Oregon Greater Sage-Grouse Resource Management Plan Amendment and Environmental Impact Statement

Substantive Comments on the Draft RMPA/EIS

US Department of the Interior
Bureau of Land Management

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BLM

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SUBSTANTIVE COMMENTS ON THE OREGON GREATER SAGE-GROUSE DRAFT RMPA/EIS

After publishing the Draft Environmental Impact Statement (EIS), the United States Department of the Interior, Bureau of Land Management (BLM) had a 90-day public comment period to receive comments on it. The BLM received written comments by mail, email, and submitted at the public meetings. Comments covered a wide spectrum of thoughts, opinions, ideas, and concerns. BLM recognizes that commenters invested considerable time and effort to submit comments on the Draft EIS, and developed a comment analysis methodology to ensure that all comments were considered as directed by National Environmental Policy Act (NEPA) regulations.

The BLM has identified and formally responded to all substantive public comments. A systematic process for responding to comments was developed to ensure all substantive comments were tracked and considered. Upon receipt, each comment letter was assigned an identification number and logged into the BLM's comment analysis database, CommentWorks. CommentWorks allowed the BLM to organize, categorize, and respond to comments. Substantive comments from each letter were coded to appropriate categories based on content of the comment, retaining the link to the commenter. The categories generally follow the sections presented in the Draft EIS, though some relate to the planning process.

Comments similar to each other were grouped under a topic heading; BLM drafted a statement summarizing the issue(s) contained in the comments. The responses were crafted to respond to the comments and if a change to the EIS was warranted.

Although each comment letter was diligently considered, the comment analysis process involved determining whether a comment was substantive or non-substantive in nature. In performing this analysis, BLM relied on the Council on Environmental Quality's regulations to determine what constituted a substantive comment.

A substantive comment does one or more of the following:

- Questions, with a reasonable basis, the accuracy of the information and/or analysis in the EIS;
- Questions, with a reasonable basis, the adequacy of the information and/or analysis in the EIS;
- Presents reasonable alternatives other than those presented in the Draft EIS that meet the purpose and need of the proposed action and addresses significant issues;
- Questions, with a reasonable basis, the merits of an alternative or alternatives;
- Causes changes in or revisions to the preferred alternative; and
- Questions, with a reasonable basis, the adequacy of the planning process itself.

Additionally, BLM's NEPA handbook identifies the following types of substantive comments:

- Comments on the Adequacy of the Analysis: Comments that express a professional disagreement with the conclusions of the analysis or assert that the analysis is inadequate are substantive in nature but may or may not lead to changes in the Proposed RMPA/Final EIS. Interpretations of analyses should be based on professional expertise. Where there is disagreement within a professional discipline, a careful review of the various interpretations is warranted. In some cases, public comments may necessitate a reevaluation of analytical conclusions. If, after reevaluation, the manager responsible for preparing the EIS (authorized officer) does not think that a change is warranted, the response should provide the rationale for that conclusion.
- Comments That Identify New Impacts, Alternatives, or Mitigation Measures: Public comments on a draft EIS that identify impacts, alternatives, or mitigation measures that were not addressed in the draft are substantive. This type of comment requires the authorized officer to determine whether it warrants further consideration. If it does, the authorized officer must determine whether the new impacts, new alternatives, or new mitigation measures should be analyzed in the Final EIS, a supplement to the Draft EIS, or a completely revised and recirculated Draft EIS.
- Disagreements with Significance Determinations: Comments that directly or indirectly question, with a reasonable basis, determinations regarding the significance or severity of impacts are substantive. A reevaluation of these determinations may be warranted and may lead to changes in the Final EIS. If, after reevaluation, the authorized officer does not think that a change is warranted, the response should provide the rationale for that conclusion.

Comments that failed to meet the above description were considered non-substantive. Many comments received throughout the process expressed personal opinions or preferences, had little relevance to the adequacy or accuracy of the Draft EIS, represented commentary regarding resource management and/or impacts without any real connection to the document being reviewed, or were considered out of scope because they dealt with existing law, rule,

regulation, or policy. These comments did not provide specific information to assist the planning team in making changes to the alternatives or impact analysis in the Draft EIS, and are not addressed further in this document. Examples of some of these types of comments include the following:

- The best of the alternatives is Alternative D (or A, B, or C);
- The preferred alternative does not reflect balanced land management;
- More land should be protected as wilderness;
- BLM needs to change the Taylor Grazing Act and charge higher grazing fees;
- I want the EIS to reflect the following for this area: no grazing, no logging, no drilling, no mining, and no OHVs;
- More areas should be made available for multiple uses (drilling, OHVs, ROWs, etc.) without severe restrictions.

Opinions, feelings, and preferences for one element or one alternative over another, and comments of a personal and/or philosophical nature were all read, analyzed, and considered, but because such comments are not substantive in nature, BLM did not include them in the report nor respond to them. It is also important to note that while all comments were reviewed and considered, comments were not counted as "votes." The NEPA public comment period is neither considered an election nor does it result in a representative sampling of the population. Therefore, public comments are not appropriate to be used as a democratic decision-making tool or as a scientific sampling mechanism.

Comments citing editorial changes to the document were reviewed and incorporated. The Final EIS has been extensively technically edited and revised to fix typos, missing references, definitions, and acronyms, and other clarifications as needed.

Copies of all comment documents received on the Draft EIS are available by request on CD from the BLM's Oregon/Washington State Office. The submission numbers for the comment documents are printed on the right margin of the first page of the comment document for comments received by mail, email, or at public meetings.

Campaign Letters

Several organizations and groups held standardized letter campaigns for the Greater Sage-grouse effort through which their constituents were able to submit the standard letter or a modified version of the letter indicating support for the group's position on the BLM planning amendment actions. Individuals who submitted a modified standard letter generally added new comments or information to the letter or edited it to reflect their main concern(s). Modified letters with unique comments were given their own letter number and coded appropriately. All commenters who used an organization's campaign letter were tracked in the BLM's commenter list.

How the Report is Organized

This report is organized by the primary topic and then by specific issue subtopics that relate to an aspect of NEPA, the BLM planning process, or specific resources and resource uses. This includes subsections such as Required Design Features and Best Management Practices, the

Elimination Criteria, and any of the six alternatives. Comments for baseline information (such as the information found in Chapter 3, Affected Environment) and impact analysis (Chapter 4) of the Draft EIS are found under the respective resource topic. Each topic or subtopic contains the substantive comments from individual letters/emails for each topic area. These topic areas retain the section code numbers as they appear in CommentWorks. See sample below.

Section 4.3 Range of Alternatives ← Topic or subtopic name

Unique CommentWorks database code → ***Comment Number: OR-GRSG-0074-8***

Comment Excerpt Text:

Substantive comment extracted from comment letter → Alternative D is described in the document as having the most specific regulatory mechanisms of all the action alternatives. However it concentrates on grazing regulatory mechanisms and avoids assessment of the primary threats. Given a direct comparison of all available regulatory and conservation measures currently available (including from regulations, program and activity level guidance) under Alt. A, what specific regulatory mechanisms and or conservation measures in Alt. D will provide an increase in preferred GRSG habitat 10 &50 years out as portrayed in tables 4-3&4-4? Please name the specific mechanisms and how they will directly improve the preferred habitat.

They layout of this report corresponds with **Appendix V**, Public Comment Report, of the Proposed RMPA/Final EIS, available on the project website: https://www.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=40504.

The terms preliminary priority management area (PPMA) and preliminary general management area (PGMA) were used in the Draft EIS to describe the relative prioritization of areas for GRSG conservation. These are BLM terms used to differentiate the degree of managerial emphasis a given area would have relative to GRSG. As the BLM moved from a Draft EIS to a Proposed RMPA/Final EIS, such prioritizations are necessarily no longer "preliminary" in nature. As such, they have been replaced with the terms Priority Habitat Management Area (PHMA) and General Habitat Management Area (GHMA). Comments on the Draft RMPA/EIS referred to PPMA and PGMA.

SECTION 4 – NEPA

SECTION 4.1 - PUBLIC NOTIFICATION

Comment Number: OR-GRSG-0112-2
Comment Excerpt Text:
The RMPA would benefit from more collaboration with stakeholders. Why did the BLM not use a more collaborative process in developing this RMPA? What is the BLM going to do to include collaboration from stakeholders?

Comment Number: OR-GRSG-0124-1
Comment Excerpt Text:
I specifically recommend that the Resource Management Plan Amendment be the result of a collaborative effort. All the economic and cultural factors, agency and private industry groups, science and resource management elements of Harney County must be at the table to create this amendment.

Comment Number: OR-GRSG-0138-4
Comment Excerpt Text:
I urge BLM to publish the number of persons that respond to the Draft RMPA / EIS.

Show that you value every response on its own merits rather than labeling some as "form letters." The Constitution provides for the right of citizens to petition the Government for a redress of grievances. The Constitution does not require each complainant to formulate a unique letter. Indeed, the very word "petition" connotes a document that multiple parties sign in agreement and solidarity regarding a particular issue. At court, there are even class-action suits, wherein many plaintiffs join together to seek justice regarding a matter of mutual concern. One action, many parties.

BLM should just state the facts:

- How many persons responded to the Draft RMPA / EIS,
- How many and what percentage favored each alternative course of action and why,
- What different ideas and alternatives were proposed, and
- What modifications, corrections, improvements could BLM make per the public input

SECTION 4.3 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0009-1
Comment Excerpt Text:
The BLM already has existing laws and reguiations to provide the regulatory assurance necessary to avoid a listing, but the agency failed to adequately discuss and analyze this in the DEIS (No Action Alternative). There are many sage grouse populations that are doing just fine and are meeting the desired goals and objectives under current management. The management of these areas should not be changed unless there is scientific evidence of the actual results of the change

Comment Number: OR-GRSG-0026-4
Comment Excerpt Text:
It is not clear, therefore, why the BLM chose to focus on the development criteria (which it relabeled as "disturbance") and not any of the other possible thresholds from the study. It is also not clear why the BLM only considered a 3% threshold and not some higher levels – 5% or 7% for example – in its alternatives. If 3% protects 99% of leks, would 5% or 7% protect 90% of leks, for example? Exactly how the disturbance percentage will be calculated and enforced has not been defined. For instance, at what scale would it be applied? Is it across the Sub-Region, by County, within a PPMA, per square mile section, or at some other scale?

Comment Number: OR-GRSG-0048-11
Comment Excerpt Text:
This EIS has not analyzed a full range of alternatives and seems to have taken what was already on paper in other documents and thrown it in since it was easy. Other appropriate alternatives to be analyzed would be an increase in grazing (as discussed earlier in this letter this can be a great benefit to reducing the risk of catastrophic wildfire as well as being

beneficial to and sustainable with, sagegrouse), an alternative focusing on the three main threats (wildfire, invasive annuals, and conifer encroachment) as identified by the US Fish and Wildfife, an alternative focusing on true muitiple use as mandated by the Federal Land Policy and Management Act.

Comment Number: OR-GRSG-0048-7

Comment Excerpt Text:

There is discussion of a 3% disturbance cap in the EIS. Is this cap from here on out in addition to current disturbance, is this cap a 3% total, is disturbance on private/other agency land to be calculated in to the total? if the 3% is to include any "disturbances already existing and that totals more than 3% will "disturbances" need to be removed (which would in turn cause new disturbance anyway)? What all is considered a disturbance? Water developments, fences, new roads, what? Why was 3% the chosen number? How are roads accounted for since research has shown that while larger, more heavily traveled roads, may have an impact on sage-grouse smaller, lesser traveled roads (which is what is mostly found in Harney County) have little to no impact? These questions need to be answered in this EIS before a final decision is signed in order to fully meet NEPA requirements.

Comment Number: OR-GRSG-0074-1

Comment Excerpt Text:

In the Draft RMPA BLM has failed to meet the Purpose and Need as defined in the document: The 2010 Warranted but precluded decision by USFWS listed the lack of regulatory mechanisms as a significant threat to Greater Sage-Grouse (GRSG). In the draft RMPA conservation measures are listed as the principal regulatory mechanism. To be clear in this discussion, the USFWS never provided an exact formula of a regulatory mechanism or instructed BLM to only consider regulatory mechanisms in the BLM analysis of the threats to GRSG. The BLM defines the Need in the document as "Changes in management of GRSG habitats are necessary to avoid the continued decline of populations across the species' range." The document then describes the Purpose as "To identify and incorporate appropriate conservation measures in the RMPS to conserve, enhance and or/restore GRSG habitat by reducing, eliminating, or minimizing threats to the habitat" (p. E-6).

By failing to analyze the primary threats to GRSG in this Draft RMPA (wildfire, invasive species and interaction with wildfire, /juniper encroachment) RMPA, VOL1. Pg.2-11: COT Report (USFWS 2013a) the BLM has failed to meet the objectives of the Purpose and Need

Comment Number: OR-GRSG-0074-13

Comment Excerpt Text:

At what level must the habitat improvement be before the BLM will process the application? Does it have to be functional habitat with a certain % sagebrush cover? It might not be processed during his/her generation. The BLM indicates in RMPA Vol.1 pg. ES-16 that offsite mitigation would be implemented consistent with Draft BLM Manual MS-1794. What directives or policy authorizes the BLM to use a draft Manual, unapproved as guidance for an RMPA/ EIS analysis?

Comment Number: OR-GRSG-0074-14

Comment Excerpt Text:

I have reviewed the study BLM stated it based the 3% human disturbance cap (Knick e.t. al. 2003) as applied to all PPMA within the project area. I also reviewed Knick e.t. al. 2013 to understand the basis in science and reliability of this concept. In the articles the author states "We constructed the model from biotic, land cover, and anthropogenic variables measured at leks (breeding and surrounding areas within 5 km." "Variables measured at 18-km radii did not perform as well in initial models as those at 5km and were dropped in subsequent analyses. Also "Densities of anthropogenic features were developed from road, powerline, pipeline and communication tower distributions." Based on my technical review of this study it is evident BLMs' application of 3% human disturbance cap to all of PPMA is an over application given the 5km distance parameter of the study. BLM also misinterpreted the disturbance level parameters used to make determinations in this research. How does BLM explain the application of an anthropogenic

disturbance cap to millions of acres of public and private lands based on this one study? Please address how you have applied the parameters of this research to the application of millions of acres of PPMA? Did BLM analyze the possible impacts to future development of these rural communities and the socio-economic impacts which may result from this concept?

Comment Number: OR-GRSG-0074-2

Comment Excerpt Text:

The assessment of wildfire and invasives described in Appendix H of the document will be conducted internally (without public review) and not completed for analysis in the RMPA. This analysis would provide the minimum information for the BLM to develop conservation measures that would address these threats to GRSG and thereby reducing, minimizing or eliminating these threats. Without analysis the agency developed conservation measures that cannot address the threats. This is demonstrated in chapter 4 of the document in Tables 4-3&4-4 which predicts no significant improvement to preferred habitat 10 and 50 years into the future under each alternative including the preferred and no action. This is precisely because BLM did not analyze the primary threats to the bird. The model used could only incorporate the regulatory mechanisms analyzed which have no significant positive change to GRSG habitat. BLM, Please explain how you would relate your preferred habitat summaries to accomplishing the objectives of the purpose and Need? Doesn't this summary indicate that your analysis did not meet the purpose and need as described in the document?

Comment Number: OR-GRSG-0074-5

Comment Excerpt Text:

The narrow range of alternatives as analyzed fails to address the purpose and Need; Alternative a (Current Situation) is the most comprehensive alternative at meeting the purpose and need as described in the 1st paragraph in #1 above. Why did the BLM fail to present in the draft RMPA a comprehensive table with all the regulatory mechanisms for sage-grouse currently in place with a direct comparison to the action alternatives? This comparison should include pertinent regulations as well as program and activity level actions that are currently implemented by the BLM. Many such as the Standards for Rangeland Health(1997), which identify sage-grouse specific requirements under standard 5, Native, T&E, and locally Important Species) and allotment specific objectives for sagegrouse have been in place for many years. By not providing a direct comparison to the action alternatives the reader (as currently is the case with USFWS) is left with the false impression that BLM currently does very little for habitat management for GRSG. Without a complete summary comparison to the 5 action alternatives the public is not presented how the agency is currently meeting the expressed purpose and need of the RMPA

Comment Number: OR-GRSG-0074-8

Comment Excerpt Text:

Alternative D is described in the document as having the most specific regulatory mechanisms of all the action alternatives. However it concentrates on grazing regulatory mechanisms and avoids assessment of the primary threats. Given a direct comparison of all available regulatory and conservation measures currently available (including from regulations, program and activity level guidance) under Alt. A, what specific regulatory mechanisms and or conservation measures in Alt. D will provide an increase in preferred GRSG habitat 10 &50 years out as portrayed in tables 4-3&4-4? Please name the specific mechanisms and how they will directly improve the preferred habitat.

Comment Number: OR-GRSG-0093-3

Comment Excerpt Text:

the DEIS does not sufficiently describe or discuss the no action alternative. This is pointed out in various ways in the discussion and comments that follows. One of the more glaring problems is the failure to accurately describe the existing protections that the grazing regulations and Oregon and Washington Standards for Rangeland Health ("RHS") provide to GRSG habitat and GRSG. The error precludes an accurate and careful examination of what is or may be needed for purposes of conserving GRSG habitat

and whether another assessment, such as the Habitat Assessment Framework (in a form that was not defined in the DEIS), should be added to the RHS assessments ("RHSA"). The DEIS also fails to adequately describe baseline conditions with regards to grazing activities, as explained in some detail below. These and other deficiencies in the no action alternative and baseline description prevent a true comparison of the alternatives presented in the DEIS

Comment Number: OR-GRSG-0093-4

Comment Excerpt Text:

Harney County Soil and Water Conservation District ("SWCD") to propose an Alternative G that encompasses the concerns raised by rural communities and to address many of the issues raised in these comments. Though we have not had opportunity to study it in detail, Alternative G does appear to pull together different parts of the alternatives considered by BLM to create a viable alternative that should have been considered by the BLM. We agree with the SWCD that the DEIS can and should be improved by providing consideration of Alternative G. Unfortunately, due to the comment period time limits, our ability to thoroughly analyze and appropriately comment on Alternative G was too limited. Therefore, we request that BLM consider adding Alternative G to the DEIS and, to the extent necessary, provide an appropriate public comment period, such as 30 or 45 days.

Comment Number: OR-GRSG-0093-41

Comment Excerpt Text:

The determination that there should be a 3% human disturbance cap cannot be supported by existing science.

On page 2-14 of the RMPA/DEIS, the BLM cites Knick et al. (2013). The article (and the RMPA/DEIS) state that all lands surrounding leks were less than 14% developed. Therefore, when considering all (100%) leks, development jumped from 3 to 14%, suggesting that a 14% cap may be just as appropriate as the 3%. Additionally, these values were only measured within 5 km of leks, not at a landscape level. Further, developed land is not defined in the article and may or may not be equivalent to "disturbance". The BLM's intent in relying on this Article is, at best, unclear. The BLM does not explain how this article supports its proposal.

Comment Number: OR-GRSG-0093-42

Comment Excerpt Text:

The BLM also relied on the NTT Report for the 3% cap. Articles that the NTT Report relied upon in recommending a 3% cap on human disturbance do not support the actual imposition of a 3% cap across the landscape. The statement from the NTT Report is that the 3% cap was based on "professional judgment". This may be an overstatement. The articles relied on by the NTT were only related to energy development and its associated infrastructure. None of the articles explicitly state a 3% disturbance threshold or any other threshold amount for GRSG protection. Though both Holloran (2005) and Walker et al. (2007) indicate that energy development within 3-5 miles of active leks has a negative impact on GRSG, they do not support the 3% cap as being impose on all human disturbance across all PPMA and without regard to scale of the impact.

Comment Number: OR-GRSG-0093-44

Comment Excerpt Text:

Further, grazing permit renewals and new rangeland improvements should not be considered human disturbances when evaluating the disturbance cap. Oregon's Sage-Grouse Conservation Plan plainly recognizes this fact, explaining that livestock ranching operations which manage for ecologically sustainable native rangelands are compatible with sage-grouse conservation and necessary management activities to maintain a sustainable ranching operation are not considered "development actions". ODFW Sage-Grouse Conservation Assessment and Strategy for Oregon, p. viii. Indeed, grazing activities and associated rangeland improvements do not create the type or level of disturbance associated with energy development, which is the focus of the articles reviewed by the NTT. Moreover, many range improvements can be beneficial, not detrimental, to GRSG habitat (i.e. improved livestock distribution and management).

Comment Number: OR-GRSG-0093-45

Comment Excerpt Text:

Page 2-26 includes information about the various resource areas and BLM Districts to be addressed by the RMPA as prepared by the ODFW. This information needs to be clarified to define the term "disturbed" as used in this section. All of these areas documented in this discussion have well over 3% "disturbed" habitats. However, the use of "disturbed habitats" in this instance is referring to areas that have been encroached by junipers/conifers or are nonsagebrush dominated shrublands or grasslands. This means that "disturbed" is used in reference to vegetation condition rather than anthropogenic disturbance as described in the disturbance cap.

Recommendation: The discussion of disturbance on page 2-26 needs to be clarified in the RMPA/DEIS. This same terminology is used on pages 2-44 and 2-45 in Table 2-4, Goals and Objectives for Alternatives. Where it appears, the term "disturbed" needs to be clarified.

Comment Number: OR-GRSG-0093-84

Comment Excerpt Text:

Further, the DEIS does not provide a rational for restricting focal area boundary changes to a ten year cycle (Page 2-22, fourth paragraph), particularly in light of the fact that the same paragraph that includes this restriction indicates that the BLM will coordinate annually with ODFW and USFWS on boundary changes. The BLM should leave itself with the flexibility to make changes where appropriate, even if it occurs on an annual basis. These changes can still be made in consideration of long-term benefits to GRSG. However, BLM should not arbitrarily constrain its efforts to benefit GRSG. Further, the BLM has not explained the rational for a ten year timeframe for boundary changes. The DEIS does not provide the public with an opportunity to evaluate the BLM's rational because it is not provided.

Comment Number: OR-GRSG-0093-95

Comment Excerpt Text:

Table 2-6 Detailed Comparison of Action Alternatives by BLM Resource Program

Chapter 2 relies heavily on Table 2-6 to disclose all of the components of the alternatives. However, the BLM has specifically excluded a comparison of the alternatives to the no action alternative, Alternative A, in Table 2-6. As a result, the BLM does not adequately explain Alternative A or provided the details necessary for reviewers to evaluate and comment on the differences between no action and the other alternatives. The BLM appears to presume that every action must be changed, rather than recognizing that some of its actions may already be acceptable to conserve GRSG. The BLM must produce a DEIS that provides the details of, explains, and evaluates Alternative A. Public review and comment is significantly hampered by the approach BLM has taken with the DEIS concerning its no action alternative.

