention noise as a possible mechanism influencing the interaction of energy development and sage-grouse population dynamics (Green and others, 2017)."

The FEIS incorporated the 2015 FEISs and RODs by reference (40 CFR 1502.21); as indicated in the 2015 FEIS for Wyoming, noise minimization "could reduce disturbance to wildlife species (Kemmerer, Pinedale, and TBNG). Specific limitations such as limiting noise to 49 decibels (10 dBA above background noise) from March 1 to June 15 or within two miles of a Greater Sage-Grouse lek (TBNG) could reduce disturbance to greater sage-grouse. Studies conducted on greater sage-grouse indicate that noise could adversely affect the communication abilities of strutting males (LaGory et al. 2001; Dantzker et al. 1999). Holloran (2005) and Blickley et al. (2012) suggest that noise emitted from drilling operations could reduce lek attendance by male and possibly female sage-grouse. Reducing noise could allow for males to continue use of leks nearby drilling operations." (2015 Wyoming FEIS p. 4-280).

The Greater Sage-Grouse Science (2015-2017) – Synthesis and Potential Management Implications (USGS 2018), which reviewed the science on sage-grouse that has been published since 2015, specifically states on page 2 that "Finally, no new insights into the effects of wild horses and burros, fence collision, recreational activity, or noise on sage-grouse have been developed."

The effects analysis in the FEIS also addressed noise. For the no-action alternative, the FEIS cited the relevant sections of the 2015 FEISs and provided a link to those documents (FEIS pp. 4-342 and 4-343). For the proposed action, the FEIS p. 4-364 states that for specifying HMA designations when applying noise standard "In Idaho, Utah, and Wyoming, analysis was done specifying HMA designations for applying the noise standard. For Idaho, it was PHMA and IHMA and for Utah and Wyoming it was PHMA. The specification of HMAs was not included in the Forest Service RODs; they are being included in this amendment to improve implementation of the plan components." The FEIS goes on to state that "The impacts associated with clarifying that the noise measurement and monitoring would apply only to leks within greater sage-grouse PHMA (and IHMA in Idaho) would have similar impacts as those described under the No Action Alternative for the 2015 GRSG LMPA (Location of analysis is found in Table 4-1, Noise/Soundscape). Project-level noise measurement and monitoring would be done at the time of site-specific environmental review. Impacts of noise on greater sage-grouse have been shown to include temporary displacement of the birds from breeding and nesting habitat, increased stress, and reduced reproductive success. In addition, adverse effects on communication abilities of strutting males and reduced lek attendance may be a result of noise. PHMA are areas that were identified as having the highest conservation values for maintaining sustainable greater sage-grouse populations. Therefore, standards to limit noise in PHMA would reduce displacement of birds from nesting and breeding areas and provide the greatest benefit to greater sage-grouse. The removal of standards to limit noise in GHMA may result in localized, adverse impacts on greater sage-grouse but would not affect greater sage-grouse conservation in Idaho, Utah, and Wyoming."

In addition, compressor noise was addressed in the FEIS, along with siting of compressors in areas of non-habitat, or if that is not possible, including design features to ensure noise is muffled, consistent with the standards. FEIS at 2-71; 2-117; 2-118; 2-174; 2-215; 2-258; 2-307; 2-308; and 4-386, 4-404, and 4-405.

The response to comments also addressed the issue of use of best available science. Specifically, the FEIS (p. I-4), summarizes the comments, noting that "Comments request that the EIS be updated to reflect best available science and allow for incorporation of future new scientific research and methods into management actions. Several respondents also state that the Forest Service should not rely on the landscape-scale planning provisions in the National Technical Team (NTT) report and other related documents that were the basis for the 2015 GRSG RODs. Many of these comments also critique the use of specific scientific studies, such as Hanser et al. (2018), as justification for management decisions made in the EIS, or provided additional references for incorporation into the EIS." The agency responded, stating that "Response: The GRSG Plan Amendment tiers to the 2015 GRSG ROD and FEIS and uses best available science. The FEIS describes best available science and includes citations for new or updated literature that was reviewed and incorporated since the 2015 GRSG ROD was signed. Refer to Chapter 3, 3.1.1 Greater Sage-grouse Literature, 2015-2019 and Chapter 4, 4.2 Use of Best Available Scientific Information."