Comment Number: OR-GRSG-0095-4

Comment Excerpt Text:

We are particularly concerned that the Alternative D would not restrict or prohibit activities within focal areas even though these areas would overlap with 2.78 million of preliminary priority management area (PPMA) and 1.39 million acres in preliminary general management area (PGMA). We seek further clarification from BLM on the applicable management actions for these overlapping areas. Furthermore, although the DEIS does not provide information on how many acres of private or non BLM-administered land are located within the focal areas, they reduce the acres available for meaningful maintenance and restoration of GRSG habitats since BLM does not have legal authority to impose conservation measures on private lands.

Comment Number: OR-GRSG-0096-1

Comment Excerpt Text:

I. The disturbance cap for both federal and state land should include disturbance on counectivity lands.

As discussed in the joint letter submitted by ONDA, LandWatch and other groups, maintenance of connectivity and reduction of fragmentation of sagebrush habitats is imperative for the longterm welfare of all sagebrush-associated species.

Maintaining connectivity between more isolated populations may help reverse long term population declines. Current land use systems provide little protection for the existing or potential habitat corridors and the proposed disturbance caps (both in the EIS and in the Oregon Framework draft) address only core and low-density (or PPH and PGH) habitats. The Oregon Framework makes cursory mention of minimizing fragmentation to core or low-density areas "by locating development adjacent to existing development and at the edge of the core area where possible." However, identification and evaluation of connectivity corridors and then inclusion of those corridors in siting analyses for proposed development will likely be more valuable than blind siting of new development adjacent to existing development

Comment Number: OR-GRSG-0133-1

Comment Excerpt Text:

In addition, the USFWS did not list grazing as a primary threat to the Greater Sage Grouse, so why is so much emphasis placed on a grazing threat in Alternative D ?

Comment Number: OR-GRSG-0134-2

Comment Excerpt Text:

Two of the most important threats to Oregon's priority sage-grouse habitats—fire and invasive species—are difficult to manage and will continue to affect large areas of sagebrush steppe in the state (COT 2013). Consequently, it is imperative for BLM to adopt a precautionary approach with respect to threats that it can minimize through its land use planning authorities. Recognizing that any development in priority habitat is likely to have negative impacts on sage-grouse, we recommend limiting the increase in existing development levels within each priority area for conservation (PAC) (core area aggregates as mapped by the Oregon Department of Fish and Wildlife) to a small increment (e.g., 5% to 10%) above the 2010 baseline. This approach would provide flexibility to accommodate some limited development in priority habitat while minimizing fragmentation of existing intact and relatively undisturbed habitat. In areas such as the Baker PAC/population, where 2010 levels of development are already about 2 percent, it may be prudent to limit the increase to a lesser percentage above the baseline to minimize the risk of unacceptable impacts in areas that may already be at or above levels that are harmful to sage-grouse. Limiting development to some marginal increase above existing levels presents fewer risks than a flat cap at levels that may result in population declines. If future research establishes a more precise no-effect threshold, or other management strategies prove effective in reversing declining population trends, BLM could modify its policy in the future.

Comment Number: OR-GRSG-0150-1

Comment Excerpt Text:

Vol.I p. 2-14; Table 2-6, D-sss2 pp. 2-58; Vol. III Appendix G, Habitat Disturbance monitoring pp. G6&G7. In setting a disturbance cap of 3%, I do not see any data of what the current disturbance level is. What is the current level? Disturbance levels on private land should not be used in regulating public land use.

At what level will enforcement of this cap be done? It would be more scientific, economically feasible with available personnel if each allotment habitat condition could be mapped to determine the baseline condition determined by State and Transition models for no net loss of sage-grouse habitat on public lands.

Comment Number: OR-GRSG-0152-4

Comment Excerpt Text:

If the BLM believes that these major threats can be limited only by vegetation management and that regulations have only a limited effectiveness, we do not understand why the agency has focused on expanding regulations instead of ways to expand vegetation management more aggressively. The EOCA Counties encourage the BLM be fundamentally re-examine their overall approach and revise Alternatives to focus on more aggressive vegetation management and other direct action against these three threats [Reference to spread of invasive weeds, isolation, wildfire, and conifer encroachment] on the lands they manage rather than

propagating more regulations that they seem to admit, will be ultimately ineffective

Comment Number: OR-GRSG-0175-2

Comment Excerpt Text:

Also not included is the information that the BLM Manual 6840 was deemed by the judge to be adequate to preserve the habitat, except that there was inadequate information to show it was being properly implemented. If an existing manual is deemed adequate by the judge, should not a plan to properly implement and document this adequate manual at least be considered in the Environmental Impact Statement?

Comment Number: OR-GRSG-0175-8

Comment Excerpt Text:

The EIS talks about "Habitat disturbance Cap", but don't define how they determine what the disturbance is or how it is measured. Page 2-14. The document refers to a 3% disturbance cap, and verbal comments at public meetings indicated that the sagebrush areas of Baker County are getting close to the 3%. My own visual determination of disturbance in this area is closer to 0.3%. Once again opinion, without arguable definition and open to creative interpretation. Please include in the document the methods and definitions to determine this disturbance, and also the reasoning behind the 3% disturbance cap.

Comment Number: OR-GRSG-0199-1

Comment Excerpt Text:

Moreover, the County is of the view that the BLM's analysis of Alternative A (no action) with respect to existing regulatory frameworks, standards and guidelines applicable to livestock grazing and range management is, in particular, inadequate and fails to provide a rational foundation for changing existing regulatory mechanisms. With respect to factors primarily within the jurisdiction of local governmental and State authorities and also with respect to livestock grazing, the BLM should have analyzed the effectiveness of current regulatory mechanisms before developing alternatives, and should have used that analysis for considering appropriate changes to the RMP-if any.

Comment Number: OR-GRSG-0199-8

Comment Excerpt Text:

In addition, the BLM's decision to rely on the NTT report for developing alternatives for addressing the purpose and need was arbitrary and capricious because it elevated the BLM's desire to designate sage-grouse specific conservation standards and guidelines over and above the underlying purpose of avoiding a listing decision. This misstep violates not only NEPA, but also FLPMA because it bypassed meaningful and effective coordination and consistency with State and local LUPs. In effect, the BLM displaced and ignored its duties to evaluate the purpose and need, and coordinate with State and local governments, in developing alternatives in favor of adopting the recommendations of the NTT report.

Comment Number: OR-GRSG-0200-11

Comment Excerpt Text:

The BLM violated these principles here. IM 2012-044 mandates that the NTT report guide the development of alternatives, as opposed to the statement of the underlying purpose and need guiding the development of alternatives. The legitimate underlying purpose and need for the RMPA is to avoid a listing decision and conserve sage-grouse populations-not merely to impose arbitrary standards and guidelines to all land management activities as IM 2012-044 instructed the BLM State Field Offices to do.

Comment Number: OR-GRSG-0200-13

Comment Excerpt Text:

Not only did the Washington Office Director require the BLM to change regulatory mechanisms applicable to livestock grazing and range management, IM 2012-044 also assured that the BLM Field Offices would adopt a variation of the NTT report as the preferred alternative in making those changes, in violation of NEPA and FLPMA. Preordaining the outcome of the RMPA process is unlawful standing alone, however, it is particularly arbitrary here because neither the NTT report, nor the BLM independently, ever analyzed the

issue of whether existing regulatory mechanisms governing livestock grazing and range management were adequate to protect sage-grouse prior to developing alternatives-and because the BLM did not coordinate with local governments and conduct a consistency review with State and local LUPs. This is particularly troubling because the NTT report was not subject to public comment or participation and the NTT report was not subject to independent scientific peer review.

Comment Number: OR-GRSG-0200-15

Comment Excerpt Text:

it was arbitrary and capricious for the BLM to develop alternatives for changing regulatory mechanisms before first analyzing the effectiveness of current regulatory mechanisms-both BLM regulatory mechanism applicable to livestock grazing and State and local government regulatory mechanisms applicable to other factors, such as habitat loss and fragmentation. In the RMPA/EIS, the BLM fails to take a hard look at Alternative A and make a rational connection between the existing environmental baseline and its conclusion that modifying or adding regulatory mechanisms to the existing RMP is necessary to conserve sage-grouse and avoid a listing.

It appears that the BLM arbitrarily rejected the no action alternative with respect to livestock grazing merely because it would not result in sage-grouse specific standards and guidelines and, as a result, unlawfully chose to not take a hard look at whether existing standards and guidelines are adequate to protect sage-grouse from a listing. Furthermore, what little analysis BLM conducted of the effectiveness of current rangeland health standards and guidelines in evaluating Alternative A suggests that the current framework adequately conserves sage-grouse habitat and populations.

Comment Number: OR-GRSG-0200-2

Comment Excerpt Text:

the County is of the view that the BLM's analysis of Alternative A (no action) with respect to existing regulatory frameworks, standards and guidelines applicable to livestock grazing and range management is, in particular, inadequate and fails to provide a rational foundation for changing existing regulatory mechanisms. With respect to factors primarily within the jurisdiction of local governmental and State authorities and also with respect to livestock grazing, the BLM should have analyzed the effectiveness of current regulatory mechanisms before developing alternatives, and should have used that analysis for considering appropriate changes to the RMP-if any.

Comment Number: OR-GRSG-0200-3

Comment Excerpt Text:

In this situation, while the BLM makes vague, casual references purporting to have considered State and county LUPs, the BLM failed to evaluate the scope and effectiveness of State and county LUPs in the context of the threats to sage-grouse identified in the 2010 FW listing decision, thereby rendering the BLM's statement of purpose and need and development of alternatives inadequate.

Comment Number: OR-GRSG-0200-7

Comment Excerpt Text:

In the RMPA/EIS, the BLM describes the purpose and need as follows: "Inadequacy of regulatory mechanisms was identified as a significant threat in the USFWS finding on the petition to list the GRSG." RMPA/EIS at ES-6. "Changes in management of GRSG habitats are necessary to avoid the anticipated continued decline of populations across the species' range." RMPA/EIS at ES-6. Put most simply in the federal register notice of intent, the core purpose of the RMPAs is to "avoid a potential listing under the Endangered Species Act." 76 FR 77009. However, as shown above in the context of habitat fragmentation and fire and vegetation management, the FWS' listing decision findings did not obviate the need for the BLM to coordinate with State and local governments and evaluate the effectiveness of existing local regulatory mechanisms prior to forging ahead with system-wide RMPAs. The FWS listing decision contains broad, generalized statements and findings pertaining to the entire range of the sage-grouse. For the purposes of developing more localized, State-based RMPAs, the BLM has a duty to critically evaluate the FWS findings on a site-specific level to

determine whether particular regulatory mechanisms actually need to be amended and/or added to the BLM's existing RMP on a case-by-case basis. Unfortunately, it does not appear that the BLM undertook the necessary evaluations in developing the purpose and need statement and developing alternatives.

Comment Number: OR-GRSG-0200-8

Comment Excerpt Text:

the 2010 FWS listing decision does not provide a foundation from which the BLM can rationally conclude, or assume, that changes in the current regulatory framework applicable to livestock grazing and range management are necessary to conserve and protect sage-grouse, much less to avoid a future listing decision. BLM's reliance on the FWS listing decision as the basis for the purpose and need to amend regulatory mechanisms applicable to livestock grazing and range management is arbitrary and capricious because the listing decision does not factually support the BLM's statement of purpose and need. The BLM has not established a legitimate purpose and need for amending current regulatory frameworks applicable to livestock grazing and range management. This error is particularly concerning to the Grant County Court because of the central importance of livestock production to the County's economy. The BLM cannot consider restrictions on grazing if it has not, as here, demonstrated a purpose and need.

Comment Number: OR-GRSG-0207-3

Comment Excerpt Text:

When drafting the alternatives A thru F, two of the alternatives C and F appeared to be written by extreme environmental groups (ONDA, Western Watersheds), whose main objective was not improving sage grouse habitat but eliminating livestock. When drafting these alternatives did the BLM offer these groups the opportunity to create a draft, or was the BLM approached by them? Why were the rural communities who will be directly impacted by a listing of the sage grouse not given the opportunity to draft an alternative prior to the community meetings that took place around the state? Why were these two groups given priority to draft an alternative? The Rural Community Alternative presented by the HSWCD is a well-written and designed alternative that is backed by scientific data. Will the BLM give the Rural Community Alternative as much attention and credit as they have the other alternatives?

Comment Number: OR-GRSG-0220-7

Comment Excerpt Text:

Unfortunately, the BLM's RMPA/EIS fails to address the CCA in any of its alternatives. The USFWS identified the CCA as a positive and vital approach to addressing the localized conservation needs and a step that may avoid the necessity of a listing.

Harney County requests that the BLM reexamine its need statement and the various alternatives to address the CCA and to avoid conflicts that may undercut the goals and objectives of the USFWS, the BLM and ranchers.

9. In addition to the failure to address the recently adopted CCA, the BLM also failed to address the Candidate Conservation Agreement with Assurances that is presently out for comment and approval by the USFWS.

Comment Number: OR-GRSG-0226-3

Comment Excerpt Text:

The BLM should, for the credibility of the RMPA/EIS, as well as for true public participation, prepare a true purpose and need statement that addresses the true issues raised by the USFWS's listing decision. The analysis can then be addressed, in the context of the existing regulations, allotment management plans, annual operating plans, CCA, CCAA and the Taylor Grazing Act. If, and only if, this analysis demonstrates that action is necessary, the revised document should be submitted as a supplemental draft EIS to provide valid information for public review and comment.

Comment Number: OR-GRSG-0226-8

Comment Excerpt Text:

To imply, by inclusion in the RMPA/EIS, that a level of arbitrary protection from disturbance is warranted from one study (Knick et.al. 2013) is disconcerting.

This untested, undocumented and poorly defined calculation for base area is wide open for litigation. It poses an absolute uncertainty to the long term socio-economic impact to communities, local business and agricultural industries. The proposal doesn't have the necessary scientific data to support inclusion in the RMPA and does nothing to directly address the fundamental threats specifically identified – wildfire, invasive species and juniper encroachment.

Comment Number: OR-GRSG-0230-4

Comment Excerpt Text:

The narrow range of alternatives, as analyzed, fails to address the Purpose and Need.

i) Alternative A (Current Situation) is the most comprehensive alternative at meeting the Purpose and Need, as described in the first paragraph in #1. Why did the BLM fail to present in the Draft RMPA a comprehensive table with all the regulatory mechanisms for sage-grouse that are currently in place with a direct comparison to the action alternatives? This comparison should include pertinent regulations as well as program and activity level actions that are currently implemented by the BLM. Several actions have been in place for many years, such as the Standards for Rangeland Health (1997), which identifies sage-grouse specific requirements under Standard 5, Native, T&E, and Locally Important Species and allotment specific objectives for sage-grouse. By not providing a direct comparison of the current actions to the action alternatives, the reader (as is the case with USFWS) is left with the false impression that BLM currently does very little for habitat management for GRSG. Without a complete summary comparison to the five action alternatives the public is not presented with how the agency is currently meeting the expressed Purpose and Need of the RMPA.

Comment Number: OR-GRSG-0230-8

Comment Excerpt Text:

The BLM's approach to provide a 3% disturbance cap on all anthropogenic disturbances (excluding fire) on public land by monitoring and applying the disturbances on all land ownerships is ill conceived with no data provided for an analysis. What is the current disturbance level for the project area, district, and counties? How can the reader assess this concept without this data? The RMPA Vol. III, Appendix G, pp. G6 & G7 list 18 categories of disturbance the agency wilt monitor on public and private lands; some are very broad categories such as agriculture and habitat improvements. Would BLM please provide a precise definition of each category and for habitat improvements indicate the criteria the agency will apply to no longer be included as disturbance? At what scale would this 3% disturbance cap be enforced {Le. project level, district, county, allotment)? Why can't BLM measure and provide for disturbance/ fragmentation on public lands? What laws provide the BLM the authority to monitor human-caused disturbance on private lands and use this data in its decision-makjng capacity to regulate public lands? If an area is under the 3% human disturbance cap and an applicant has completed the required habitat improvement to a proposed net gain in PPMA habitat, at what level must the habitat improvement be before the BLM will process the application? Does it have to be functional habitat with a certain % sagebrush cover? If so, it might not be processed during his/her generation. The BLM indicates in RMPA Vol. I p. ES-16 that off-site mitigation would be implemented consistent with Draft BLM Manual MS-1794. What directives or policy authorizes the BLM to use a draft manual, unapproved as guidance, for an RMPA/ EIS?

Comment Number: OR-GRSG-0276-1

Comment Excerpt Text:

Under Alternative D, all PPMA would be an avoidance area and subject to the 3% development threshold (no additional disturbance authorized where 3% disturbance already exists). The 3% limit is not spatially defined nor is the mechanism to calculate it, thus it is not possible at this point to accurately predict how it would affect future power lines and maintenance of existing power lines (3% of what area?). Depending on how BLM interprets it, the 3% threshold could limit colocation of power lines with other development, such as other existing power lines, road or highway system, etc. in much of

eastern Oregon. Consequently, IPC would be forced to site through undisturbed habitat or agricultural areas in order to be in compliance with the 3% threshold. While BLM suggests that pre-project mitigation or restoration could be used to bring a project in to compliance with the threshold, the details of the timing and quality of that restoration work is not defined. The Draft RMPA/EIS does not explain whether the mitigation must provide functional habitat, which could take years, or whether initiating a mitigation project may be adequate.

Comment Number: OR-GRSG-0276-2

Comment Excerpt Text:

Alternative D proposes to limit human-caused disturbances, including existing disturbances, to less than 3 percent (%) of PPMA, regardless of ownership. However, the Draft RMPA/EIS fails to identify the following key components associated with this threshold:

- The landscape scale and boundaries that will be used when calculating the 3% disturbance threshold,
- Specific definitions of human-caused disturbances and how they will be identified and quantified.
- How the BLM will coordinate with state, county, and local land use agencies in Oregon to document disturbance.
- The existing baseline condition and areas that currently exceed the disturbance threshold.
- Will the disturbance threshold calculation include direct and indirect effects? How will these be defined, identified, and quantified?
- If a project proponent can use a previously disturbed area and the disturbance threshold already exceeds 3%, will the project be allowed?
- How the BLM will coordinate with state, county, and local land use agencies so that BLM-managed lands do not become de-facto exclusion areas because disturbance is occurring on non-federal lands.
- Verify that in the absence of coordination with state, county, and local agencies, implementation of the preferred alternative on BLM-managed lands would be sufficient to protect the sage-grouse and maintain the desired population levels identified in the Draft RMPA/EIS. In other words, if development will continue on non-federal lands, will the species survive at levels sufficient to prevent its listing on federally-managed lands?
- How disturbance thresholds will be calculated for polygon projects that are typically going to occur in one analysis area and how thresholds will be calculated for long linear projects that can occur in multiple analysis areas (depending on the scale selected).
- Define if specific changes in land use would be considered a disturbance and included in the threshold calculation. For example, will the conversion of dry land agriculture to irrigated agriculture be a disturbance? Depending on the previous and expected future condition of the area, sage-grouse may still use the habitat.
- Does the BLM maintain the disturbance database or is the expectation that this will be applicant generated on a project-by project basis? If it is the latter, how will consistency be ensured?

Human-caused disturbance on non-federal lands could already exceed 3% in areas (depending on the scale) and if so, no projects could be authorized by the BLM in PPMA. This requirement could stymie the development of projects that have moved forward through state, county, and local authorizations. Further, BLM's approach may result in the inequitable requirement that a project proponent mitigate for the impacts from a prior project as a prerequisite to moving forward with its own project; and then the proponent would have to provide additional mitigation for the impacts of the new project. Furthermore, other state and federal agencies may

allow development to continue on non-federal lands and exceed the 3% threshold.

Comment Number: OR-GRSG-0276-27

Comment Excerpt Text:

Comment: The National Technical Team (NTT 2010) suggested a 3% discrete anthropogenic disturbances cap of the total sage-grouse habitat regardless of ownership. This percentage was based on professional judgment of greater sage-grouse researchers (Holloran 2005; Walker et al. 2007; Doherty et al. 2008, 2011; Naugle et al. 2011). There are 2 specific questions that need to be addressed in the RMPA/DEIS: 1) how was the 3% disturbance cap precisely determined; and 2) how will this disturbance cap be applied spatially? The RMPA/DEIS does not provide answers to either question.

Comment Number: OR-GRSG-0276-28

Comment Excerpt Text:

Text: Pg. 2-17, 3rd para.

This objective allows for human-caused disturbance (including current on-the-ground disturbance) to cover less than 3 percent of PPMA, regardless of ownership; it requires appropriate mitigation for habitat disturbance within PPMA and PGMA.

Comment: Knick et al. (2013) modeled greater sage-grouse presence based on known greater sage-grouse leks and measured variables for the 1-km2cell within which the lek was located, as well as in a 5- and 18-km radii surrounding the lek. Variables measured at a 18-km radius (11.2 miles) did not perform well and were dropped in subsequent analyses. This suggests that measured variables at this latter scale did not influence lek persistence. At the 5 km radius scale Knick et al. (2013) found that 95% of all active leks were in landscapes with <3% developed acreage. However, such results were not reported within a 1 km2 cell within which the lek was located or for each 1 km2 comprising the PPMA. According to Knick et al. (2013) an area of 2.4 km2 (0.9 mi2) could be developed in a 5-mile radius around an active lek (78.5 km2, or 30.3 mi2). This appears to be the smallest scale to be considered in PPMA. However, the RMPA/DEIS, considers the 1 mi2 the smallest hierarchical arrangement allowing concentrated anthropogenic disturbance. Thus, Knick et al. (2013) study appears not to support the BLM's smallest scale at which anthropogenic disturbance is measured (30.3 mi2 versus 1 mi2 respectively). Importantly, the RMPA/DEIS does not provide any guidance how the 3% disturbance cap at either the smallest hierarchal scale or the largest scale (PPMA) should be spatially applied.

Comment Number: OR-GRSG-0276-29

Comment Excerpt Text:

Text: Pg. 2-23, Last para.

The Draft RMP/EIS states that "all efforts" would be taken to avoid impacts in PPMA and that "efforts" would be taken to avoid adverse impacts in PGMA.

Comment: What is the difference between "all efforts" and "efforts" and what criteria will the BLM use to make these determinations? Based on past experience with the BLM, project-by-project definitions and criteria can vary substantially, often leaving the project proponent subject to an iterative loop trying to guess what will satisfy the BLM. At a minimum, the document should identify basic sideboards or criteria for making the determination.

Comment Number: OR-GRSG-0276-3

Comment Excerpt Text:

It is also not clear how the 3% disturbance threshold would be implemented for ROWs in PPH/PPMA/Core Area Habitats. Table 2-5, page 2-53, states that Alternative D would exclude ROWs from 857,564 acres of these habitats. It is not clear whether the exclusion area would be in lieu of the 3% disturbance threshold.

Because critical information necessary to evaluating the alternatives is not included in the Draft RMPA/EIS, and because there may be a broad spectrum of impacts on a variety of project proponents and stakeholders, the BLM should provide the public an opportunity to review and comment on the detailed disturbance threshold methods and requirements prior to the Final EIS.

Comment Number: OR-GRSG-0276-4
Comment Excerpt Text:
FOCAL AREAS

Offsite mitigation would be directed towards focal areas under Alternative D. The Draft RMPA/EIS states "The GRSG focal areas are not land allocations, as they establish priorities for only certain types of BLM administrative actions and do not restrict or prohibit activities." Idaho Power supports the identification and use of focal areas to concentrate mitigation activities to areas where the greatest benefit can be realized. However, the document needs to identify measures specifying how BLM would implement this concept.

Comment Number: OR-GRSG-0281 (FrmLtr11)-15
Comment Excerpt Text:
3% Cap Vol 1. Page 2-14 and Page 2-109 Table 2-7: We do not think it is clearly explained why the 3% cap is being placed on disturbance. The cap is based on limited information relating disturbance to lek occupancy. There are too many unresolved issues about sage grouse to believe that GRSG population dynamics are so simplistic that a 3% cap should be made absolute. Given the qualitative nature of disturbance data, limited information provided by Lek data and lack of replication, it seems inappropriate to make an absolute disturbance cap. For example restoration activities include disturbance and occur in areas with a disturbed environment. This cap needs to be clarified to include why it is specific at 3% and why 4% wouldn't be a better cap level. The absolute of 3% suggests all progress must stop and forever be held in the place. This makes little sense and more information is needed.

Comment Number: OR-GRSG-0281 (FrmLtr11)-24
Comment Excerpt Text:
Comment: Vol 1, page 2-31, Section 2.6.3. The DEIS in taking a "hard look" should have considered the benefits of grazing and the numerous circumstances where allotments may fail the SRH standards due to decadent plant communities due to a lack of grazing. Livestock grazing is a vegetation management tool and the permitted use needs to be addressed through decades of experimental research and proven on-the-ground studies that document valuable lessons about current management strategies. There are many areas where stocking levels may be low and the Alternatives did not consider areas where the "capacity" for grazing is incorrect and the head numbers are too low to achieve a better level of use where bunchgrases are stimulated to produce good annual tillering.

Comment Number: OR-GRSG-0281 (FrmLtr11)-5
Comment Excerpt Text:
Many of the actions exceed the purpose of the broad landscape DEIS plan and is offering specific "how to" instructions which are inappropriate at the DEIS level. Guidance does not mean the broad landscape view should guide using specific steps, because that detail has to be managed based on local conditions. The actions will appropriately be managed through the RMPs, GMA Plans, and AMPs. Actions taken by the BLM must be workable, practical, and feasible everywhere all the time. The rejected or deleted actions are appropriately managed at the District level RMPs, GMA Plans, and AMPs within the local programs such as Action 41 for Invasive Plants, which cannot be guided at the broad landscape level of the DEIS plan.

Comment Number: OR-GRSG-0333-1
Comment Excerpt Text:
On the whole the Malheur County Court questions whether the BLM has adequately considered the current application of local land use plans, including local Malheur County plans, and the Oregon Department of Fish and Wildlife's (ODFW) sage-grouse conservation strategy in determining whether the BLM needs to take any action with respect to certain risk factors the FWS discussed in its 2010 listing decision but which are primarily within the jurisdiction of State and local governments. Similarly the County is concerned that the BLM has too quickly sided with the 2011 National Technical Team (2011) report in selecting Alternative D as the preferred alternative. Moreover, the County is of the

view that the BLM's analysis of Alternative A (no action) with respect to existing regulatory frameworks, standards and guidelines applicable to livestock grazing and range management is, in particular, inadequate and fails to provide a rational foundation for changing existing regulatory mechanisms. With respect to factors primarily within the jurisdiction of local governmental and State authorities and also with respect to livestock grazing, the BLM should have analyzed the effectiveness of current regulatory mechanisms before developing alternatives and should have used that analysis for considering appropriate changes to the RMP-if any.

Comment Number: OR-GRSG-0333-15

Comment Excerpt Text:

it was arbitrary and capricious for the BLM to develop alternatives for changing regulatory mechanisms before first analyzing the effectiveness of current regulatory mechanisms-both BLM regulatory mechanism applicable to livestock grazing and State and local government regulatory mechanisms applicable to other factors, such as habitat loss and fragmentation. In the RMPA/EIS, the BLM fails to take a hard look at Alternative A and make a rational connection between the existing environmental baseline and its conclusion that modifying or adding regulatory mechanisms to the existing RMP is necessary to conserve sage-grouse and avoid a listing.

It appears that the BLM arbitrarily rejected the no action alternative with respect to livestock grazing merely because it would not result in sage-grouse specific standards and guidelines and, as a result, unlawfully chose to not take a hard look at whether existing standards and guidelines are adequate to protect sage-grouse from a listing. Furthermore, what little analysis BLM conducted of the effectiveness of current rangeland health standards and guidelines in evaluating Alternative A suggests that the current framework adequately conserves sage-grouse habitat and populations.

Comment Number: OR-GRSG-0333-8

Comment Excerpt Text:

While the FWS did make broad, generalized findings that certain regulatory mechanisms of the BLM were inadequate to conserve sage-grouse, the FWS never found that existing regulatory mechanisms specifically applicable to livestock grazing and range management pose a threat to sage grouse habitat or populations, much less that changes in such regulatory mechanisms are necessary to avoid a listing decision. For this reason, the BLM's statement of the purpose and need is inaccurate and misleading with respect to livestock grazing and range management.

Comment Number: OR-GRSG-0333-9

Comment Excerpt Text:

In sum, the 2010 FWS listing decision does not provide a foundation from which the BLM can rationally conclude, or assume, that changes in the current regulatory framework applicable to livestock grazing and range management are necessary to conserve and protect sage-grouse, much less to avoid a future listing decision. BLM's reliance on the FWS listing decision as the basis for the purpose and need to amend regulatory mechanisms applicable to livestock grazing and range management is arbitrary and capricious because the listing decision does not factually support the BLM's statement of purpose and need. The BLM has not established a legitimate purpose and need for amending current regulatory frameworks applicable to livestock grazing and range management. This error is particularly concerning to the Malheur County Court because of the central importance of livestock production to the County's economy. The BLM cannot consider restrictions on grazing if it has not, as here, demonstrated a purpose and need

Comment Number: OR-GRSG-0356 (FrmLtr07)-19

Comment Excerpt Text:

The disturbance footprint from a transmission or distribution line which will count against the cap is not distinguished, Permanent habitat loss from a transmission or distribution line is largely limited to the actual pole location; sage-brush habitat between

support structures will be spanned by the conductor. It is unclear in the DEIS what aspect of the transmission or distribution line will count against the disturballce cap (structure foundation, entire right-of~way (ROW), buffer surrounding ROW, etc.). Any aspect of the transmission or distribution line which will count against the disturbance cap must be clearly defined and supported by sound scientific evidence.

Comment Number: OR-GRSG-0357 (FrmLtr08)-5

Comment Excerpt Text:

It is unclear whether BLM would determine that the 3% cap is already being met in some areas. If so, would BLM require the removal of surface disturbing features in order to achieve a 3% surface disturbance?

Comment Number: OR-GRSG-0378-10

Comment Excerpt Text:

BLM Fails to Demonstrate that the Proposed Disturbance Caps are Feasible and Implementable

More detail should be provided in the FEIS regarding the ways in which the disturbance caps would be monitored and implemented. Specifically, MidAmerican would like to request the following information be included in the FEIS:

- How would the overall disturbance "remaining" under each cap be tracked? This information is needed in order for the public and project proponents to adequately plan projects to avoid areas with no remaining cap without the burden of conducting site-specific studies for each project.
- BLM fails to account for valid existing rights under their caps. Valid rights must be defined and quantified (disturbance allowances) for each management zone in the FEIS. BLM must quantify what rights lease holders have to disturbance under each cap, and quantify this disturbance for each management zone.
- BLM must account for prior decisions in Resource Management Plans in allocating remaining disturbance. Specifically, BLM has designated utility corridors and their use must be assumed by setting aside disturbance "credits" under each cap where utility corridors exist. If not, BLM is voiding implementation of a previous decision. The effects of this action must be avoided or analyzed. Without addressing the above points, alternatives using disturbance caps must be considered infeasible.
- BLM should not include fire as a disturbance type that would accumulate under the disturbance cap under Alternative F. Fire is unpredictable and could consume large amounts of habitat in a very short period of time, thereby making proposed projects in the area, which may be working through the NEPA process, infeasible.

As proposed, disturbance caps are unworkable and violate BLM's responsibility to provide ROWs in the public interest under FLPMA. BLM must provide utilities and other entities the details of a workable system that they can use to plan and secure ROW approvals. MidAmerican directs BLM to Appendix F of the Northwest Colorado LUP A DEIS. The Oregon RMP FEIS should include a similar appendix detailing how the disturbance caps would be allocated, tracked, and monitored

Comment Number: OR-GRSG-0378-11

Comment Excerpt Text:

BLM Should Allocate Disturbance Approvals by Application Date

BLM must explain the order in which applications (ROW, APD, etc.) and surface disturbing uses will be approved and prioritized, as well as managed within the surface disturbance cap. In order to reasonably conduct ongoing NEPA processes, BLM must hold disturbance cap space (sufficient for their implementation) available for long-running processes, particularly ROW applications that have been filed and where NEPA is underway. If not, projects that have been designed to fit within the available disturbance limitations (under a particular zone's cap) could find that their disturbance can no longer be accommodated (under the cap) once BLM is ready to issue a decision at the end of the NEP A process.

Comment Number: OR-GRSG-0378-13

Comment Excerpt Text:

It is unclear in the DEIS whether temporary disturbances, such as staging areas and pulling and tensioning sites associated with transmission construction, would accumulate against the disturbance cap limit. Clarification should be added stating that temporary disturbance in sagebrush habitat (i.e., any disturbance undergoing reclamation within one-year of vegetation clearance) is considered an exemption to the disturbance cap

Comment Number: OR-GRSG-0409-11

Comment Excerpt Text:

Many of the objectives in Table 2-4 are not quantitative and time bound. This makes it difficult to evaluate the level of threat reduction and habitat improvement that could be expected from Alternative D. Similarly, the information in Chapter 4: Environmental Consequences does not adequately translate the actions in the preferred alternative into specific enough expected benefits to threat reduction, habitat improvement and ultimately population trends. We certainly appreciate the challenges given uncertain budgets and the sheer technical difficulties in extending the potential actions into habitat and population trends. But strengthening both of these components in the FEIS will be critical to helping the USFWS correctly interpret the benefits provided by the proposed Resource Management Plan Amendments for GRSG populations.

- Recommendation: Increase the specificity of management objectives to define specific targets the BLM will likely achieve to reduce threats and improve habitat conditions under the Proposed Alternative in the FEIS.
- Recommendation: Work with the State of Oregon and the SageCon Partnership to complete an analysis to better predict the expected threat reduction as well as habitat improvements and population trends expected from the Proposed Alternative in the FEIS

Comment Number: OR-GRSG-0409-3

Comment Excerpt Text:

Action D -SSS 2 [DEIS, pg 2-58] proposes to limit anthropogenic surface disturbances to less than 3 percent of the area designated as PPMA. This action is one of the primary mechanisms included in Alternative D to reduce threats from anthropogenic disturbances and maintain sustainable habitat for the GRSG. However, the assessment units, definition of anthropogenic disturbance, base data and protocols for calculating baseline disturbance are not clearly stated in the DEIS. As a result, we cannot assess whether or not the 3 percent limit proposed will significantly reduce threats from anthropogenic disturbance.

- Recommendation: Define transparent, repeatable, accurate and predictable methods [including unit of assessment, definition of anthropogenic disturbance, base data and calculation protocols] the BLM will use to administer [establish baseline conditions, monitor and make decisions on new actions that will increase anthropogenic disturbance] the surface disturbance cap in the Proposed Alternative in the Final EIS

Comment Number: OR-GRSG-0409-4

Comment Excerpt Text:

The Nature Conservancy recommends that the BLM and the State of Oregon define the methods they will use to manage a disturbance cap and crosswalk those methods with the methods Knick et al. (2013) used. Being able to show the link between the Knick et al. (2013) methods and findings, and the methods that will be used to administer the cap is critical to setting a solid scientific foundation for the cap

Comment Number: OR-GRSG-0409-5

Comment Excerpt Text:

Recommendation: Clearly state how proposed new conversion of sagebrush habitat to crop/hay and pasture uses will be addressed relative to a surface disturbance cap in the in the Proposed Alternative in the FEIS.

Agricultural development was treated separately in the Knick at al. (2013) paper. Specific consideration of how new proposals for agricultural conversion will be treated relative to the cap needs to be clearly stated and evaluated in the Proposed Alternative in the FEIS

Comment Number: OR-GRSG-0409-7

Comment Excerpt Text:

Comment: The objectives and actions included in Alternative D in the DEIS are not explicit enough to assess how proposed actions will accomplish adequate threat abatement.

- Recommendation: In order to facilitate a complete review of threat reduction measures the BLM should include a stand-alone accounting of proposed actions organized by threats identified in the COT Report (such as "Weeds/Annual Grasses" and "Conifers") similar to those organized by BLM Resource Program in tables 2-4 and 2-6 in the Proposed Alternative in the FEIS.

Table 2-1 begins to cross-walk identified threats to applicable BLM RMP Resource Programs but stops short of providing a template for further summarizing actions or expected impacts (particularly measurable threat reduction) by threat. While the existing template may be a useful summary for administrative review it is an ineffective method for assessing threat abatement strategies and likelihood of effectiveness

Comment Number: OR-GRSG-0427-2

Comment Excerpt Text:

Alternative A (Current Situation) is the most comprehensive alternative at meeting the Purpose and Need, as described in the first paragraph in #1. Why did the BLM fail to present in the Draft RMPA a comprehensive table with all the regulatory mechanisms for sage-grouse that are currently in place with a direct comparison to the action alternatives? This comparison should include pertinent regulations as well as program and activity level actions that are currently implemented by the BLM. Several actions have been in place for many years, such as the Standards for Rangeland Health (1997), which identifies sage-grouse specific requirements under Standard 5, Native, T&E, and Locally Important Species and allotment specific objectives for sage-grouse. By not providing a direct comparison of the current actions to the action alternatives, the reader (as is the case with USFWS) is left with the false impression that BLM currently does very little for habitat management for GRSG. Without a complete summary comparison to the five action alternatives the public is not presented with how the agency is currently meeting the expressed Purpose and Need of the RMPA.

Comment Number: OR-GRSG-0427-3

Comment Excerpt Text:

Clearly, the BLM has failed to present an array of alternatives that address the primary threats to GRSG and its habitat. Therefore, Harney Soil and Water Conservation District, as a cooperating agency, requested that the BLM allow themselves and other cooperating agencies to work to incorporate a Rural Community Alternative (RCA) into the RMPA analysis. Harney SWCD has submitted the basic framework of this alternative within their comments.

Comment Number: OR-GRSG-0428-1

Comment Excerpt Text:

Along these lines, the Oregon Cattlemen's Association and Oregon Farm Bureau appreciates the efforts by the Harney County Soil and Water Conservation District ("SWCD") to propose an Alternative G that encompasses the concerns raised by rural communities and to address many of the issues raised in these comments. Though we have not had opportunity to study it in detail, Alternative G does appear to pull together different parts of the alternatives considered by BLM and is a viable alternative that should have been considered by the BLM. We agree with the SWCD that the DEIS can and should be improved by providing consideration of Alternative G. Unfortunately, due to the comment period time limits, our ability to thoroughly analyze and appropriately comment on Alternative G. Therefore, we request that BLM consider adding Alternative G to the DEIS and, to the extent

necessary, provide an appropriate public comment period, such as 30 or 45 days.

Comment Number: OR-GRSG-0436-1

Comment Excerpt Text:

The preferred alternative would apply a three percent disturbance cap to anthropogenic disturbance. It is unclear in the DEIS what aspect of the transmission or distribution line will count against the disturbance cap (structure foundation, entire right-of-way, and buffer surrounding ROW). Any aspect of the transmission or distribution line which will count against the disturbance cap must be clearly defined and supported by sound scientific evidence

Comment Number: OR-GRSG-0450-3

Comment Excerpt Text:

The 3% disturbauce cap has no sound basis as BLM admitted at the Burns informational meeting, there is no solid basis for this number. At present there is only an estimate as to where we are currently at in the regard to a disturbance cap. It is unclear in the RMPA what lands will be included in the cap and how it will be measured between adjoining private land and government managed land. The uncertainty it will create with the existing AMP's that are currently in place on various allotments is substantial. We work toward common cooperative goals with our fellow permittees and the range specialist on our allotments. Permittee involvement in clarification of the disturbance cap should be mandatory to ensure it is beneficial to the range and the resources within it

Comment Number: OR-GRSG-0465-1

Comment Excerpt Text:

BLM does not provide a rational basis for imposing grazing restrictions. In the RMPA/EIS, BLM describes the purpose and need as follows: "Inadequacy of regulatory mechanisms was identified as a significant threat in the USFWS finding on the petition to list the GRSG." RMPA/EIS at ES.3. "Changes in management of GRSG habitats are necessary to avoid the continued decline of populations across the species' range." RMPA/EIS at ES.3. Put most simply in the federal register notice of intent, the core purpose of the RMPAs is to "avoid a potential listing under the Endangered Species Act." 76 FR 77009. The FWS listing decision contains broad, generalized statements and findings pertaining to the entire range of the sage-grouse. For the purposes of developing more localized, State-based RMPAs, BLM has a duty to critically evaluate the FWS findings on a site-specific level to determine whether particular regulatory mechanisms actually need to be amended and/or added to BLM's existing RMP on a case-by-case basis. Unfortunately, it does not appear that BLM undertook the necessary evaluations in developing the purpose and need statement and developing alternatives.

Comment Number: OR-GRSG-0465-2

Comment Excerpt Text:

As applied to livestock grazing and range management, BLM's statement of the purpose and need is inaccurate and misleading because the FWS never found, nor has BLM found, that existing regulatory mechanisms applicable to livestock grazing and range management pose a threat to sage-grouse habitat or populations, much less that changes in such regulatory mechanisms are necessary to avoid a listing decision.

Comment Number: OR-GRSG-0470-1

Comment Excerpt Text:

The practical consequences of the recommended disturbance cap are difficult to discern from the Draft Plan, because disturbance measurement is not clearly defined, methods of applying the disturbance cap are not specified, and data on existing disturbance is not included.

Comment Number: OR-GRSG-0471-1

Comment Excerpt Text:

However, the Alternative [D] is still grossly overly dependent upon an inadequate analysis of the nature and extent of sage grouse habitat, and upon the arbitrary and subjective 3% cap on all human caused disturbances. This inclusion of massive amounts of the 10 million acres managed by the BLM is too broad and must be refined and better supported. Likewise, the use of the 3% disturbance cap based essentially on a single report is unsupportable.

Comment Number: OR-GRSG-0489-18

Comment Excerpt Text:

The DEIS is not clear about what anthropogenic features will be taken into account under the habitat disturbance cap. The DEIS states on page 2-14:

Anthropogenic features include, but are not limited to, paved highways, graded gravel roads, transmission lines, substations, wind turbines, oil and gas wells, geothermal wells and associated facilities, pipelines, landfills, mines, and residences. There is a 3-percent habitat disturbance cap for Alternatives B, D, and F. The habitat disturbance cap for Alternatives B and applies to anthropogenic disturbances. The habitat disturbance cap for Alternative F applies to anthropogenic disturbances and fire.

The DEIS also does not say at which scale the cap will be applied.

In order to analyze the impacts of a habitat cap, BLM needs to state very specifically what will and will not count toward the cap, and needs to be clear about the scale at which the cap will be applied. The RMPA also needs to include an assessment of existing disturbance levels, so that it is clear how much additional disturbance could occur and so that the impacts of the proposed cap can be analyzed.

Comment Number: OR-GRSG-0517-2

Comment Excerpt Text:

the detailed description of Alternative A, found within the DEIS, fails to include reference to the numerous applicable laws, regulations, executive orders, departmental guidance, agency manuals, agency handbooks and instruction memos that must be considered in concert with existing land use plan guidance

Comment Number: OR-GRSG-0532-120

Comment Excerpt Text:

Pg. 5-31, last paragraph – Specifically, "If allowing limited development within GRSG habitat on BLM-administered lands would alleviate development pressures on other lands with less stringent protections, management under Alternative D would have the greatest ability to reduce major threats to ." Need to consider that most GRSG habitat in Oregon is on BLM-administered land and that ~82% of the population (and leks) is also located on BLM-administered land. This reduces the likelihood that alleviating development on private land by developing on BLM-administered land, will have any meaningful benefit for GRSG. In fact the possibility is just the opposite.

Comment Number: OR-GRSG-0532-144

Comment Excerpt Text:

The State requests that the BLM estimate costs associated with proposed habitat conservation measures, identify proposed sources of funding, and include a BLM commitment to request adequate funding for the actions identified as BLM responsibilities.

Comment Number: OR-GRSG-0532-41

Comment Excerpt Text:

The DEIS addresses human disturbances in Appendix G. The draft lists broad categories of threats designed "to evaluate anthropogenic and natural disturbances (direct physical footprint) of GRSG habitat based on threats listed in factor A" (pg. G-6). The types of disturbance listed are only one-word categories such as agriculture, wildfire, and invasive species. Clear definitions of disturbance, including defined methods of calculating disturbance and cumulative measures are essential for guiding conservation investments and actions. The State recommends a definition of "disturbance" that expressly excludes normal ranching and farming practices, including infrastructure related to small-scale ranch, home and farm businesses (e.g., fences, livestock water developments, range improvements, etc.). [Infrastructure definition from Idaho's proposed alternative that has received USFWS support per April 10, 2013 letter to Governor Otter]

Comment Number: OR-GRSG-0532-44

Comment Excerpt Text:

Pg. 4-47 - The BLM and the State need to agree on what is included in baseline determinations of disturbance. As noted above, the state believes that only the direct footprint of concentrated land-

disturbing activities should be included. Indirect impacts should be considered, but only in terms of avoidance, minimization and mitigation.