The following citations are also included:

> Blickley, J.L., D. Blackwood and G.L. Patricelli. 2012. Experimental evidence for the effects of chronic anthropogenic noise on abundance of greater sage-grouse leks.
>
> Gail L. Patricelli, et.al. Recommended management strategies to limit anthropogenic noise impacts on greater sage-grouse in Wyoming.

Each state has specific standards, as follows:

For Colorado plans: GRSG-GEN-ST-006-Standard - Do not authorize new surface disturbing and disruptive activities that create noise at 10dB above ambient measured at the perimeter of an occupied lek during lekking (from March 1 to April 30) from 6 p.m. to 9 a.m. Do not include noise resulting from human activities that have been authorized and initiated within the past 10 years in the ambient baseline measurement. GRSG-LR-SUA-ST-016-Standard requires "protective stipulations" in PHMA and GHMA when issuing new authorizations (No change from 2015).

For Idaho plans: GRSG-GEN-ST-008-Standard - In PHMA and IHMA, do not authorize new large scale infrastructure or facilities that create sustained noise levels of >10 dB above ambient baseline at the perimeter of an occupied lek during lekking (from March 15 to May 1) from 6 p.m. to 9 a.m. (Changes from 2015 to be consistent with state plan) GRSG-GEN-MA-009-Management Approach).

When implementing GRSG-GEN-ST-008-Standard, in coordination with the State of Idaho, specific noise protocols for measurement and implementation will be developed as additional research and information emerges and as needed and mutually agreed to. These measures would be considered at the site-specific project level where and when appropriate. GRSG-LR-SUA-ST-019-Standard requires require appropriate protective stipulations in PHMA and IHMA.

For Nevada plans: GRSG-GEN-ST-009-Standard - Do not authorize new surface disturbing and disruptive activities that create detrimental noise levels at the perimeter of an active or pending lek during lekking (Table D-1, generally March 1 to May 15) from 6 pm to 9 am. Detrimental

noise is considered to be 10 dBa above ambient baseline noise. Do not include noise resulting from human activities that have been authorized and initiated within the 10 years prior September 16, 2015 in the ambient baseline measurement.

GRSG-GEN-MA-010-Management Approach - Consider new science related to the effects of noise and to overall noise thresholds, above which negative effects may render habitat unsuitable. Follow appropriate environmental analysis and planning process to determine the need for change in plan direction and when determining if an activity would create detrimental noise levels. Consider new science and state wildlife agency protocols in the determination of methods used to measure and establish ambient baseline noise, including using an ambient baseline value as provided by State wildlife agency if it is impractical to collect pre-project measurements. GRSG-LR-SUA-ST-017-Standard requires protective stipulations (e.g., noise, tall structure and guy wire marking, perch deterrent installation) when issuing new authorizations in PHMA and GHMA.

For Utah plans: GRSG-GEN-ST-006-Standard - In PHMA, do not authorize new large scale infrastructure or facilities that create sustained noise levels of >10 dB above ambient baseline at the perimeter of an occupied lek during lekking (from March 1 to April 30) from 6 p.m. to 9 a.m.

GRSG-GEN-MA-007-Management Approach -When implementing GRSG-GEN-ST-006-Standard, in coordination with the State of Utah, specific noise protocols for measurement and implementation will be developed as additional research and information emerges and as needed and mutually agreed to. These measures would be considered at the site-specific project level where and when appropriate. GRSG-LR-SUA-ST-017-Standard - In PHMA and GHMA, require protective stipulations (e.g., noise, tall structure, guy wire marking, perch deterrent installation, etc.) when issuing new authorizations.

For Wyoming plans: GRSG-TDDD-GL-021-Guideline - In PHMA, 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).

GRSG-GEN-MA-022-Management Approach - When implementing GRSG-TDDD-GL-022-Guideline, in coordination with the State of Wyoming, specific noise protocols for measurement and implementation will be developed as additional research and information emerges. These measures would be considered at the site-specific project level where and when appropriate.