Comment Number: OR-GRSG-0532-79

Comment Excerpt Text:

The State recommends adding to Actions D-LR1 and D-TM4 an assessment of available wireless and other technology and the viability of a cost-share program for such technology that may be shared between private and public land managers. Wireless technology can be a valuable tool for tracking operations in remote areas—such as monitoring water levels in stock tanks—thereby reducing the need to travel through sensitive areas.

Comment Number: OR-GRSG-0558-10

Comment Excerpt Text:

The document is also in violation of NEPA because it does not analyze a full range of alternatives. The document includes two "environmental" alternatives, which both greatly reduce livestock grazing, the state Strategy and NTT alternative (two alternatives based on other documents, so they were 'easy' to throw in without much further thought), and a preferred alternative which also reduces grazing and ignores the three main threats to sage-grouse habitat. There is no alternative which analyzes an increase in grazing despite science that shows that livestock grazing can be beneficial to and sustainable with sage-grouse, and which can reduce the risk of catastrophic wildfire by removing fine fuels and returning fire intensity and severity to a more "natural" level. There is also no alternative which truly focuses on the three main threats (wildfire, invasive annuals, and conifer encroachment), as identified by the USFWS. While this document does a very good job of analyzing alternatives that would make the environmental groups happy, it does not analyze anything that focuses on true multiple-use, even though the BLM is mandated by the Federal Land Policy and Management Act. Multiple uses of the land are legally required on public lands, and can be managed along with sage-grouse habitat through the use of conservation measures. The BLM needs to analyze at least one alternative which focuses on multiple use management of public lands, through conservation measures, which includes addressing the three major threats in our area, and an increase in livestock grazing.

Comment Number: OR-GRSG-0558-7

Comment Excerpt Text:

Another issue of concern is the disturbance cap that has been added to most of the alternatives, without being clearly defined or analyzed within the document. Based on how this disturbance cap is calculated, as well as its temporal and spatial scales, the effects of it could vary greatly; therefore, needs be fully included and analyzed in this document. For instance is it 3% from now on, or 3% ever? Is it 3% annually or cumulatively? What exactly counts as a disturbance, and what doesn't? The true definition of a disturbance is anything that interrupts or intrudes.

Comment Number: OR-GRSG-0567-2

Comment Excerpt Text:

our review identified one additional overarching topic not yet sufficiently addressed and which should be substantially rectitled in the final EIS; a description of the anticipated outcomes for sage-grouse populations and habitats in Oregon in response to implementation of the BLM alternative(s). This description should include the amount of habitat or the percent of the sage-grouse population likely to be disturbed under each alternative. In addition, we recommend providing maps to show where sage-grouse and their habitats will be protected or impacted. Given that BLM's management direction will be a key consideration in our FY 2015 listing decision, it would be helpful for the final EIS to provide reasonable insight into likely outcomes for the species and its habitats.

Comment Number: OR-GRSG-0567-31

Comment Excerpt Text:

Without a description of the extent and severity of the current disturbances we have no way of measuring how effective the various alternatives will be in addressing the threat, and the effectiveness of any disturbance cap cannot be evaluated without a baseline. We suggest that the final EIS include a

graphic showing the methodology for calculating disturbance at the appropriate scale, so that the current distribution and extent of anthropogenic disturhances can be clearly understood.

Comment Number: OR-GRSG-0567-34

Comment Excerpt Text:

Throughout Chapter 4 (Environmental Consequences) there are repeated descriptions of the distmbance cap such as this, from page 4-213: "Applying the 3 percent disturbance cap would directly impact non-energy leasable minerals by limiting the amount of disturbance from various activities, including non-energy leasable mineral development. If total disturbance in sage-grouse habitat reached 3 percent, no additional disturbance from nonenergy leasable mineral activities would be permitted. Because non-energy leasable mineral development involves sUl1ace disturbance, new development would essentially be shut down once the 3 percent cap was reached. " What is missing from this description and discussion are what this means for the conscrvation of sage-grouse, on these specific popUlations. Please describe how this is measmcd, and under what protocol the measmements take place. Further, please describe how the decision would be made between imposing an NSO buffer around leks and/or a 3 percent surface distmbance cap.

Comment Number: OR-GRSG-0567-35

Comment Excerpt Text:

Energy Development and Mining (Chapter 4, Alternative B, pages 36-37) - Percent of the populations affected by closmes to salable minerals: "In areas that cannot be completely closed to leasable mineral development or withdrawnfrom locatable mineral entry, the BLM could impose a NSO buffer around leks and/or a 3 percent surface disturbance threshold in PPMA to the extent allowed by law. Once the 3 percent disturbance cap is met, no new surface disturbance would be allowed in P P MA until restoration has occurred. " Please describe how this is measured, and under what protocol the measurements take place. Further, please describe how the decision would be made between imposing an NSO buffer around leks andlor a 3 percent surface disturbance cap.

Comment Number: OR-GRSG-0567-38

Comment Excerpt Text:

cumulative impacts from non-energy solid leasable minerals in the planning area are mentioned, and the draft EIS states that once the disturbance cap is met, no further activities would be allowed. However, there is no further discussion about how that would be administered (not accept new ROW or lease applications?), and more importantly it does not describe what that means in terms of conservation of the sage-grouse. A description of what meeting the 3 percent disturbance cap means for the conservation of the bird is essential, and missing.

Comment Number: OR-GRSG-0567-5

Comment Excerpt Text:

We recommend the following clarifications:

- Identification of a clearly defined scale at which a disturbance cap is applied (e.g., sagegrouse populations); analysis of the effects of capping disturbance via the various alternatives at the priority areas of conservation (PAC) scale; an adequate description of the effects of implementing the caps in the context of PAC conservation; and a description of the amount of existing disturbance from a clearly defined and explained baseline, including how the quantification of existing disturbance was calculated as part of the baseline.
- That BLM consider provisions that, regardless of the thresholds applied at the above landscape-levels, BLM should consider provisions to limit disturbance to sage-grouse habitat or leks resulting from any individual project and that prevent impacts from multiple projects from accruing rapidly on the same landscape,
- That the EIS include a description of how direct and indirect disturbance will be measured, including a description on how

short and long term disturbances will be counted towards the proposed cap,

We further recommend that measurements related to the cap should rely on a consistent methodology for addressing impacts, including direct impacts (habitat removal), indirect impacts and disturbance, This methodology should be the same one utilized to assess all impacts across all ownerships in the state and be developed in close coordination with the Oregon Department of Fish and Wildlife and the Service.

Comment Number: OR-GRSG-0567-6

Comment Excerpt Text:

The draft EIS does not describe avoidance and minimization of impacts before implementing the cap; nor does it clearly describe how maintaining habitat suitability or ecological minimums beyond disturbance thresholds (i,e" the 70/30 concept described in Alternative E) would be considered before allowing disturbances that would contribute to the 3 percent cap, We recommend including provisions to ensure that impacts to sage-grouse habitats are first avoided, then minimized if avoidance is not feasible, If avoidance and minimization are implemented but there are still impacts, the remaining impacts could be limited through the use of a disturbance cap, The final EIS should clarify that impacts counted toward a disturbance cap would also be subject to mitigation requirements.

Comment Number: OR-GRSG-0567-8

Comment Excerpt Text:

The draft EIS does not effectively describe how the disturbance cap will be monitored. Appendix G: Gremer Sage-Grouse Monitoring Framework describes the concept of monitoring at the broad and mid scales (Appendix G, page 2), and it describes 18 "disturbance data sources" (Pages G-6 to G-7) but it does not adequately describe the specifics of the monitoring program. Also, there is no discussion of monitoring indirect etlects from any of these disturbances. Further, it is mentioned at the end of Section C (Appendix G, page 7) that the 18 threats will be aggregated into three general measures, and that these will be reported annually, but it does not describe what the data will be used for, specifically in relation to the application of a disturbance cap.

Comment Number: OR-GRSG-0591-17

Comment Excerpt Text:

According to BLM IM 2012-44, "The conservation measures developed by the NTT and contained in Attachment 3 must be considered and analyzed, as appropriate, through the land use planning process by all BLM State and Field Offices that contain occupied Greater Sage-Grouse habitat." This must be done fully in the Oregon DEIS. IM 2012-44 does not provide an option not to analyze these measures in at least one alternative unless a clear finding is provided that the measure is not appropriate, and BLM has provided no such findings in the context of the Oregon RMP Amendment.

For example, the NTT Report calls for an unambiguous requirement that closed-loop drilling with no reserve pits be required within Core Areas, not incorporated into any alternative.

Comment Number: OR-GRSG-0591-21

Comment Excerpt Text:

Land surface disturbance in sage grouse habitat is widely known to affect the species. Disturbance thresholds are commonly applied in areas of energy development, even though there has been little science to date establishing the disturbance threshold by percentage of land area at which significant impacts to sage grouse begin to occur. Under the Preferred Alternative, the amount of cumulative disturbance allowed in sage grouse core habitat is three percent per square mile, but it remains unclear as to how large an area this percentage would be calculated across. If the area calculated is larger than one square mile, the possibility exists that developments that are too dense to allow sage grouse persistence will be permitted in Priority Habitats.

Comment Number: OR-GRSG-0591-68

Comment Excerpt Text:

Unlike all other action alternatives, Alternative E fails to designate all Preliminary General Habitat ("PGH") for some form of increased protection. Table 4-2, DEIS at 4-7. This would leave more that 1.7 million acres of occupied habitats that are important for the survival of sage grouse populations unprotected for the purpose of this planning effort. BLM offers no science-based justification for why these lands have been excluded; it is apparent that they have been excluded for political reasons, rather than legitimate scientific reasons. As there is no scientific basis for excluding these lands from increased conservation protections for sage grouse, Alternative E cannot pass the PECE Policy's test of effectiveness, and therefore does not meet the Purpose and Need for this EIS.

Alternative E "recommends" no development of leasable minerals in sage grouse Core Areas, but applies no stipulations or withdrawals to guarantee that this recommendation will ever be implemented. DEIS a 4-56. This creates a regulatory certainty problem that prevents this alternative from meeting the Purpose and Need of addressing the threats that are leading to sage grouse ESA listing. In order to be meaningful, conservation measures need to be clearly articulated and certain in implementation, so that there is certainty that conservation measures will be applied in accordance with the best available science (and thereby be judged as "effective").

Alternative E contains no recommendation for withdrawal of sage grouse habitats from locatable mineral entry beyond withdrawals that exits today. DEIS at 4-57. Given the limited authority that BLM has to regulate the development of mining claims, this failure virtually assures that if and when mining claims are developed in sag grouse habitats. Major impacts will result. This alternative therefore fails to address this threat to sage grouse persistence.

Alternative E prescribes such weak protections from inappropriate grazing that it "[g]razing impacts would be similar to Alternative A" which is the current management. DEIS at 4-60. The current management represents a threat to the persistence of sage grouse, and therefore a package of livestock grazing measures that fails to improve on Alternative A also fails to address this threat. For this reason also, Alternative E fails to meet the Purpose and Need for the EIS.

Comment Number: OR-GRSG-0591-78

Comment Excerpt Text:

The National Technical Team Report prescribes a number of conservation measures for sage grouse General Habitat, the lands outside priority habitat. These include avoidance for the purposes of rights-of-way and enhanced riparian area protections, for example. The Oregon RMP amendment DEIS does not appear to consider alternatives to provide enhanced protections for sage grouse General Habitats of the type recommended in the National Technical Team report. Under current BLM policy, the agency must fully consider implementing the recommendations of the National Technical Team in at least one alternative, and this direction applies to General Habitats. This shortcoming should be addressed in the Final EIS, and General Habitats should be accorded the protections necessary to maintain viable populations of this BLM Sensitive Species.

We are concerned that the BLM has not fully considered the Sage-grouse Recovery Alternative or the National Technical Team recommendations in full, and has not provided sufficient explanation for why this has occurred.

Comment Number: OR-GRSG-0606-12

Comment Excerpt Text:

The most egregious omission of viable sage-grouse habitat from the DRMPA/DEIS planning area is the failure to include the Klamath Resource Area of the Lakeview District in the geographic scope of the RMPA. See DRMPA/DEIS at 1-7–10; 2-57. BLM must amend its scope of analysis so that the RMPA process applies to the Klamath RMP. If it does not, BLM completely disregards the Klamath OR/CA population—one of Oregon's five populations of sage-grouse—in this plan amendment.

Comment Number: OR-GRSG-0643-4

Comment Excerpt Text:

As proposed, disturbance caps are unworkable and violate BLM's responsibility to provide ROWs in the public interest under FLPMA. BLM must provide utilities and other entities the details of a workable system that they can use to plan and secure ROW approvals. APLIC directs BLM to Appendix F of the Northwest Colorado LUPA DEIS. The Oregon RMP FEIS should include a similar appendix detailing how the disturbance caps would be allocated, tracked, and monitored.

SECTION 4.4 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0025-15

Comment Excerpt Text:

Furthermore, most PPH maps appear to be developed without regard to actual habitat on the ground, resulting in the incorporation of non-habitat within the PPH areas. Given that there are many such areas within the PPH that do not provide habitat for sage-grouse, BLM's current definition of PPH is not only vague and inconsistent but also overly broad. Such a broad delineation of PPH will unnecessarily limit productive legitimate economic uses of these federal public lands.

Comment Number: OR-GRSG-0025-16

Comment Excerpt Text:

Both PPH and PGH maps should be amended in the RMPs based on site-specific data. Such amendments have already been made in Wyoming in response to public outcry regarding the original PPH and PGH designations in those states. Until this is corrected, PPH and PGH delineation should be subject to site-specific field evaluation as to their importance to local sage-grouse instead of simply prohibiting development. This would allow for this process to avoid blanket prohibition of wind development in large areas without appropriate site-specific evaluations first.

Comment Number: OR-GRSG-0093-19

Comment Excerpt Text:

[referring to page G-4]

The DEIS indicates that effectiveness monitoring will occur as a multi-scale analysis of habitat and disturbance monitoring data. The DEIS/RMPA needs to clarify what is being evaluated and when and how it is being evaluated. Since the analyses are supposed to 'roll up,' the DEIS needs to clarify how the current multi-scale analyses were ground-truthed in Oregon.

Recommendation: The DEIS needs to clarify how the current multi-scale analyses were ground-truthed in Oregon. If they were not ground-truthed, then the DEIS should state as much and the RMPA should call for ground-truthing before the analyses are applied.

Comment Number: OR-GRSG-0093-3

Comment Excerpt Text:

the DEIS does not sufficiently describe or discuss the no action alternative. This is pointed out in various ways in the discussion and comments that follows. One of the more glaring problems is the failure to accurately describe the existing protections that the grazing regulations and Oregon and Washington Standards for Rangeland Health ("RHS") provide to GRSG habitat and GRSG. The error precludes an accurate and careful examination of what is or may be needed for purposes of conserving GRSG habitat and whether another assessment, such as the Habitat Assessment Framework (in a form that was not defined in the DEIS), should be added to the RHS assessments ("RHSA"). The DEIS also fails to adequately describe baseline conditions with regards to grazing activities, as explained in some detail below. These and other deficiencies in the no action alternative and baseline description prevent a true comparison of the alternatives presented in the DEIS

Comment Number: OR-GRSG-0093-39

Comment Excerpt Text:

Habitat mapping, as described in detail in the Greater Sage-grouse Conservation Assessment and Strategy for Oregon (Hagen 2011) and summarized on Page 3-6 in the DEIS/RMPA, was to provide a broad-scale

filter to assist planners, county, state, and federal agencies to identify areas of high and low resource conflict. The core-area mapping was not intended to be used at the project scale, and therefore should not be used to define specific objectives or for approval of specific projects or disturbances. For example, Alternative C in the RMPA designates all PPH as an ACEC; however, the scale at which the mapping occurred is not appropriate for designation of an ACEC.

Comment Number: OR-GRSG-0093-81

Comment Excerpt Text:

Pages 2-19, 2-21 to 2-22, and 2-24 Focal Areas.

The BLM needs to explain how it determined what areas fall within the focal areas as defined on Pages 2-21 and 2-22. How did BLM determine that climate change would occur and would remove GRSG habitat to over 5000 feet elevation? For the high-density breeding focal areas, did the BLM confirm that leks are actually active? What level of confirmation occurred? Did the BLM field check these areas? If not, what type of data did it rely on? Absent this type of information, the public is unable to understand the rational and cannot evaluate the positions taken in the DEIS.

Comment Number: OR-GRSG-0152-3

Comment Excerpt Text:

We ask that the BLM review and incorporate into its final decision-making process the findings of a recent study, Central & Eastern Oregon Land Use Planning Assessment: Sage-Grouse Habitat (attached). This report provides a description of the Oregon Planning Program and how it is carried out at the local level. Specifically, the report looks at the central and eastern Oregon regions including all or portions of Baker, Crook, Deschutes, Lake, Harney, Malheur, and Union counties. The report identifies the overarching protections and land use safeguards that currently apply in all seven of Oregon's Sagegrouse counties. These include Urban Growth Boundaries to contain urban development, resource zoning that requires very large parcel sizes and limits development that is not related to farm, ranch, or forestry activities, and wildlife protection programs, some specific to GRSG

Comment Number: OR-GRSG-0185-1

Comment Excerpt Text:

I would also ask that you folks pick up a copy of the Spring 2013 "Range" magazine. Their phone number is 775-884-2200. This magazine has only been wrong less than a handful of times in probably 20 years. My point is the Range is one of the most thoroughly researched publications out there. There are two articles that pertain to the comments that I wish I had talent to convey to the BLM, USFS and the Fish and Wildlife Service and especially to the average citizen of these United States. The Sage Grouse articles start on Pg.22 of the Spring 2014 edition and end on Pg.27. Just so there is no confusion I'm enclosing my personal copy.

Comment Number: OR-GRSG-0199-3

Comment Excerpt Text:

However, in the RMPA/EIS, the BLM fails to recognize that habitat loss and fragmentation is primarily regulated and controlled by State and county LUPs, which raises the question of the need for the BLM to address habitat loss and fragmentation in the RMPA/EIS.

The 2013 Central & Eastern Oregon Land Use Planning Assessment found that "most habitat fragmentation threats (Mining, Energy Development, Infrastructure, Urbanization) are regulated by county comprehensive plans and zoning ordinances."

http://www.co.harney.or.us/PDF Files/Sage%20Grouse/County%20Sage%20Grouse%20 Regional%2OReport1142013.pdf. This planning effort was a collaborative planning effort among Baker, Crook, Deschutes, Harney, Lake, Malheur, and Union counties intended to address the threats to sage-grouse identified in the COT report. The report documents how counties consult with ODFW in making land use decisions and how implementation of the various counties' land use plans and ordinances are effective in conserving sage-grouse habitat and avoiding adverse impacts to sage-grouse.

Comment Number: OR-GRSG-0199-4

Comment Excerpt Text:

Notably, the RMPA/EIS contains no discussion of the 2013 Central & Eastern Oregon Land Use Planning Assessment, nor does it contain any discussion of the various counties' underlying LUPs and/or ordinances, which are discussed in the 2013 planning assessment. Further, while the RMPA/EIS does discuss the Oregon Sage-Grouse Strategy as an alternative (Alternative E), it does not evaluate its effectiveness in addressing habitat loss and fragmentation associated with mining, energy development, infrastructure, and urbanization.

Comment Number: OR-GRSG-0200-5

Comment Excerpt Text:

the RMPA/EIS contains no discussion of the 2013 Central & Eastern Oregon Land Use Planning Assessment, nor does it contain any discussion of the various counties' underlying LUPs and/or ordinances, which are discussed in the 2013 planning assessment.

Comment Number: OR-GRSG-0220-15

Comment Excerpt Text:

In reviewing the literature utilized by the USFWS in developing the Hart Mountain National Antelope Refuge Comprehensive Plan, Harney County notes with respect to the management of its own lands, the USFWS reached significantly different management findings relative to sage-grouse management than those being considered by the BLM in this Draft RMP for very similar environments. It is also notable that the BLM did not cite to either the Hart Mountain National Antelope Refuge Comprehensive Plan Environmental Impact Statement (1994) (HMNARCP/EIS) nor did it reference the scientific literature that was examined therein.

Comment Number: OR-GRSG-0220-3

Comment Excerpt Text:

As illustrated by the CEOLUPA it is clear that the USFWS did not take into account Oregon's local planning programs -including Harney County land use programs (See CEOLUPA, p. 63). Similarly, it is clear the BLM likewise did not undertake an independent review as required by FLPMA (Footnote 4: It appears that the BLM simply parroted the statements by the USFW and did not undertake an independent review) rather it simply restated the USFWS's conclusionary statement. While CEOLUPA does not take the place of coordination with individual counties, it does provide documentation to the BLM as to how counties' land use plans, policies and programs are effective in avoiding fragmentation of sage-grouse habitat.

The BLM violated FLPMA by failing to meaningfully evaluate the effectiveness of the various county plans, policies and programs in addressing fragmentation and habitat loss, an analysis that was necessary in order to properly determine whether there was a purpose or need to develop the RMP or to properly develop alternatives.

Comment Number: OR-GRSG-0221-1

Comment Excerpt Text:

Attached to this email is the "Central & Eastern Oregon Land Use Planning Assessment, Sage Grouse Habitat" produced and endorsed by the following counties as a collaborate report and analysis:

- Baker County
- Crook County
- Deschutes County
- Harney County
- Lake County
- Malheur County
- Union County

This is an initial-only submittal, as a more formal follow-up is currently underway. Our desire is to incorporate (submit for inclusion) this report into the EIS (Oregon Sub-Regional Greater Sage-Grouse Draft Resource Management Plan Amendments/Draft Environmental Impact Statement for the Oregon Sub-Region).

Comment Number: OR-GRSG-0226-4

Comment Excerpt Text:

Existing land use policies and how they may interact with the proposed RMPA amendments was studied by the various County land use planners from seven counties in the Oregon Study Area when they produced the Central and Eastern Oregon Land Use Planning Assessment (CEOPLA) and submitted the document to the BLM in an effort to inform the BLM of the high level of development regulation and land use authority that is administered by individual counties on a state wide basis. The CEOPLA report reviewed zoning, minimum lot sizes, urban growth boundaries, ag and forestry zoning, subdivisions, energy development and wildlife considerations that have been an influencing factor in diminishing fragmented landscapes in Oregon for decades. Private lands, comprising 31% of the landmass in the Oregon Study Area, are regulated by state and county land use plans that are arguably the most restrictive in the nation.

The BLM should analyze the CEOPLA and include a summary of the existing protective authority for the energy development, urban sprawl, mining and infrastructure concerns identified in the USFWS' COT Report. This information must be included for consideration in the final decision making process. The generated summary report should be included in a supplemental draft EIS to provide information for public review and comment.

Comment Number: OR-GRSG-0281 (FrmLtr11)-1

Comment Excerpt Text:

Landscape and midscale information, by definition, is a broad look at resources. Statements made at a broad landscape scale lack a basis for site-specific instruction. As a result the document should emphasize that landscape and midscale statements can only provide guidance and should not be used or interpreted as a controlling statements at the site-specific scale. Guidance can be helpful to provide direction for a goal, but at the scale Zone IV and Zone V have been described in this DEIS, the RMPAs can only use their local information to achieve the habitat quality and quantity set forth for a regional goal.

Comment Number: OR-GRSG-0333-3

Comment Excerpt Text:

However, in the RMPA/EIS, the BLM fails to recognize that habitat loss and fragmentation is primarily regulated and controlled by State and county LUPs which raises the question of the need for the BLM to address habitat loss and fragmentation in the RMPA/EIS.

The 2013 Central & Eastern Oregon Land Use Planning Assessment found that "most habitat fragmentation threats (Mining. Energy Development, Infrastructure. Urbanization) are regulated by county comprehensive plans and zoning ordinances http://www.co.harney.or.us/PDF_Files/Sage%20Grouse/County%20Sage%20Grousc%20Regional%20Report1142013.pdf. This planning effort was a col1aborativc planning effort among Baker, Crook. Deschutes, Harney, Lake, Malheur, and Union counties intended to address the threats to sage-grouse identified in the COT report. The report documents how counties consult with ODFW in making land use decisions and how implementation of the various counties' land use plans and ordinances are effective in conserving sage-grouse habitat and avoiding adverse impacts to sage-grouse.

Comment Number: OR-GRSG-0333-4

Comment Excerpt Text:

Notably, the RMPA/EIS contains no discussion of the 2013 Central & Eastern Oregon Land Use Planning Assessment. nor does it contain any discussion of the various counties' underlying LUPs and/or ordinances, which are discussed in the 2013 planning assessment. Further, while the RMPA/EIS does discuss the Oregon Sage-Grouse Strategy as an alternative (Alternative E), it does not evaluate its effectiveness in addressing habitat loss and fragmentation associated with mining energy development, infrastructure, and urbanization.

Comment Number: OR-GRSG-0532-136

Comment Excerpt Text:

All aspects of the DEIS must be supported by the most recent compilation of scientific information and management recommendations. The final EIS could be improved by citing current literature to substantiate statements and to add specificity. The DEIS does not adequately review the literature available and there are a number of new manuscripts in the peer-reviewed literature that address disturbance and conservation as related to GRSG that the DEIS does not incorporate.

Comment Number: OR-GRSG-0532-42

Comment Excerpt Text:

The State recommends that baseline data be provided using 2010 (the Warranted but Precluded determination date) as a starting point. As noted above, the scale of analysis to establish baseline protections for priority and general habitat must be defined. In addition, the final EIS should cite and utilize current peer-reviewed literature to address disturbance and conservation as related to GRSG. For example,

- Knick et al. 2013. Modeling ecological minimum requirements for distribution of GSG leks: implications for population connectivity across the western range, USA. Ecology and Evolution 6:1539-1551.
- Arkle et al. In press. Quantifying restoration effectiveness using multi-scale habitat models: implications for sage-grouse in the Great Basin. Ecosphere 5:XXX-XXX.

Comment Number: OR-GRSG-0591-1

Comment Excerpt Text:

We are concerned that BLM is excluding the John Day RMP from the RMP amendment process on the basis that no occupied habitat occurs on BLM lands in this area. DEIS at 1-5. However, the John Day Field Office contains mapped Preliminary Priority Habitat and Preliminary General Habitat. DEIS at Figure 1-2. It is our understanding that the John Day Field Office encompasses 10,952 acres of Preliminary Priority Habitat and 4,685 acres of Preliminary General Habitat, in addition to 24,801 acres of undesignated but currently occupied habitat. Even if there is no overlap between federal lands and occupied sage grouse habitats, BLM may manage federal minerals within sage grouse habitats in these areas. The John Day and Two Rivers RMPs should be included in this plan amendment, and all historical sage grouse range the John Day and Two Rivers Field Offices should be addressed with special measures to promote sage grouse restoration in the areas under the RMP Amendment. This should be done pursuant to the 2011 NOI, which included both Field Offices in question. See DEIS at 1-5.

We are concerned that the Oregon RMP amendment does not include national forest lands within the planning area, some of which represent occupied sage grouse habitat. See DEIS at 1-4. These units should be included in the plan amendment process, to ensure that forest plans can also successfully address the threats identified by the Conservation Objectives Team. We have seen no evidence that the Forest Service has its own plan amendment process underway for Oregon.

Comment Number: OR-GRSG-0591-16

Comment Excerpt Text:

This policy required BLM to update its Ecological Assessments of the Columbia Basin and Great Basin. Id. at 11. BLM should reference the findings of these reports as they apply to the Oregon planning area, in order for the BLM has not met its obligation to "use the best available science" including publications specifically mandated under the Strategy.

SECTION 4.5 - GIS DATA AND ANALYSIS

Comment Number: OR-GRSG-0007-2

Comment Excerpt Text:

One of my concerns is that the maps are not legible. There are no streams, rivers, county roads, or sections depicted on the maps. It is very difficult to ascertain where PGMA and PPMA areas are located.

Comment Number: OR-GRSG-0033-1

Comment Excerpt Text:

Many of the areas marked on the maps as sage grouse habit are not due to fire. The hundreds of thousands of acres of natural and prescribed fires have eliminated the sage grouse habitat in these areas and it will probably be another 50-75 years for it to possibly return. The BLM should have fire scar maps showing the accurate acres.

Comment Number: OR-GRSG-0127-2

Comment Excerpt Text:

The maps provided are not adequate, as they cannot be read. The roads, rivers, and creeks are not defined, so that an individual cannot adequately determine where exactly prime, and general Sage Grouse habitat is even located in Baker County.

Comment Number: OR-GRSG-0225-1

Comment Excerpt Text:

As can be viewed in the attached maps, a number of examples exist within Harney County that reflect Core habitat mapping considerations by ODFW as guided by local implementation teams. These removals/additions to the low density/core habitat mapped areas are labeled with simple note identifiers as found within the ODFW GIS mapping information (notes contained in meta data). The PPH/PGH designations are on private lands in addition to federal. Based on the PGH designations covering privately-held lands and no clear connection to the low density habitat work performed for the 2011 mapping effort, the Planning Department feels that a federal designation of PGH on these lands may be in conflict with the Harney County Comprehensive Plan and EFRU land use designations.

We request that an analysis be performed considering the low density mapping efforts performed by ODFW and the corresponding Local Implementation Teams, and to fix any mapping errors that may exist.

Attachments:

- ODFW Edits1.pdf
- ODFW Edits2.pdf

Comment Number: OR-GRSG-0225-2

Comment Excerpt Text:

The mapping of this particular area does not appear to be consistent with the Core Area mapping developed by the Oregon Department of Fish and Wildlife (ODFW). This is concerning as the ODFW Core Area mapping incorporates a local knowledge base ("local implementation team") which provided the agency knowledge of on the ground and future (permitted) development in select areas. In addition, the BLM's modeling does not account for the fully permitted "Echanis Wind Facility" within this specific location. The permit (conditional use permit) is an approval of the facility and its location based on local standards found within the Harney County Comprehensive Plan and its implementing ordinances. The BLM is fully aware of this project site, however this new mapping does not provide for this consideration.

Request:

We request that the mapping utilized for the Oregon Greater Sage-Grouse Draft RMP Amendment/EIS remove all permitted development sites located on private lands under the "PGH" mapping designation (e.g., Echanis Wind Energy Facility).

Comment Number: OR-GRSG-0276-37

Comment Excerpt Text:

Maps – The scale and level of detail makes it difficult to use them in determining potential impacts of the various Alternatives. BLM needs to provide more detail so reviewers can determine where they are on the map, provide larger scale maps, and make GIS data available. As of February 7, 2014, no GIS data were available on the project web site

Comment Number: OR-GRSG-0396-1

Comment Excerpt Text:

The maps available at the Lakeview BLM meeting January 13, 2014, don't accurately reflect grouse habitat - they need to be reviewed and updated. Many areas stated as grouse habitat are not and haven't

been for years due mostly to fire and juniper encroachment.

Comment Number: OR-GRSG-0400-1

Comment Excerpt Text:

Your planning area map identifying Sage Grouse habitat is also flawed. Many areas are designated as habitat, yet there is no documentation that a single sage grouse has ever been there. To be credible, the map must reflect only the areas that actually are habitat

Comment Number: OR-GRSG-0532-73

Comment Excerpt Text:

Pg. 2-6, Figure 2-1 - It is not clear from the figure that occupied habitat is also within PPH and PGH. The final EIS needs to clearly illustrate that PPH and PGH are considered occupied habitat as well. This figure could clarified in the text preceding the reference to Figure 2-1 on pg. 2-5.

Comment Number: OR-GRSG-0532-74

Comment Excerpt Text:

Pg. 2-20 Figure 2-2 (Alternative D) – State (DSL) ownership is included in the polygons depicting "GRSG Focal Areas". The State is open to participate in restoration efforts that complement BLM restoration projects however coordination is essential for projects occurring on State ownership. It should be noted that including State Trust Lands in Figure 2-2 (while correct) conflicts with Table ES-1 in the Executive Summary on pg. ES-3 (which incorrectly notes that there are no State Trust Lands).

Comment Number: OR-GRSG-0532-94

Comment Excerpt Text:

Pg. 3-96, O-10, Land Use Authorizations - Table 3-36, Active ROW Authorizations, does not appear to identify ROW appropriations/authorizations/ easements for material sources. However, Table O-9, Acres of Mineral Material Disposal Sites within GRSG Habitat, identifies more than 88,000 acres of mineral material disposal sites on BLM-administered lands and another 1,000 acres under State Surface Management. Notwithstanding, neither of these tables appear to include many of the ODOT material sites authorized via the Title 23 appropriation process.

Comment Number: OR-GRSG-0532-95

Comment Excerpt Text:

Pg. 3-119, Figure 3-9 - It would be preferable to see the Steens Mt. Wilderness (blue color) of Steens Coop Mgmt Area and its relationship to other designations such as PPH.

Comment Number: OR-GRSG-0547-3

Comment Excerpt Text:

Other significant flaws are found in the DEIS and the environmental review process. Mapping and geographic information necessary to the review of the DEIS are totally inadequate. My mining claims must, by regulation, be located by Township, Range, and Section Number to the nearest quarter-section. This information is maintained by the BLM in the LR-2000 database yet no graphic has been provided in the DEIS document to show the location and extent of existing mining claims in the study area. The only information provided is a summary summation of number of claims and total acreage. The capability to graphically display the locations of mining claims has been provided in the past through the BLM Geocommunicator GIS system but was discontinued. However, BLM still has the capability, and should have provided a graphical presentation of existing mining claims in the study area.

Comment Number: OR-GRSG-0623-1

Comment Excerpt Text:

Just recently observed by County Planning Staff was the mapping of PGH (Preliminary General Habitat) within the vicinity of private lands near "Man Lake Ranch" in Southern Harney County Oregon. (image below, map attached in .pdf format):

SEE ATTACHMENT for IMAGE 1

The mapping of this particular area does not appear to be consistent with the Core Area mapping developed by the Oregon Department of Fish and Wildlife (ODFW). This is concerning as the ODFW Core Area mapping incorporates a local knowledge base ("local implementation team") which provided

the agency knowledge of on the ground and future (permitted) development in select areas. In addition, the BLM's modeling does not account for the fully permitted "Echanis Wind Facility" within this specific location. The permit (conditional use permit) is an approval of the facility and its location based on local standards found within the Harney County Comprehensive Plan and its implementing ordinances. The BLM is fully aware of this project site, however this new mapping does not provide for this consideration.

Request:

We request that the mapping utilized for the Oregon Greater Sage-Grouse Draft RMP Amendment/EIS remove all permitted development sites located on private lands under the "PGH" mapping designation (e.g., Echanis Wind Energy Facility).

SECTION 4.7 - CUMULATIVE IMPACTS

Comment Number: OR-GRSG-0001-6

Comment Excerpt Text:

Although collaboration through the use of Candidate Conservation Agreements is mentioned, the alternative plans fail to incorporate these tools in any actions. Where are the voluntary incentive programs to encourage continued stewardship by the land users?

Comment Number: OR-GRSG-0025-14

Comment Excerpt Text:

The DEIS fails to identify reasonably foreseeable future actions. For example, the fact that there are 12 wind testing applications does not equate to reasonably foreseeable utility scale wind energy projects. We also question why hunting and predator control is determined to be outside the scope of the DEIS. The DEIS also fails to meaningfully identify the spatial scope of cumulative impact area for renewable energy.

Comment Number: OR-GRSG-0093-148

Comment Excerpt Text:

As noted throughout these comments, the DEIS/RMPA fails to identify and evaluate impacts. As a result, its cumulative impacts analysis is lacking in many regards. It does not adequately address fire, the spread of West Nile virus, predators, or the socio economic impacts of the RMPA. At a minimum, the BLM should include discussions of the following impacts in the cumulative impacts section:

Insert discussions within the Vegetation, Soils, Water, and Fish/Wildlife Cumulative Impacts Analyses:

1. The positive cumulative impacts that could result from Candidate Conservation Agreements (CCA) or the Candidate Conservation Agreements with Assurances (CCAA). The benefits from these agreements to GRSG are mentioned briefly on Page 5- 18. These agreements and the resulting benefits should be discussed, as they will be implemented within the "reasonably foreseeable future."

Comment Number: OR-GRSG-0226-7

Comment Excerpt Text:

Harney County has instigated, hosted and participated in a wide variety of activities and legislative resolutions to multiple resource management issues. It is unfortunate that these efforts were not adequately expressed within the RMPA/EIS as further evidence that Harney County not only supports the current effort to conserve sage-grouse but has had a historical leadership role in developing and resolving land management issues for many years that have a continued contribution to conserving sage-grouse habitat. Some of the obvious efforts are as follows:

1 - The Steens Mountain CMPA – includes cow free wilderness and a specific juniper management area

2 - Community Wildfire Protection Plan

3- Multiple Rural Fire Protection Associations

4 – Cooperative Weed Management Area

5 – CCA developed between BLM and Oregon Cattlemen's Association

6 – CCAA developed in Harney County with multiple agency, county government, SWCD, NRCS, BLM, USFWS, ODFW, ranchers, business and general public Participation

7 – High Desert Partnership that has facilitated Oregon Solutions projects

8 – Harney Basin Wetlands Initiative

9 – SWCD, NRCS, OWEB juniper and watershed improvement projects resulting in beneficial impacts to all species

10 – Malheur National Wildlife Refuge Collaborative CCP

11 – Harney County Forest Collaborative

These efforts should have been clearly addressed in the RMPA/EIS as a response to the suggestion of the lack of regulatory mechanisms. Although the activities of most of the groups listed above are not regulatory, they go one step further – they were voluntarily instigated to oversee and be proactively involved in the matter of managing natural resources in a positive, sustainable and productive manner in our community. Credit should be given to this State and especially the Harney County community for the implemented and ongoing efforts to manage resources in a holistic and on the ground approach. Take the opportunity to inform the public reviewing the RMPA of the multitude of the positive land management efforts that have been advanced on a totally voluntary basis because we care about our resources enough to act on that concern – not just litigate.

Comment Number: OR-GRSG-0281 (FrmLtr11)-45

Comment Excerpt Text:

Comment, Vol 2, page 5-18-19: There are a number of Candidate Conservation Agreements (CCAs) and Candidate Conservation Agreements with Assurances (CCAAs) in Oregon. Though none have been implemented, assuming they are signed, these are voluntary agreements whereby landowners agree to manage their lands to remove or reduce threats to GRSG. In CCAAs, landowners receive assurances against additional regulatory requirements should GRSG ever be listed under the ESA. These agreements are expected to enhance conditions for GRSG and improve habitat connectivity. ……..page 19… Though participation is voluntary and, thus, not a traditional regulatory approach, participating landowners are bound by contract. Usually three to five years in duration, the contracts require landowners to implement conservation practices in consultation with NRCS staff in order to re ceive financial incentives.

Solution: This section does not explain how these agreements with NRCS will impact the BLM lands.

Comment Number: OR-GRSG-0532-115

Comment Excerpt Text:

Pg. 5-4, Table 5-1 - This table represents a very comprehensive look at reasonably foreseeable actions, but doesn't this need to be taken further? What are the expected impacts on GRSG from these "foreseeable actions"?

Comment Number: OR-GRSG-0567-54

Comment Excerpt Text:

A Candidate Conservation Agreement, covering more than 10 million acres ofBLM ground, was signed in May of 2013 in partnership with the Oregon Cattlemen's Association, the BLM and the Service. We recommend acknowledging this agreement in the final EIS as part of the current effort to conserve sage-grouse and their habitats. The agreement outlines many conservation measures that are directly applicable to addressing the threat to sage grouse from grazing, including appropriate adaptive management, inventory and monitoring, etc. We note that appropriate Candidate Conservation Agreements that adequately address the threat to sage-grouse from grazing, if implemented, are likely to adequately address the threat to sage grouse from grazing through the implementation of conservation measures described therein.

Comment Number: OR-GRSG-0606-23

Comment Excerpt Text:

The DRMPA/DEIS fails to sufficiently look outside of the planning area for cumulative impacts. The BLM's National Sage-grouse Habitat Conservation Strategy calls for a regional analysis, and the DRMPA/DEIS should have looked outside of the RMP area in the cumulative impacts discussion. See WWP v Salazar, No. 04.08-cv-516-BLW (D. Idaho September 28, 2011).

The DRMPA/DEIS has failed to recognize that conservation and recovery of sage-grouse populations and habitats that span state borders should be coordinated and consistent. Arbitrary boundary designations ensure non-uniform management. Although sage-grouse populations span state lines, BLM is compartmentalizing the EISs based on its administrative units. As a result, some populations are likely to receive significantly different management under this process on one side of a state line than the other. And BLM is allowed to emphasize total grouse numbers, not individual populations, or habitats. In general, the DRMPA/DEIS needs to consider effects on sage-grouse populations in Idaho, Nevada, and California in concert with those in Oregon.

Comment Number: OR-GRSG-0643-3

Comment Excerpt Text:

APLIC is concerned that this RMP revision does not adequately consider neighboring states in its planning process. APLIC requests that BLM consider how decisions made for this RMP would affect decisions in neighboring states

SECTION 4.8 - DISTURBANCE CAP

Comment Number: OR-GRSG-0007-4

Comment Excerpt Text:

It is a concern that Appendix G states that agriculture is the #1 cause of disturbance. Nowhere does the document state whether existing agricultural practices, such as plowing, seeding, irrigating and cutting hay, are being considered as part of the 3% disturbance cap when these private lands are in PPMA. At the meeting in Ontario, BLM stated that fences and two track roads do not contribute to the percent of disturbance, but gravel and paved roads do. However, I cannot find this information in the GRSG PLAN, to confirm BLM's statements. Agricultural practices have taken place for over 100 years in Baker and Malheur Counties, and just like the power lines, BLM should consider that these fields "are likely fully manifested".

Comment Number: OR-GRSG-0026-3

Comment Excerpt Text:

Baker County is extremely concerned about how the BLM or any other agency calculates disturbances in the GRSG Plan. Nowhere in the plan does it summarize how each level of disturbance is calculated and how the buffer zones are determined. We assume that this will be included in the analysis of the Baker RMP but believe that this analysis should be provided in the document before the selection of an alternative. It will be Baker County's assertion that disturbance calculations in Baker County will need to be addressed through coordination with the Baker County Natural Resource Plan.

Comment Number: OR-GRSG-0027-4

Comment Excerpt Text:

In Table 2-6, Action D-SSS it states that this alternative will apply a 3% surface disturbance cap to anthropogenic disturbances (not including fire) in PPMA. Mitigation would be mandatory. Once the habitat disturbance cap is exceeded, no additional disturbance would be allowed until the disturbance is below 3%. In the wording of the document it states that Knick (2013) found that 99% of all leks were within this 3% and under disturbance cap to a range of 14% where the leks disappeared altogether. It would be good to have the cap higher than the minimum of 3% and possibly 5% to compromise and allow counties and the local economy work while still leaving the percentage buffer low enough for sage grouse. An example is Baker County is at a 2.5% cap currently, there is only a 0.5% increase and then all infrastructure and development would need to be stopped in GRSG areas. This does not seem reasonable.

Comment Number: OR-GRSG-0039-3
Comment Excerpt Text:
BLM Alternatives fail to state what the current Disturbance Cap level is

Comment Number: OR-GRSG-0276-55
Comment Excerpt Text:
The 3% disturbance cap that came out of the NTT report seems to be based entirely on professional judgment. Coincidently, research by Knick et al. (2013) later came up with a 3% threshold. However, the scale for which Knick suggest a 3% disturbance threshold is at an entirely different scale than what the BLM is proposing. They modeled greater sage-grouse presence based on known greater sage-grouse leks and measured variables for the 1-km2cell within which the lek was located, as well as in a 5- and 18-km radii surrounding the lek. Variables measured at a 18-km radius (11.2 miles) did not perform well and were dropped in subsequent analyses. This suggests that measured variables at this latter scale did not influence lek persistence. At the 5 km radius scale Knick et al. (2013) found that 95% of all active leks were in landscapes with <3% developed acreage. However, such results were not reported within a 1 km2 cell within which the lek was located or for each 1 km2 comprising the PPMA. According to Knick et al. (2013) an area of 2.4 km2 (0.9 mi2) could be developed in a 5-mile radius around an active lek (78.5 km2, or 30.3 mi2). This appears to be the smallest scale to be considered in PPMA. However, the RMPA DEIS, considers the 1 mi2 the smallest hierarchical arrangement allowing concentrated anthropogenic disturbance. Thus, Knick et al. (2013) study appears not to support the BLM's smallest scale at which anthropogenic disturbance is measured (30.3 mi2 versus 1 mi2 respectively). Furthermore, the RMPA/DEIS does not provide any guidance how the 3% disturbance cap at either the smallest hierarchal scale or the largest scale (PPMA) should be spatially applied.