Both the 2019 FEIS and 2015 FEISs incorporated the best science with regard to noise and the timing restrictions for noise included in the 2019 FEIS did not change from those disclosed in 2015. While the objector believes that the timing differences for the states was changed “arbitrarily” this is not the case, as documented in the two FEISs. Compressor noise and siting was addressed in the FEIS, as indicated above.

The record is not clear, however, as to why the timing restriction ends at 8 am in the state of Wyoming, versus 9 am in the other states. It is presumed that the timing restriction ends at 8 am

in Wyoming in order to be consistent with the state's plan, however, the rationale behind this timing change (versus the other states) could not be found in the 2015 FEIS.

The record is not clear as to whether or not the county's issue of noise restrictions hampering their ability to address road maintenance or emergency services was fully addressed. The response to comments (FEIS at Appendix I-5) makes note that there was "A request that the EIS clarify that county administrative activities, existing infrastructure, and emergency services are not considered anthropogenic disturbance and all qualify as "authorized uses" in both priority and general habitat." The response states that "Many comments under this theme were in the nature of a position statement; the commenter was either in favor or opposed to aspects of the proposed action. The noise plan component has been revised in the proposed action for Idaho, Nevada, Utah, and Wyoming to allow for clarification and management applicability. The use of the terminology used to define lek activity in Nevada is explained in Section 4.5.4." Upon review of the plan component, it is unclear if it would apply to emergency services or road maintenance, although the standard does state that "noise resulting from human activities that have been authorized and initiated within the past 10 years" is not included in the ambient baseline measurement.

Upon review of the 2015 FEIS's, the discussion of noise impacts is not specific to any particular project level activity due to it being a programmatic level analysis. The environmental effects of the proposed 2019 plan components for noise are within the effects analyzed for the range of alternatives in the 2015 FEIS's. Site-specific NEPA analyses would be performed to address noise impacts to sage-grouse at the time projects are proposed. The proposed changes in plan amendments in the 2019 FEIS were done to clarify application of noise standards to specific HMA's and aligning with State GRSG management plans. Best available science supports the inclusion of plan components to mitigate noise impacts as a measure to help maintain viable population of greater sage-grouse on NFS lands. The proposed plan amendments (except for CO) include as a management approach that specific noise protocols for measurement and implementation will be developed as additional research and information emerges.

The Management Approach stipulations for mineral leasing in Appendix G are consistent with the standards, guidelines, and management approaches of the proposed plan amendments. The stipulations contain provisions for waivers, exceptions, and modifications if the project level analysis determines the action as approved would not impair the function or utility of the site for sage-grouse needs. Since the stipulations are closely aligned with standards and guidelines, any waivers, exceptions or modifications granted per this management approach would also require a project-specific plan amendment.

The county objectors (Idaho and Nevada) recommend including an exception for public health and safety, reauthorizations or renewals and routine administrative functions. The proposed standards apply to new surface disturbing projects, not reauthorizations or renewals. It is assumed that routine administrative functions could be conducted in accordance with the noise requirements of the plan amendments. Projects that are needed for public health and safety purposes can be addressed through project-specific plan amendments.

The record includes the use of best available science and explains the changes between the 2015 FEIS and 2019 FEIS; an effects analysis was included where changes were made. No changes to plan components appear to be needed, however as noted below, several clarifications could be made that would strengthen the analysis.

Instructions:

1. Include rationale as to why the state of Wyoming's timing restriction ends one hour earlier than the other states.
2. Clarify whether routine administrative functions could be conducted in accordance with the noise requirements of the plan amendments or if projects that are needed for public health and safety purposes must be addressed through project-specific plan amendments. The county's concern about emergency services and road maintenance (and the noise that could occur) does not appear to have been specifically addressed in response to comment.
3. See page 2-232 in FEIS - GRSG-GEN-ST-006-Guideline – Appears to be a typo in the format of guideline label. Change "ST" to GL. Also resolve an apparent conflict with GRSG-GEN-ST-006-Standard on p. 2-189 of FEIS.