Comment Number: OR-GRSG-0532-126
Comment Excerpt Text:
Under Alternative D, the BLM would apply a buffer system to manage fluid mineral development in and next to occupied habitat. Under this system leks would be surrounded by buffers of varying sizes in which NSO stipulations would apply (pg. 2-124). The State recommends that the BLM consider buffers which account for all seasonal use areas, including winter habitats. Surface use designations <4 miles are insufficient to protect GRSG populations because they fail to protect adequate habitat critical to fulfill the life history needs of GRSG, such as nesting, summer and fall, and winter habitats (e.g., Fedy et al. 2012, Coates et al. 2013).

SECTION 4.9 - MITIGATION MEASURES

Comment Number: OR-GRSG-0025-12
Comment Excerpt Text:
We further noted that Appx A, Required Design Features, proposes numerous features for fluid minerals but is unclear on whether they would apply to wind energy, which the DEIS likens to oil and gas field development. This should be clarified in the final DEIS.

Comment Number: OR-GRSG-0093-20
Comment Excerpt Text:
[referring to page G-4]

The DEIS states that monitoring is based on quantitative indicators. Quantitative is used to ascertain the amount (quantity) of a defined object or attribute. The word qualitative describes the characterization of an attribute by observation into a class or group. The DEIS lists landscape and midscale indicators as patch and disturbance size and number, linkage areas, landscape matrix and edge effects. These base units are qualitative (subjective characterization of patch, disturbance, edge and matrix) and are subject to significant observer error and errors associated with ground level accuracy.

Recommendation: The DEIS needs to correctly describe the data as qualitative and indicate their accuracy limitations. The RMPA needs to reflect and proscribe actions that reflect the limitations on data quality

Comment Number: OR-GRSG-0093-82

Comment Excerpt Text:

With regards to the restoration opportunity focal areas, the DEIS does not address whether the BLM coordinated its efforts with existing restoration efforts and plans for mitigation. It appears that BLM did intend to coordinate with other partners. However, the DEIS takes an apparent position that the BLM will determine what restoration should occur and where. This top-down approach is neither helpful, nor productive for GRSG. Further, it ignores the considerable GRSG expertise of other agencies. At Page 2-36, the DEIS itself recognizes the diversity of land ownership within GRSG and that state fish and wildlife agencies have primary responsibility for population level management of wildlife. The restoration efforts of the BLM should be coordinated and approached in light of these fundamental and uncontroverted facts.

Comment Number: OR-GRSG-0164-1

Comment Excerpt Text:

To ensure that all types of habitat would be covered under Alternative D's off-site mitigation, we recommend that the Final RMP A/EIS discuss whether the proposed Restoration Opportunity Areas provide adequate opportunities to mitigate unavoidable impacts to brood-rearing, winter and connectivity habitats.

Comment Number: OR-GRSG-0164-2

Comment Excerpt Text:

Precautionary Alternative and Adaptive Management

We are concerned that an adaptive management plan focused on addressing unintended negative impacts, " ... before consequences become severe or irreversible"s may not be sufficiently protective. Addressing negative impacts based on monitoring may not be sufficiently protective because it is more reactive than precautionary, and there is substantial uncertainty surrounding how GRSG populations will respond to increased protections and restoration efforts. A more precautionary approach would select relatively more protective measures now, and use adaptive management to relax them as GRSG populations incrcase or achieve sustainability.

The results in Table 4-3 "Projected Percentage of Sage-Grouse Habitat in Preferred Condition in the Oregon Sub-region After 10 Years" could provide an indicator of whether initial levels of protection are high enough. In Table 4-3, for example, Alternative D would result in a lower amount of GRSG habitat in preferred condition after 10 years than all of the other action alternatives. After 50 years, Alternative D would result in a relatively higher amount of habitat in the preferred condition. The short-term result runs counter to the Draft RMPA/EIS's conclusion that Alternative D, " ... would provide the highest level of protection for GRSG habitat of the action alternatives.."6 We believe a more precautionary approach to GRSG protection would result in high levels of both short and long-term benefits.

Comment Number: OR-GRSG-0276-24

Comment Excerpt Text:

The brief description of what the BLM hopes to present as a mitigation strategy following the completion of the NEPA process is inadequate. The lack of detail does not allow reviewers the opportunity to determine if mitigation will be appropriate for potential impacts. At a minimum, the Draft RMPA/EIS should provide a “menu” of mitigation project types; criteria for determining appropriate mitigation sites and priorities; expected benefits of each mitigation type; mitigation ratios; and monitoring and success criteria. This information should be provided before the Final EIS is completed and not after. By delaying the development of the mitigation requirements, the BLM has not provided a meaningful opportunity for comment; reviewers should be aware of the information the BLM is relying on when, and be able to make comments before, the BLM makes its final decision

Comment Number: OR-GRSG-0276-26

Comment Excerpt Text:

In addition to mitigation ratios, one of the greatest areas of controversy when project proponents are

working with agency staff is how to quantify mitigation measures that are not measured in acres and correlate those measures to impacts that are measured in acres. For example, fence marking is often proposed as a mitigation measure, but there is no agreed on method to equate x miles of fence marking to y acres of habitat.

Comment Number: OR-GRSG-0276-30
Comment Excerpt Text:
Text: Pg. 2-33, 4th para.

2.7.1 Adaptive Management and Monitoring

This RMPA/EIS contains a monitoring framework plan (Appendix G, Greater Sage-Grouse Monitoring Framework), which includes an effectiveness monitoring component

The information collected through the Monitoring Framework Plan outlined in Appendix G would be used by the BLM to determine when adaptive management hard and soft triggers (discussed below) are met.

Comment: Only a draft of the Monitoring Framework is provided (Appendix G), with insufficient detail to provide a meaningful opportunity to comment. There is insufficient information provided to determine what monitoring efforts will be implemented by the BLM and if these monitoring efforts will support mitigation measures and to what extent. The Draft Monitoring Plan falls short of what can be reasonably expected of a DEIS to provide a meaningful opportunity to comment.

Comment Number: OR-GRSG-0276-54
Comment Excerpt Text:
Text: Pg. C-3. Appendix C. Required Design Features

For Alternatives B, C, D, E, F

- Fit transmission towers with anti-perch devices (Lammers and Collopy 2007).

Comment: Mesmer et al. (2013) reviewed available information on the effectiveness of perch deterrents and concluded that these devices had not proven effective in eliminating raptor or corvid perching on transmission and distribution lines (APLIC 2006, Lammers and Collopy 2007). In fact, perch deterrents may encourage raptors and corvids to nest on structures and may increase the level of risk of electrocution for raptors. IPC encourage the BLM to evaluate the effectiveness and suitability of perch deterrents for powerline structures.

Comment Number: OR-GRSG-0532-134
Comment Excerpt Text:
Coordination and communication with adjacent land owners prior to implementing management decisions (i.e., during the planning process) is essential and should be explicitly included in this DEIS. Such coordination is the key to improving overall landscape and rangeland health. The State should be included where there are recommendations for adaptive management working groups to assist with responding to soft adaptive management triggers".

Comment Number: OR-GRSG-0547-5
Comment Excerpt Text:
The stated purpose of the EIS is to revise RMPs to protect the Oregon Sage-Grouse and answer USFWS criticisms. Many significant new management activities are proposed in the DEIS. Yet there is no monitoring plan recommended as part of the DEIS to determine the success or effectiveness of the proposed management actions. It is stated that a joint BLM-USFS plan is being developed, but there is no coherent formal plan included as part of the DEIS. An effective monitoring plan is a necessary part of the EIS process in order to evaluate the success of the implemented actions.

Comment Number: OR-GRSG-0567-10
Comment Excerpt Text:
wc arc unsure based on the progress made to datc and this draft EIS (in the preferred alternative) if and how such a plan coordinates with the BLM's regional mitigation policies or addresses our mitigation principles and standards as outlined in the Framework. This concern is highly significant because it directly affects the level of certainty that the final

RMPs/ETS provide with regard to how impacts are to be avoided and how unavoidable impacts will be addressed.

Comment Number: OR-GRSG-0567-11

Comment Excerpt Text:

we strongly recommend that a clear description of coordination and integration with the State's mitigation plan be included in the final EIS to provide assurance for how impacts will be avoided and unavoidable impacts will be mitigated.

Comment Number: OR-GRSG-0567-46

Comment Excerpt Text:

Intra- and interstate coordination, to promote a landscape-scale effort, should also be outlined. Specifically, a clear description of coordination/overlap with the State's mitigation plan should be included in the final EIS to provide assurance for how impacts will be avoided and unavoidable impacts will be mitigated to achieve no net loss/net benefit to sage-grouse. The program administrator(s) - the entity(s) with enforcing authority for the establishment, operation, and management of compensatory mitigation projects - should be clearly defined.

Comment Number: OR-GRSG-0567-7

Comment Excerpt Text:

The adequacy of any proposed disturbance cap, then, can only be assessed in conjunction with the standards and principles underlying that mitigation framework, the effectiveness, durability and additionality contained in mitigation actions, and the amount of mitigation required for impacts. The draft EIS lacks an adequate description and analysis of a mitigation program and its relationship to the disturbance cap.

Comment Number: OR-GRSG-0567-9

Comment Excerpt Text:

We are concerned that the draft EIS is largely silent on how mitigation, monitoring (effectiveness and implementation monitoring), and adaptive management will be integrated into a comprehensive management strategy for all the management actions and conservation measures included as part of all the action alternatives. Based on the information contained in the draft EIS, it will be difficult for us to conclude that effective, reliable, and coordinated mitigation will occur via the BLM RMPs.

Comment Number: OR-GRSG-0591-2

Comment Excerpt Text:

The failure to look at the full range of reasonable alternatives is related to BLM's duty in any environmental analysis to develop, study, analyze and adopt mitigation measures to protect other resources. The ability to adopt post-leasing mitigation measures – see 43 C.F.R. § 3101.1-2 – is quite broad, as all reasonable measures not inconsistent with a given lease may be imposed by BLM. This is particularly true given that BLM, pursuant to FLPMA, must manage public lands in a manner that does not cause either "undue" or "unnecessary" degradation. 43 U.S.C. § 1732(b). Put simply, the failure of BLM to study and adopt these types of mitigation measures – especially when feasible and economic – means that the agency is proposing to allow this project to go forward with unnecessary impacts to public lands, in violation of FLPMA.

SECTION 5 - FLPMA

Comment Number: OR-GRSG-0025-11

Comment Excerpt Text:

any EIS's "purpose and need" statement should focus on the diverse uses that federal lands should promote, including renewable energy development. While sage-grouse conservation must be pursued, it should not overly burden the advancement of other productive activities. Federal law makes clear that an EIS governing land management plans must "recognize competing values." The principles of multiple use and sustained yield should play a central role in framing the DEIS considering that both BLM and the FS maintain multiple use mandates for their land that trump single-species management.

Comment Number: OR-GRSG-0025-6

Comment Excerpt Text:

This sage-grouse management policy described in the NTT Report, in conjunction with the NOI and the IMs, elevates sage-grouse management above other multiple uses on the federal public lands. This is the case even though BLM and the FS have established their multiple-use management mandate, which trumps single-species management, in the Federal Land Policy and Management Act of 1976, as amended, (FLPMA), the National Forest Management Act of 1976 (NFMA), and the Multiple-Use Sustained-Yield Act of 1960.

Comment Number: OR-GRSG-0025-9

Comment Excerpt Text:

the strict single-species management being pursued by BLM and the FS through the current sage-grouse policy is clearly a violation of the multiple-use policy that Congress has repeatedly declared in several federal statutes and the balancing of interests that those statutes require. In other words, to manage these public lands for the protection of a single species and categorically limit other interests on specified land is clearly inconsistent with the statutory intent of both FLPMA and NFMA. Consistent with these statutes, BLM and the FS should manage federal public lands pursuant to the multiple-use and sustainable-yield mandates and not rule out certain activities on those lands, such as excluding important uses, including renewable energy development, from certain areas.

Comment Number: OR-GRSG-0093-83

Comment Excerpt Text:

The DEIS/RMPA indicates that changes to restoration opportunity and high-density breeding areas focal areas would only occur every ten years. And, in climate change consideration focal areas, boundary changes would be made every 20 years. As recognized in the DEIS, land use plans are intended to operate on a ten year cycle. On Page 2-13, 2nd paragraph, the DEIS states that "Restrictions on resource uses (e.g. Areas closed to leasing) made through this amendment apply for the life of the RMPs." FLPMA requires land use agencies to review their land use plans after 10 years and complete a plan revision to insure the document is still relevant. It is beyond the scope of the document and inconsistent with federal law to prevent boundary changes for a twenty year period

Comment Number: OR-GRSG-0145-12

Comment Excerpt Text:

Multiple Use Mandate

The DEIS puts sage grouse at the center of nearly every management decision. While avoiding a listing of the bird is commendable, BLM must not forget its statutory multiple-use mandate. Furthermore, multiple-use management is a wise management approach: according to Davies et al. 2011, "Successful management of ecosystems threatened by multiple stressors requires development of ecosystem conservation plans rather than single species plans."

SECTION 5.2 - CONSISTENCY WITH OTHER STATE, COUNTY, OR LOCAL PLANS

Comment Number: OR-GRSG-0003-1

Comment Excerpt Text:

As a local government under Oregon law, it is our expectation that the Bureau of Land Management ("BLM") will extend to The District a meaningful opportunity to consult, cooperate, and coordinate in the process of finalizing the RMPA, consistent with Department on Interior ("DOI") regulations for the implementation of NEPA:

43 CFR § 46.155 - Consultation, coordination, and cooperation with other agencies.

The Responsible Official must whenever possible consult, coordinate, and cooperate with relevant State, local, and tribal governments and other bureaus and Federal agencies concerning the environmental effects of any Federal action within the jurisdictions or related to the interests of these entities.

There is no question that the management provisions for the conservation of the greater sagegrouse ("GRSG") proposed in the RMPA will result in

"environmental effects" that are "related to the interests" of this District, and to the community it serves. We therefore thank you, in advance, for extending to The District—prior to the finalization of the RMPA—an invitation to consult, cooperate, and coordinate with the BLM regarding our comments below.

Comment Number: OR-GRSG-0025-13

Comment Excerpt Text:

The DEIS states that BLM and the FS recognize the importance of state and local plans, as well as plans developed by other federal agencies and tribal governments, and will strive to be consistent with or complementary to the management actions in these plans whenever possible. However, it appears that the agencies did not consider how their following planning efforts conflict with: (1) the BLM Manual 6840 Special Status Species Management; and (2) Wind PEIS and BMP approach. See 40 CFR 1502.16(c) (requiring the consideration of "[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned").

Comment Number: OR-GRSG-0164-3

Comment Excerpt Text:

Consistency with the USFWS's Evaluation Criteria for Conservation Plans7

To support the USFWS' s eventual evaluation of this conservation plan, we recommend that the Final RMPA/EIS include additional information on the action alternatives' consistency with the USFWS's Evaluation Criteria for Conservation Plans. The evaluation criteria are (i) the certainty that the conservation effort will be implemented, and, (ii) the certiainty that the conservation effort will be eftective. Consider including the following information:

- the relative certainty of adequate resources for full implementation (i.e., funding, conservation pminers etc.) under the alternatives;
- the relative consistency of the alternatives with existing management practices and regulations;
- indications of where procedural requirements, like further Land Use Plan amendments or acts of congress, would be required to implement a conservation measure;
- the relative reliance on voluntary participation to meet conservation objectives;
- a comparison of implementation schedules;
- indications that all necessary parties will approve required agreements - such as for collaborative monitoring efforts;
- more detailed comparisons of how the alternatives' conservation measures would reduce identified threats;
- incremental conservation objectives and dates for achieving them;
- quantifiable and scientifically defensible parameters that will demonstrate achievement of objectives;
- provisions for implementation and effectiveness monitoring.

Comment Number: OR-GRSG-0199-2

Comment Excerpt Text:

FLPMA accords State and local land use plans (LUP), including county plans, special standing. FLPMA requires the BLM to "coordinate" land use planning and management activities with the land use planning and management programs of States and local governments and, further, to ensure that BLM land use plans be "consistent with State and local plans to the maximum extent ... consistent with Federal law." 43 U.S.C. § 1712(c)(9). In this situation, while the BLM makes vague, casual references purporting to have considered State and county LUPs, the BLM failed to evaluate the scope and effectiveness of State and county LUPs in the context of the threats to sage-grouse identified in the 2010 FW listing decision, thereby rendering the BLM's statement of purpose and need and development of alternatives inadequate.

Comment Number: OR-GRSG-0199-5

Comment Excerpt Text:

Pursuant to FLPMA, BLM was required to evaluate and coordinate its planning effort with applicable State and county LUPs, including developing the statement of purpose and need and in developing alternatives. Here, the BLM violated FLPMA by failing to meaningfully evaluate the effectiveness of State and county LUPs in addressing habitat loss and fragmentation associated with mining, energy development, infrastructure, and urbanization in order to determine whether there is a true purpose and need to make amendments to the RMP addressing these factors. At the very least, FLPMA requires the BLM to explain why State and county LUPs are insufficient regulatory mechanisms for addressing the threats of habitat loss and fragmentation in the context of the threats identified in the FWS 2010 listing decision and within the purview of the counties, as recognized in the 2013 Central & Eastern Oregon Land Use Planning Assessment. Such an explanation is wholly absent from the RMPA/EIS, in violation of FLMPA

Comment Number: OR-GRSG-0200-1

Comment Excerpt Text:

On the whole, the Grant County Court questions whether the BLM has adequately considered the current application of local land use plans, including the plans of affected counties, and the Oregon Department of Fish and Wildlife's (ODFW) sage-grouse conservation strategy in determining whether BLM needs to take any action with respect to certain risk factors the FWS discussed in its 2010 listing decision but which are primarily within the jurisdiction of State and local governments.

Comment Number: OR-GRSG-0200-4

Comment Excerpt Text:

In its 2010 listing decision, the FWS identified habitat loss and fragmentation as the biggest threat to sage grouse. List. Dec. at 21. FWS estimates that "almost half of the sagebrush habitat estimated to have been present historically has been destroyed" through habitat conversion to agriculture, urbanization, infrastructure, fire, invasive plants and other causes. Similarly, in the FWS' 2013 Conservation Objective Team report (COT report), the COT identified habitat fragmentation, wildfire and the proliferation of invasive weed species as the primary and most recent risks to habitat in Oregon. However, in the RMPA/EIS, the BLM fails to recognize that habitat loss and fragmentation is primarily regulated and controlled by State and county LUPs, which raises the question of the need for the BLM to address habitat loss and fragmentation in the RMPA/EIS.

Comment Number: OR-GRSG-0200-6

Comment Excerpt Text:

Pursuant to FLPMA, BLM was required to evaluate and coordinate its planning effort with applicable State and county LUPs, including developing the statement of purpose and need and in developing alternatives. Here, the BLM violated FLPMA by failing to meaningfully evaluate the effectiveness of State and county LUPs in addressing habitat loss and fragmentation associated with mining, energy development, infrastructure, and urbanization in order to determine whether there is a true purpose and need to make amendments to the RMP addressing these factors. At the very least, FLPMA requires the BLM to explain why State and county LUPs are insufficient regulatory mechanisms for addressing the threats of habitat loss and fragmentation in the context of the threats identified in the FWS 2010 listing decision and within the purview of the counties, as recognized in the 2013 Central & Eastern Oregon Land Use Planning Assessment. Such an explanation is wholly absent from the RMPA/EIS, in violation of FLMPA.

Comment Number: OR-GRSG-0203-1

Comment Excerpt Text:

Finally the BLM designation of PGH on private land recently reviewed and approved (without appeal or protest) for land use by Harney County undermines local government without any attempt in communication from the BLM

Comment Number: OR-GRSG-0203-2

Comment Excerpt Text:

No attempt has been made by the BLM to coordinate on the county land use plan and/or the fully and legally permitted Project

Comment Number: OR-GRSG-0220-2

Comment Excerpt Text:

In a nutshell, FLPMA requires that when a resource management plan or amendment can be consistent with the Harney County Land Use plans and policies without being inconsistent with the laws and regulations applicable to the public lands, then the BLM is required to select the alternative that is consistent with the County's plans and policies. In this case, the BLM only made vague, casual references wherein it purports to have considered the local plans. It failed to provide any discussion that demonstrates that it in fact met its required evaluation as to the scope and effectiveness of the local plans in the context of the threats to sage-grouse identified in the 2010 USFWS's listing decision. Not only has the BLM failed to undertake an evaluation as to whether its alternatives are consistent with the County's plans and policies, it has also failed at the initial step to even discuss the plans and policies.

To fulfill the FLPMA requirements the BLM needs to not only effectively coordinate with Harney County, it must also undertake a consistency review which examines at a minimum the Harney County Zoning Ordinance; Harney County Subdivision and Partitioning Ordinance; the Central & Eastern Oregon Land Use Planning Assessment ("CEOLUPA"); Harney County Cooperative Weed Management Agreement; Harney County Community Wildfire Protection Plan; Harney County Multi-Jurisdiction Natural Hazards Mitigation Plan; Harney County Transportation Plan; Harney County Renewable Energy Plan; and, the goals as set forth in the Harney County Comprehensive Plan. (Footnote 2: These plans and policies have been provided to the BLM or are publically available. In many cases the BLM was an active participant in the development of these plans and policies.)

Comment Number: OR-GRSG-0220-5

Comment Excerpt Text:

Rather than assure that all of the proposed alternatives are consistent with the State of Oregon's officially approved and adopted resource plan, the BLM merely creates a separate Alternative E. While it compares the State of Oregon plan to the other alternatives, it never addresses whether these alternatives are consistent with the State plan or which federal laws prevent the BLM from being consistent with the State of Oregon's plan.

Comment Number: OR-GRSG-0220-6

Comment Excerpt Text:

In addition to its failure to consider Harney County's and the State of Oregon's plans, policies and programs, the BLM also has failed to address whether it has coordinated with the Crane Rural Fire District; the Frenchglen Rural Fire Protection District; the Riley Rural Fire Protection District; or, the Fields Rural Fire Protection District. Further, there is no discussion as to whether the alternatives are consistent with these districts' plans, policies or programs.

Comment Number: OR-GRSG-0283-1

Comment Excerpt Text:

Despite the Oregon Counties' sincere efforts to work with the BLM this Draft RMP Amendments/Draft EIS was sent to the public before BLM fully Coordinated with the Oregon State plan developed by the ODFW, Oregon Counties and other local government Land Use Plans to resolve inconsistencies between the BLM's planning efforts and local land planning efforts, as required under FLPMA in essence no local Coordination. As a result of this lack of Coordination it will be hard for the USFWS to declare or show it meaningfully engaged a lawful process to defend that there is sufficient local regulation for protection and or enhancement of the sage grouse

Comment Number: OR-GRSG-0333-2

Comment Excerpt Text:

FLPMA accords State and local land use plans (LUP), including those of Malheur County, special standing.

FLPMA requires the BLM to "coordinate" land use planning and management activities with the land use planning and management programs of States and local governments and, further, to ensure that BLM land usc plans be "consistent with State and local plans to the maximum extent ... consistent with Federal law." 43 U.S.C. § 1712(c)(9}. In this situation while the BLM makes vague, casual references purporting to have considered State and county LUPs, the BLM failed to evaluate the scope and effectiveness of State and county LUPs in the context of the threats to sage-grouse identified in the 2010 FW listing decision thereby rendering the BLM's statement of purpose and need and development of alternatives inadequate.

Comment Number: OR-GRSG-0333-5

Comment Excerpt Text:

Pursuant to FLPMA, the BLM was required to evaluate and coordinate its planning effort with applicable State and county LUPs, including developing the statement of purpose and need and in developing alternatives. Here, the BLM violated FLPMA by failing to meaningfully evaluate the effectiveness of State and county LUPs in addressing habitat loss and fragmentation associated with mining, energy development, infrastructure, and urbanization in order to determine whether there is a true purpose and need to make amendments to the RMP addressing these factors. At the very least, FLPMA requires the BLM to explain why State and county LUPs are insufficient regulatory mechanisms for addressing the threats of habitat loss and fragmentation in the context of the threats identified in the FWS 2010 listing decision and within the purview of the counties, as recognized in the 2013 Central & Eastern Oregon Land Use Planning Assessment. Such an explanation is wholly absent from the RMPA/EIS, in violation of FLMPA.

Comment Number: OR-GRSG-0333-6

Comment Excerpt Text:

Because the BLM did not undertake its coordination and consistency review obligations required by FLPMA, the BLM fails to recognize the impact avoidance and mitigation measures that State and local LUPs require and which reasonably ensure the conservation of sage-grouse habitat and populations.

SECTION 6 - OTHER LAWS

Comment Number: OR-GRSG-0022-1

Comment Excerpt Text:

In addition, the Auburn Ranch is underlain by federal mineral estate where I have located valid mining claims. The area where I will be mining is not within designated grouse habitat, however, my concern is the assumption on page 4-199 where the EIS states, "Management actions to prevent unnecessary or undue degradation also apply to locatable mineral activity on lands overlying federal mineral estate. This includes federal mineral estate underlying BLM administered lands and land not administered by BLM."

Currently, BLM has no authority to restrict or even administer mining operations on split estate lands, (private lands patented under the Stock Raising Homestead Act of 1916). I have an approved Conditional. Use permit with the County, a DOGAMI permit with the State and settling pond permits with DEQ. If BLM can get Congress to amend the law, or the President acts without Congress, not just SRHA minerals in grouse habitat would be subject to BLM administration, but all SRHA minerals would be subject.

Comment Number: OR-GRSG-0025-8

Comment Excerpt Text:

In the Energy Policy Act of 2005, Congress called for approval of non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity within ten years of the enactment of the act. Furthermore, on May 18, 2001, President Bush issued Executive Order (E.O.) 13212, "Actions to Expedite Energy-Related Projects," establishing the policy that federal agencies should take appropriate actions, consistent with applicable law, to expedite projects to increase the production, transmission, or conservation of energy.

To effectuate E.O. 13212, the National Energy Policy recommendation to increase renewable energy production, and the Energy Policy Act of 2005, BLM adopted the Wind Energy Development Program on December 15, 2005, which called for the amendment of multiple land use plans to specifically address wind development. And, on December 19, 2008, BLM "updated guidance on processing right-of-way applications for wind energy projects on public lands administered by [BLM]" in the Wind Energy Development Policy. The Wind Energy Development Policy continues to promote wind energy as an accepted use of federal public lands. As mentioned above, as part of the Climate Action Plan, the president recently directed the Department of the Interior to permit another 10,000 megawatts' worth of renewable-electricity projects on public lands.

Renewable energy development thus is an appropriate use of the federal public lands pursuant to the multiple-use and sustainable-yield mandates under FLPMA and NFMA. Nevertheless, the new sage-grouse management policy substantially limits opportunities for renewable energy growth given the limitation of all discrete anthropogenic disturbances on just 3 percent of sage-grouse habitat across all land ownerships.

Comment Number: OR-GRSG-0026-13

Comment Excerpt Text:

Where Alternative B really falls short is in the area of locatable minerals. Alternative D reflects the fact that BLM has sufficient laws and regulations in place to administer locatable minerals operations within PPMA. Alternative B reflects the current administration's view that mining cannot be controlled, and thus, huge tracts of mineral withdrawal are necessary. This is a short-sighted view of the industry. As stated above, the 43CFR3809 and 3715 regulations are sufficient to handle proposed exploration and mining in grouse habitat. Conservation measures will be a part of each Plan of Operation. Mining is a public benefit, it is authorized by law, including the Mining and Minerals Policy Act, and all Federal agencies are required by law to facilitate the orderly development of the locatable minerals resource. Thus, "an approach in avoiding new mining activities" would be illegal.

Comment Number: OR-GRSG-0152-8

Comment Excerpt Text:

Alternatives A, B, C, E, and F all propose additional acres of mineral withdrawals. Withdrawals of the magnitude proposed in these Alternatives are in conflict with FLMPA's multiple use mandate and the Mining and Minerals Policy Act of 1970, which mandates the BLM to facilitate the orderly and economic development of the mineral resources

Comment Number: OR-GRSG-0192-6

Comment Excerpt Text:

13) The Bureau of Land Management is acting in an arbitrary and capricious manner by setting aside a preexisting policy language as found in RS 2477, as found in the Burr Trail case (Sierra Club v. Hodel (10th Cir. USCA, 1988. 848 F.2d 1068). Routes of travel in existence on the day in 1976 that FLPMA was enacted are legally rights of way in the public domain. They were granted expressly by the law and, because they are public, may not be abandoned. From the legal perspective, as they are public ways, the ownership of these routes lies with the County where they are located and state and county laws control usage. The court found that RS 2477 rights do in fact exist and the perfection of these rights arise, and are self-executing, with use. The routes then become rights of way vested in the public (through County ownership--the Burr Trail was found to be owned by Garfield County). This is the "beaten path" doctrine. The court decided that because the grantor, the Federal government, was never required to ratify a use on a RS 2477 right of way, each use, and new use (more traffic), automatically vested as an incident to the easement itself. Thus, all uses before October 21, 1976 (the enactment date of FLPMA), whether at that time the route was a Jeep road or a superhighway, not expressly terminated or surrendered, are part of the RS 2477 right of way.

Comment Number: OR-GRSG-0220-22

Comment Excerpt Text:

The imposing of federal surface use limitations on the development of oil, gas, mineral and material development on lands wherein the State of Oregon retained the mineral estate raises constitutional issues. There are various lands within the study area wherein the State of Oregon exchanged surface estates with the United States, yet retained the oil, gas, mineral and material rights underlying these lands. These retained subsurface estates represent constitutional Common School Fund trust lands which are mandated by both the Oregon Admissions Acts and the Oregon Constitution to be used solely for the benefit of the Common Schools. The closing of these lands to leasing - whether in PPH/PPMA Core Areas or in low density areas - is an issue that needs to be addressed not only in the context of Oregon law wherein the subsurface estate is the dominant estate, but also, in the context of these being constitutionally dedicated mineral estates

Comment Number: OR-GRSG-0230-5

Comment Excerpt Text:

The BLM fails to meet the Purpose and Need by not providing an analysis and an array of alternatives that address the Five Factors of Section 4 of the Endangered Species Act (16 U.S.C. 1533) and implementing regulations (50 CFR part 424) that the USFWS must consider for final determination in listing a species as endangered.

Comment Number: OR-GRSG-0283-2

Comment Excerpt Text:

Under 4.1.1 Analytical Assumptions it is stated "RFD scenarios or supporting mineral potential reports were not completed for locatable minerals, salable minerals, conventional leasable minerals, or nonenergy leasable minerals", thus BLM has not determined the economic benefits forgone by the deliberate curtailment of present and future development of minerals in violation of congressional intent 30 USC 21a and paragraph 46 of the Sustainable Development Minerals Application signed by both BLM and FS Directors 10-22-03 and under the Federal land disposal laws as well as, 30 USC 21-54 and the Executive Order 12630

SECTION 7 - SAGE GROUSE

SECTION 7.1 - NTT REPORT/FINDINGS

Comment Number: OR-GRSG-0025-1

Comment Excerpt Text:

The NTT Report establishes several requirements that are not adequately supported in the record and, therefore, not reasonably justified. First, the NTT Report states: "Within priority habitat, a minimum range of 50-70 percent of the acreage in sagebrush cover is required for long-term sage-grouse persistence." This range relies on a number of studies, each including complex statistical analyses that used different techniques and measured sagebrush cover at varying distances. The lower limit for the percentage of sagebrush cover in these studies, however, is between 25-30 percent; the upper limit is between 50-65 percent. Therefore, without providing support for this conclusion, the NTT Report unjustifiably increases the range to 50-70 percent. Furthermore, the NTT Report failed to consider how much sage-grouse habitat actually includes over 50 percent of the acreage in sagebrush-dominated cover, given the number of wildfires that have occurred in the last five to ten years. In other words, in reality, part of the area currently designated as PPH likely does not meet the 50 percent sagebrush standard due to recent fires. Thus, this standard should be stated as a goal to be achieved if adequate data is found to sustain it, rather than be put forth as a requirement.

Comment Number: OR-GRSG-0025-2

Comment Excerpt Text:

The NTT report also requires: "Manage[ment of] priority sage-grouse habitat so that discrete anthropogenic disturbances cover less than 3% of the total sage-grouse habitat regardless of ownership." The basis for this recommendation is cited as "professional judgment" derived from several studies cited in the report. All of these studies, however, were conducted in non-wind energy development

areas, which are very different from and orders of magnitude larger and more complex than a typical wind project. The assumption that sage-grouse will respond to an individual wind project in the same way that they respond to other development activities that are several orders of magnitude larger is questionable and should not be relied upon without further support for such a conclusion.

Comment Number: OR-GRSG-0026-20

Comment Excerpt Text:

NTT Report and 3%: The NTT Report on pages 19-21 lists a series of studies on grouse, and discusses how surface disturbance may affect grouse at varying distances. The surprising conclusion on page 21 states, "for these reasons, we believe the conservation strategy most likely to meet the objective of maintaining or increasing sage grouse distribution and abundance is to exclude energy development and other large scale disturbances from priority habitats, and where valid existing rights exist, minimize those impacts by keeping disturbances to 1 per section with direct surface disturbance impacts held to 3% of the area or less". How the writers of the NTT report could look at the information on grouse behavior and disturbances, many of which were done in Wyoming where 4% is considered protective, and come to the conclusion that 3% is the magic figure to maintain the birds is beyond good science. The limit in the NTT Report on the percent of land that can be disturbed is unsupported, arbitrary, and will have a dramatic adverse impact on multiple-use activities.

In addition, this figure conflicts with the required 5% figure found on page F-7, and F-11 for Alternative D. On page F-1, the GRSG PLAN states, "This appendix lists by alternative, surface stipulations for geothermal and oil and gas leasing referred to throughout this Resource Management Plan Amend (RMPA) and Environmental Impact Statement (EIS). These surface stipulations would also apply, where appropriate and practical, to other surface-disturbing activities (and occupancy) associated with land use authorizations, permits, and leases issued on BLM-administered lands". The sage grouse habitat is at the goal level for the state, populations in Eastern Oregon are at ODFW goal numbers, the bird numbers are not only stable but on the increase, the trend is upward. The threshold of disturbance for monitoring should be 4%-5%.

Comment Number: OR-GRSG-0101-3

Comment Excerpt Text:

The NTT report is incorrect in saying the federal government owns the mineral estate but not the surface. Number one the government or BLM does not own the minerals estate it only administers over it. Legally filed federal minerals are the private property of the claim owner. The wording in the GSG EIS document should be changed to reflect that the BLM administers the surface and subsurface minerals estate for the public, BLM does not own those resources

Comment Number: OR-GRSG-0101-4

Comment Excerpt Text:

BLM 2008 Manual 6840 Special Status Species Management

One of the objectives in the manual is to "initiate proactive conversation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing ofthese species under the ESA" .

Curiously the NTT completely fails to include any discussion of the manual or even recognize its existence (it is not included in the Literature Cited section of the NTT). The failure of the NTT to use or amend the Manual is particularly perplexing since the manual is designed to be as protective, if not more, protective as the ESA. Instead, the

BLM mischaracterized what the USFWs stated in its WBP determination and set aside adequate existing regulatory and conservation mechanism pursuant the Manual in favor of the NTT, without providing a reasonable explanation for doing so, and may in fact be arbitrary and capacious

Comment Number: OR-GRSG-0101-5
Comment Excerpt Text:
BLM maintains the NTT conservation measures are required to respond to the WPB determination and describes USFWS' finding in the WBP determination that BLM lacks adequate regulatory tools to conserve Greater sage-grouse. The NTT does not use Manual 6840 or the ESA, nor does it explain the need for the entirely new regulatory approach.

As such, it inappropriately discards an existing agency policy with ever justifying the radical change advanced in the NTT, and is thus arbitrary and capricious.

Comment Number: OR-GRSG-0101-6
Comment Excerpt Text:
Peer Review

During the peer-review period for the NTT. Multiple peer review criticized the applicability of the NTT due to misapplication of the science and omission of existing federal and state regulatory programs that could be used to conserve sage-grouse and its habitat. As a result the NTT would not likely withstand scrutiny under PECE.

Additional research shows inadequacies in the science itself. Limited analysis of the science used in creating the NTT, as well as the science used in the WBP determination has shown that there has been:

- Significant mischaracterization of past research;
- Methodological bias;
- Substantial errors and omissions; Lack of independent authorship and peer review;
- And substantial technical errors.

These issues call into question whether the "Best Available Science" was in fact used to establish the conservation measures in the NTT, and tlle validity of the NTT as a whole. To that end, flawed science will lead to flawed species-centric policy, like that in the NTT.

Comment Number: OR-GRSG-0101-7
Comment Excerpt Text:
Source Mischaracterization

The work of one researcher, J.W. Connelly, is cited 12 times in the NTT; however, 25% of the time Connelly was referenced there was not a corresponding source available to review.

This also is true for B.L. Walker who is cited 11 times, and 45% of the time there was not a corresponding source to review. Whether this is a result of poor editing or intentional misuse of authority it doesn't matter. It does not change the reality that it limits the ability of the outside reviewers or the public to verify the claims presented, which is critical to the review process, and which reduces the NTT's scientific credibility even further. There were also literature cited that wasn't used, creating another credibility issue for the NTT

Comment Number: OR-GRSG-0140-3
Comment Excerpt Text:
The NTT Report states that for priority sage-grouse habitat areas, "Where the federal government owns the mineral estate, and the surface is in nonfederal ownership, apply the conservation measures applied on public land," and "Where the federal government owns the surface, and the mineral estate is in nonfederal ownership, apply appropriate Fluid Mineral BMPs (see Appendix D) to surface development".

This report is in error, and relying on this information as it pertains to locatable minerals is in error. BLM needs to correct the EISA to reflect the fact that locatable minerals mining is a nondiscretionary activity, subject to valid existing rights. The Federal government technically does own the mineral estate, but the minerals are for the public benefit. Legally filed federal minerals are the private property of the claim owner. The BLM simply administers the resources during exploration and development, but not where the surface is private land. On page 4-92, the statement under Impacts from Mineral Split-Estate Management should he changed to read: "Impacts on vegetation from mineral

split estate management under Alternative D are the same as those described under Alternatives A and e" (delete B). For consistency, under Alternative D, all references to administration of split estate lands should be the same as described under Alternatives A and C.

Comment Number: OR-GRSG-0145-11
Comment Excerpt Text:
NTT Report

The use of the BLM National Technical Team (NTT) report is problematic as it contains overly burdensome recommendations that are not based on local conditions in Oregon. According to an independent review of the report, it contains many methodological and technical errors, selectively presents scientific information to justify recommended conservation measures, and was disproportionately influenced by a small group of specialist advocates (Ramey, 2013).

Comment Number: OR-GRSG-0199-12
Comment Excerpt Text:
The NTT report explains that its objective was to "articulate conservation objectives for the greater sage-grouse in measureable terms to guide overall planning" and to "identify science-based management considerations for the greater sage-grouse (e.g., conservation measures) that are necessary to promote sustainable sage-grouse populations." The NTT makes numerous recommendations for conservation objectives and measures that relate to range management without ever actually evaluating whether the current regulatory framework, standards and guidelines for rangeland health are adequate to conserve sage grouse. It was arbitrary and capricious for the BLM to not first evaluate the effectiveness of existing regulatory mechanisms with respect to range management, as well as the effectiveness of State and local LUPs on factors such as habitat loss and fragmentation, prior to developing alternatives ordering all BLM field offices to incorporate the NTT reports' recommendations into their respective RMPAs.

Comment Number: OR-GRSG-0199-9
Comment Excerpt Text:
IM 2012-044 instructed all BLM field offices to use the goals and objectives from the 2011 NTT report as "guiding philosophy that should inform the goals and objectives developed for individual land use plans." The basis for this direction was the finding in 1M 2012-044 that "FWS concluded that existing regulatory mechanisms, defined as 'specific direction regarding sage-grouse habitat, conservation, or management in the BLM's Land Use Plans (LUPs): were inadequate to protect the species."

For the reasons described above, in part E, the finding of the Washington Office Director in 1M 2012-044 that changes in existing regulatory mechanisms are necessary is inaccurate and arbitrary and capricious as-applied to livestock grazing and range management. FWS did not find that existing regulatory mechanisms relating to livestock grazing and range management are inadequate to protect sage grouse. Therefore, the factual basis for the Washington Office Director to instruct all the BLM Field Offices to utilize and follow the NTT report with respect to livestock grazing and range management was erroneous. Due to the Washington Office Director's inaccurate factual finding, the Washington Office Director unlawfully prevented the various BLM State Field Offices from undertaking an independent review of the purpose and need statement and developing alternatives based on that review. See Webster v. U.S. Oep't of Agric., 685 F.3d 411, 423 (4th Cir. 2012). Instead, the Washington Office Director required the State Field Offices to use the goals and objectives from the NTT report as the "guiding philosophy" for the development of the alternatives in RMPAs, despite the fact that the NTT report had no public input and did not evaluate the purpose and need for changing regulatory mechanisms applicable to livestock grazing and range management. Most fundamentally, IM 2012-044 elevates the BLM's apparent desire to impose sage-grouse specific conservation standards and guidelines on all land management activities over the underlying purpose of avoiding a listing.

Comment Number: OR-GRSG-0200-10

Comment Excerpt Text:

IM 2012-044 instructed all BLM field offices to use the goals and objectives from the 2011 NTT report as "guiding philosophy that should inform the goals and objectives developed for individual land use plans." The basis for this direction was the finding in IM 2012-044 that "FWS concluded that existing regulatory mechanisms, defined as 'specific direction regarding sage-grouse habitat, conservation, or management in the BLM's Land Use Plans (LUPs),' were inadequate to protect the species."

For the reasons described above, in part E, the finding of the Washington Office Director in IM 2012-044 that changes in existing regulatory mechanisms are necessary is inaccurate and arbitrary and capricious as-applied to livestock grazing and range management. FWS did not find that existing regulatory mechanisms relating to livestock grazing and range management are inadequate to protect sage grouse. Therefore, the factual basis for the Washington Office Director to instruct all the BLM Field Offices to utilize and follow the NTT report with respect to livestock grazing and range management was erroneous. Due to the Washington Office Director's inaccurate factual finding, the Washington Office Director unlawfully prevented the various BLM State Field Offices from undertaking an independent review of the purpose and need statement and developing alternatives based on that review. See Webster v. U.S. Dep't of Agric., 685 F.3d 411, 423 (4th Cir. 2012). Instead, the Washington Office Director required the State Field Offices to use the goals and objectives from the NTT report as the "guiding philosophy" for the development of the alternatives in RMPAs, despite the fact that the NTT report had no public input and did not evaluate the purpose and need for changing regulatory mechanisms applicable to livestock grazing and range management. Most fundamentally, IM 2012-044 elevates the BLM's apparent desire to impose sage-grouse specific conservation standards and guidelines on all land management activities over the underlying purpose of avoiding a listing.

Comment Number: OR-GRSG-0200-14

Comment Excerpt Text:

The NTT report explains that its objective was to "articulate conservation objectives for the greater sage-grouse in measureable terms to guide overall planning" and to "identify science-based management considerations for the greater sage-grouse (e.g., conservation measures) that are necessary to promote sustainable sage-grouse populations." The NTT makes numerous recommendations for conservation objectives and measures that relate to range management without ever actually evaluating whether the current regulatory framework, standards and guidelines for rangeland health are adequate to conserve sage grouse. It was arbitrary and capricious for the BLM to not first evaluate the effectiveness of existing regulatory mechanisms with respect to range management, as well as the effectiveness of State and local LUPs on factors such as habitat loss and fragmentation, prior to developing alternatives ordering all BLM field offices to incorporate the NTT reports' recommendations into their respective RMPAs

Comment Number: OR-GRSG-0200-9

Comment Excerpt Text:

It is clear from the RMPA/EIS that the alternatives the BLM developed for amending the standards and guidelines applicable to livestock grazing and range management were guided by the 2011 National Technical Team (NTT) report. RMPA/EIS at 1-3. The BLM's decision to rely on this report lacked a rational factual foundation for the same reasons explained above in Part E. In addition, the BLM's decision to rely on the NTT report for developing alternatives for addressing the purpose and need was arbitrary and capricious because it elevated the BLM's desire to designate sage-grouse specific conservation standards and guidelines over and above the underlying purpose of avoiding a listing decision. This misstep violates not only NEPA, but also FLPMA because it bypassed meaningful and effective coordination and consistency with State and local LUPs, In effect, the BLM displaced and ignored its duties to evaluate the purpose and need, and coordinate with State and local governments, in

developing alternatives in favor of adopting the recommendations of the NTT report.

Comment Number: OR-GRSG-0220-11

Comment Excerpt Text:

The NTT report itself explained that its objective was to "articulate conservation objectives for the greater sage-grouse in measureable terms to guide overall planning" and to "identify science-based management considerations for the greater sage-grouse (e.g., conservation measures) that are necessary to promote sustainable sage-grouse populations." The NTT makes numerous recommendations for conservation objectives and measures that relate to range management without ever actually evaluating whether the current regulatory framework, standards and guidelines for rangeland health are adequate to conserve sage-grouse.

Comment Number: OR-GRSG-0220-12

Comment Excerpt Text:

As the RMPA/EIS explains, IM 2012-044 instructed all BLM field offices to use the goals and objectives from the 2011 NTT report as "guiding philosophy that should inform the goals and objectives developed for individual land use plans." The basis for this direction was the finding in IM 2012-044 that "FWS concluded that existing regulatory mechanisms, defined as 'specific direction regarding sage-grouse habitat, conservation, or management in the BLM's Land Use Plans (LUPs),' were inadequate to protect species."

For the reasons described above, this finding is erroneous and arbitrary and capricious as applied to livestock grazing and range management. USFWS did not find that existing regulatory mechanisms relating to livestock grazing and range management are inadequate to protect sage-grouse. Rather, it found that the BLM did not provide comprehensible monitoring data sufficient to make the finding of which livestock regulations were inadequate. Therefore, the factual basis for the Washington Office Director to instruct all the BLM Field Offices to utilize and follow the NTT report with respect to livestock grazing and range management was erroneous.

Comment Number: OR-GRSG-0220-14

Comment Excerpt Text:

Not only did the Washington Office Director require the BLM to change regulatory mechanisms applicable to livestock grazing and range management, IM 2012-044 also effectively assured that the BLM Field Offices would adopt a variation of the NTT report as the preferred alternative, in violation of NEPA and FLPMA. Preordaining the outcome of the RMPA process is unlawful standing alone; however, it is particularly arbitrary here because neither the NTT report, nor the BLM independently, ever analyzed the issue of whether existing regulatory mechanisms governing livestock grazing and range management were adequate to protect sage-grouse prior to developing alternatives-and because the BLM did not coordinate with local governments and conduct a consistency review with State and local plans, policies and practices. This is particularly troubling because the NTT report was not subject to public comment or participation.

The NTT report explains that its objective was to "articulate conservation objectives for the greater sage-grouse in measureable terms to guide overall planning" and to "identify science-based management considerations for the greater sage-grouse (e.g., conservation measures) that are necessary to promote sustainable sage-grouse populations." The NTT makes numerous recommendations for conservation objectives and measures that relate to range management without ever actually evaluating whether the current regulatory framework, standards and guidelines for rangeland health are adequate to conserve sage-grouse. It was arbitrary and capricious for the BLM to not first evaluate the effectiveness of existing regulatory mechanisms with respect to range management, as well as the effectiveness of State and local LUPs on factors such as habitat loss and fragmentation, prior to developing alternatives ordering all BLM field offices to incorporate the NTT report's recommendations into their respective RMPAs.

Comment Number: OR-GRSG-0281 (FrmLtr11)-10

Comment Excerpt Text:

Comment: Vol 1, Page 1-4: The text states that it will address GRSG impacts in the Oregon Sub-region and will address the NTT guidelines where appropriate. The Oregon sub-region contains a relatively small portion of the range of GRSG. Clarify which guidelines in the NTT are appropriate and clarify why certain ones are or are not appropriate?

Comment Number: OR-GRSG-0283-4

Comment Excerpt Text:

This DRMP/DEIS and its supporting documents especially the Conservation Objectives Team report, known as COT and the Sage Grouse National Technical Team report, known as NTT have a strong appearance of being agenda driven, in that, the associated documents evidence an attempt to circumvent congressional authority and intent, by agency personnel, by attempting to implement a UN treaty known as the Rio Accord, 1992, or Earth Summit, Agenda 21, The United Nations Programme of Action from Rio, 1992, through agency policy, that was signed by the president but the legislature has refused to ratify. (see page 6&7 of NTT report),

Comment Number: OR-GRSG-0333-11

Comment Excerpt Text:

IM 2012-044 instructed all BLM field offices to use the goals and objectives from the 2011 NTT report as "guiding philosophy that should inform the goals and objectives developed for individual land use plans." The basis for this direction was the finding in 1M 2012-044 that "FWS concluded that existing regulatory mechanisms, defined as 'specific direction regarding sage-grouse habitat, conservation, or management in the BLM's Land Use Plans (LUPs): were inadequate to protect the species."

For the reasons described above, in part E, the finding of the Washington Office Director in 1M 2012-044 that changes in existing regulatory mechanisms are necessary is inaccurate and arbitrary and capricious as-applied to livestock grazing and range management. FWS did not find that existing regulatory mechanisms relating to livestock grazing and range management are inadequate to protect sage grouse. Therefore, the factual basis for the Washington Office Director to instruct all the BLM Field Offices to utilize and follow the NTT report with respect to livestock grazing and range management was erroneous. Due to the Washington Office Director's inaccurate factual finding, the Washington Office Director unlawfully prevented the various BLM State Field Offices from undertaking an independent review of the purpose and need statement and developing alternatives based on that review. See Webster v. U.S. Oep't of Agric., 685 F.3d 411, 423 (4th Cir. 2012). Instead, the Washington Office Director required the State Field Offices to use the goals and objectives from the NTT report as the "guiding philosophy" for the development of the alternatives in RMPAs, despite the fact that the NTT report had no public input and did not evaluate the purpose and need for changing regulatory mechanisms applicable to livestock grazing and range management. Most fundamentally, IM 2012-044 elevates the BLM's apparent desire to impose sage-grouse specific conservation standards and guidelines on all land management activities over the underlying purpose of avoiding a listing.

Comment Number: OR-GRSG-0333-14

Comment Excerpt Text:

The NTT report explains that its objective was to "articulate conservation objectives for the greater sage-grouse in measureable terms to guide overall planning" and to "identify science-based management considerations for the greater sage-grouse (e.g., conservation measures) that are necessary to promote sustainable sage-grouse populations." The NTT makes numerous recommendations for conservation objectives and measures that relate to range management without ever actually evaluating whether the current regulatory framework, standards and guidelines for rangeland health are adequate to conserve sage grouse. It was arbitrary and capricious for the BLM to not first evaluate the effectiveness of existing regulatory mechanisms with respect to range management, as well as the effectiveness of State and local LUPs on factors such as habitat loss and fragmentation, prior to developing alternatives

ordering all BLM field offices to incorporate the NTT reports' recommendations into their respective RMPAs.

Comment Number: OR-GRSG-0532-123

Comment Excerpt Text:

Appendix C-3, Design Features (RDF) 12 - We recommend that the final EIS cite the following peer-reviewed literature which provides important biologically-based guidance on GRSG management related to conifer encroachment. The BLM should incorporate the information and recommendations from these manuscripts wherever possible:

Commons, M.L., R.K. Bayback, and C.E. Braun. 1999. GRSG response to pinyon-juniper management. USDA Forest Service Proceedings RMRS-P-9. pages 238-239.

Baruch-Mordo et al. 2013. Saving GRSG from the trees: a proactive solution to reducing a key threat to a candidate species. Biological Conservation 167:233-241.

Comment Number: OR-GRSG-0547-1

Comment Excerpt Text:

The Northwest Mining Association commissioned a review of the NTT Report, and the May 20, 2013 report by Ms. Megan Maxwell concisely and adequately documents the flaws in the findings in the NTT Report. In the interests of brevity, those flaws will not be repeated here except to point out that there are still no objective definitions of Preliminary Priority Habitat (PPH) or Preliminary General Habitat (PGH) to be found in the DEIS or supporting documentation. Ms. Maxwell's report is included by reference.

Comment Number: OR-GRSG-0591-23

Comment Excerpt Text:

On existing leases, the NNT Report recommends capping the density of wellpads and other industrial sites at one per square mile. This is supported by the best available science; both Holloran (2005) and Doherty (2008) found that one wellsite per 699 acres and one wellsite per square mile, respectively, were the thresholds at which significant negative impacts to lek populations began to be recorded. See Attachments 3, 4. Even well densities less than one per square mile can have a negativeffect on sage grouse. According to Taylor et al. (2012: 28, emphasis added),

"Two scenarios include decisions on whether to develop a landscape from 0 to 4 wells per section (0 to 1.5 wells/km2), and then from 4 to 8 wells per section (1.5 wells/km2 to 3.1 wells/km2). In both cases, the total northeast Wyoming lek count decreased by ~ 37% (1-2,876/4,537 and 1-1,768/2,876, Table 3), leaving only 39% of the original number of males on leks (1,768/4,537, Table 3) when development reached 8 wells per section (80 ac spacing)."

But the BLM's Preferred Alternative does not include any wellsite density limits, which means that it has failed to emplace adequate regulatory mechanisms to protect sage grouse in this regard

SECTION 7.3 - COT

Comment Number: OR-GRSG-0283-4

Comment Excerpt Text:

This DRMP/DEIS and its supporting documents especially the Conservation Objectives Team report, known as COT and the Sage Grouse National Technical Team report, known as NTT have a strong appearance of being agenda driven, in that, the associated documents evidence an attempt to circumvent congressional authority and intent, by agency personnel, by attempting to implement a UN treaty known as the Rio Accord, 1992, or Earth Summit, Agenda 21, The United Nations Programme of Action from Rio, 1992, through agency policy, that was signed by the president but the legislature has refused to ratify. (see page 6&7 of NTT report),

Comment Number: OR-GRSG-0567-23

Comment Excerpt Text:

Alternative D is not consistent with the COT report with respect to sagebrush removal and therefore we recommend providing an expanded explanation on

how protecting both breeding and wintering habitats will occur.

Comment Number: OR-GRSG-0567-4

Comment Excerpt Text:

Alternatives B, C, D, and F could meet the COT report objectives if provisions are included to account for the influences of wildfire. For example, if an adaptive management strategy was implemented to ensure that after large wildfires, disturbance to populations from anthropogenic causes was appropriately minimized or avoided, such a strategy in conjunction with a 3 percent anthropogenic disturbance cap could meet the COT report objectives.

SECTION 7.4 - POLICY GUIDANCE

Comment Number: OR-GRSG-0025-4

Comment Excerpt Text:

The IMs Constitute a Rulemaking That Should Have Undergone NEPA Analysis

The IMs governing sage-grouse conservation satisfy the test for federal action that is subject to NEPA review. The failure to complete this review shielded the IMs' provisions from scrutiny, specifically with respect to the evaluation of other reasonable alternatives that could have achieved BLM's conservation objectives while not overly burdening wind energy development. The wind industry's contributions in mitigating climate change also received no analysis or consideration as a mitigating effect due to the fact that these documents were not subject to NEPA. Given these shortcomings, the IMs should not have been relied upon in formulating the DEIS.

Comment Number: OR-GRSG-0025-5

Comment Excerpt Text:

Additionally, the NOI was issued to help guide the preparation of an EIS. NEPA implementing regulations specifically address what actions are allowed during the time period in which an EIS is being prepared, and state that "[w]hile work on a required program environmental impact statement is in progress and the action is not covered by an existing program statement, agencies shall not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment." Applied here, the December 2011 IMs do not fall into any of the exemptions associated with this rule and constitute an independent action with an environmental impact for which the appropriate NEPA analysis should have been completed.

SECTION 7.5 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0026-19

Comment Excerpt Text:

It is a concern that Appendix G states that agriculture is the #1 cause of disturbance. Nowhere does the document state whether existing agricultural practices, such as plowing, seeding, irrigating and cutting hay, are being considered as part of the 3% disturbance cap when these private lands are in PPMA. At the meeting in Ontario, BLM stated that fences and two track roads do not contribute to the percent of disturbance, but gravel and paved roads do. However, we cannot find this information in the GRSG PLAN, to confirm BLM's statements. Agricultural practices have taken place for over 100 years in Baker and Malheur Counties, and just like the power lines, BLM should consider that these fields "are likely fully manifested". We recommend that agriculture, native surface roads, inactive mines and mined areas that have been reclaimed to standard, fences and other long standing infrastructure not be considered as part of the 3% "human footprint".

Comment Number: OR-GRSG-0048-1

Comment Excerpt Text:

This EIS does not focus on the three main threats to our region defined by the US Fish and Wildlife Service; there is acknowledgment but no concentration. These three threats are invasive species (annual grasses), conifer (juniper) encroachment, and wildland fire. Why in reading this EIS, as well as what was presented at the BLM public meeting, BLM is not addressing these threats because it is "difficult", taking too much time, and will cause the BLM to exceed it's timeframe. This is in no way

an acceptable excuse for doing such a poor job writing such an important document. All of the threats mentioned above can be managed in a way that would improve sage-grouse habitat over a large scale

Comment Number: OR-GRSG-0061-11

Comment Excerpt Text:

Text: 4-12: The distribution of sagebrush is limited and the cost of habitat restoration is high; because of this, management plants that protect intact sagebrush and restore impacted areas strategically to enhance existing habitats- that is, increase connectivity of intact sagebrush- have the best chance of increasing high quality sagebrush cover (Connelly et al. 2004; Beck and Mitchell 2000, cited in Manier et al. 2013) Sagebrush promoting vegetation treatments would increase the amount and quality of GRSG habitat.

Comment: Yet there needs to be care taken that fire reduction strategies don't have the net result of reducing intact sagebrush habitat and that same sagebrush promoting management, such as herbicide use, don't just threaten Greater Sage grouse viability directly. There seem to be neglected significant concerns- esp. in alts D and E. Chemical methods of invasive plant control should not be hard in Grater Sage grouse habitat as herbicides and pesticides directly threaten GRSG brooding hens and chicks and also remove insects and native plant foraging sources for hens and chicks- directly impairing reproductive success- yet the alts and the DEIS somehow fail to recognize this.

Comment Number: OR-GRSG-0095-1

Comment Excerpt Text:

The DEIS has identified Alternative D as the Preferred Alternative. The goal of the Preferred Alternative is to "[m]aintain or increase GRSG abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend in cooperation with other conservation partners."38 However, the appropriate goal should be "to maintain and increase abundance and distribution of greater sage-grouse" (emphasis added) as described in the Sage-Grouse Recovery Alternative submitted by conservation groups.39

38 DEIS, at 2-41.

39 Sage-Grouse Recovery Alternative for criteria for designating sagebrush reserves, at 41. available t

www.sagebrushsea.org/pdf/Sage-Grouse_Recovery_Alternative.pdf.

Maintaining current populations, which have been in a continuous decline as discussed above, will not provide secure long term populations well distributed across the range. Indeed, if current populations were adequate, the greater sage-grouse would not have been found to be warranted for listing under the Endangered Species Act. Given current levels of habitat fragmentation, individual populations will become increasingly isolated reducing genetic interchange. Smaller populations are at greater risk of extirpation. Further, given the pervasive spread of highly flammable invasive plants largely from grazing and the resulting increase in wildfire, sage brush habitat will be lost to fires over the next several decades. Therefore, recovery efforts must take stochastic events into account and aim to increase, rather than maintain sage-grouse populations.

Comment Number: OR-GRSG-0107-4

Comment Excerpt Text:

In the Executive Summary of the 2013 State of the Agriculture Industry, Board of Agriculture Report lists 10 Priority Policy Recommendations to the legislature, governor, and regulatory agencies.

Number 5 - "Encourage management of natural resources in a way that enables farming while protecting water, soil, air, habitat and endangered species".

Number 6 -"Support a land use system that protects farmland for farm use".

Number 7 - "Support high quality research and experiment and extension services that enable growers to diversify cropping and capitalize on unique

geographic micro-climates and soils and to remain competitive in a world market".

Number 10 -"Help young or new farmers and transitional family farmers successfully become the next generation of aspiring producers.

How were the above recommendations that were made by the Oregon Department of Agriculture included in the BLM Greater Sage-Grouse RMPA?

Comment Number: OR-GRSG-0107-5

Comment Excerpt Text:

I would support the Harney Soil and Water Conservation District Rural Community Alternative framework that was submitted. If the BLM chooses not to consider the Rural Community Alternative, please cite the reasons why the framework cannot be accepted and utilized by the BLM.

Comment Number: OR-GRSG-0118-2

Comment Excerpt Text:

The BLM's approach to provide a 3% disturbance cap on all anthropogenic disturbances on public land by monitoring and applying the disturbances on all land ownerships is rebuttable with no data provided for the public to analyze, What is the current disturbance level for the project area, district, and each county?

Comment Number: OR-GRSG-0134-1

Comment Excerpt Text:

The proposed 3 percent cap on development in priority habitat may be excessive. The NTT report recommended limiting discrete anthropogenic disturbances to less than 3 percent of priority habitat, regardless of ownership (SGNTT 2011: 7). Analysis by Knick et al. (2013) suggests that sage grouse leks are largely abandoned as development reaches 3 percent of disturbance within 5 km of leks (see also Baruch-Mordo et al. 2013). Allowing development up to 3 percent in priority habitat may very well result in local extirpation of sage-grouse. It also raises the possibility of extensive new development in important sage grouse habitats that are currently largely intact. Average development levels in Oregon's core areas are currently about 0.4 percent (pers. comm. Theresa Burscu, Institute for Natural Resources, Oregon University System); a 3 percent cap would allow on average up to a seven-fold increase in development within priority habitats that are currently the last remaining strongholds for the species.

Comment Number: OR-GRSG-0161-1

Comment Excerpt Text:

A program should be considered to allow the public to pick up big game road kills in Eastern Oregon, (like Idaho) especially during the winter to reduce the food base for ravens. Small game road kills could be removed by local people. However this should be monitored closely to determine if this would have significant negative effects on golden eagles. Dead animal pits and afterbirth from livestock calving should be buried if ravens are using these items to survive.

Comment Number: OR-GRSG-0193-24

Comment Excerpt Text:

Finally, the GRSG Plan must stipulate what actions will be taken (and when) once sage-grouse populations reach Oregon's no-action level of 40,000 birds .

Comment Number: OR-GRSG-0263-3

Comment Excerpt Text:

This draft RMPA as written provides no indication of collaboration with the people that live in the communities with sage grouse habitat. The document mentions there are voluntary tools to improve sage grouse habitat called the Candidate Conservation Agreement for grazing permitees on public lands and the Candidate Conservation Agreement with Assurance on private lands to improve the habitat and climate threats to the birds. Why does the RMPA fail to engage these tools into actions in the preferred alternative? This ranch has for years worked with the BLM, USFS, ODFW and others to improve the land for the betterment of both wildlife and cattle. I am sure that the vast majority of other ranches have done the same.

Comment Number: OR-GRSG-0276-31
Comment Excerpt Text:
Text: Pg. 2-52, Table 2-5

According to Table 2-5, no cross-country travel would be allowed in PPH/PPMA/Core area habitats.

Comment: Idaho Power uses cross country travel within our ROWs and at times, to gain access to our ROWs, when existing roads are not available and are not necessary. We typically access our lines one to two times per year for inspections and as needed for operation and maintenance activities (this can typically be another one to two trips per year). Because we have relatively few trips to our facilities, we do not create roads unless they are needed for safe equipment access and operation. The prohibition on cross country travel would have the unintended consequence of encouraging us to create more roads not fewer roads.

Comment Number: OR-GRSG-0409-1
Comment Excerpt Text:
Comment: The DEIS Preferred Alternative does not provide sufficient protections for critical habitat needed to maintain connectivity between isolated units of PPMA and therefore does not fully meet the COT Report goal of ensuring, "Long-term conservation of sage-grouse and their habitat, by maintaining viable, connected, and well-distributed populations across their range, through threat amelioration and restoration activities."

To reach the COT Report goal, it will be important to: (a) control the level of surface anthropogenic disturbance; (b) reduce threats from conifer encroachment, invasive species and wildfire; and (c) restore habitat where it has been degraded or fragmented within connectivity corridors.

- Recommendation: The BLM should add Sub-objective B-SSS 6 in the Proposed Alternative and work with ODFW to designate important connectivity corridors as PPMA in the FEIS.

Knick et al. (2013) highlighted the need to maintain interconnected populations that allow for recolonization in order to reduce the risk of extirpation caused by local impacts. We encourage BLM to take a precautionary approach and designate some of the PGMA habitat as PPMA habitat in order to maintain linkages among the PPMA habitat. Knick et al. (2013) mapped Habitat Suitability Index scores and modeled pathways of potential sage-grouse movement among leks and populations using Circuitscape (McRae 2006). We recommend that BLM work with Oregon Department of Fish and Wildlife to evaluate this methodology and others to identify and add movement corridors to PPMA

Comment Number: OR-GRSG-0433-1
Comment Excerpt Text:
A critical first step in the conservation of sage-grouse habitat is to appropriately identify and characterize those areas of habitat used by sage-grouse to meet various life-history requirements so that these can be used to guide where conservation and/or restoration measures will be implemented. BLM identifies these areas as preliminary priority management areas ("PPMA") and preliminary general management areas ("PGMA"). PPMA and PGMA cover very similar areas as the State of Oregon's Core and Low-Density habitat types identified in the Greater Sage-grouse Conservation Assessment and Strategy (Hagen 2011). These areas, based on the "core area approach" have been thoroughly reviewed and there is general agreement on their use at both state and federal levels for habitat management purposes. These areas require periodic updates and we encourage BLM to incorporate new priority and general habitat areas as new or more accurate information becomes available. For the purposes of this DEIS ONDA supports the designation of PPMA and PGMA as described in Action B-SSS 1.2

Connectivity

In addition to the designation of priority and general habitat types it is important to identify sagegrouse movement patterns and seasonal ranges and establish strong protections for connecting habitat corridors

(Hagen 2011). Maintenance of connectivity and reduction of fragmentation of sagebrush habitats is imperative for the long-term welfare of all sagebrush associated species (Hagen 2011, Connelly et al. 2004, Hanser and Knick 2011). Protecting core regions and maintaining connectivity with more isolated sage-grouse populations may help reverse or stabilize the processes of range contraction and isolation that have resulted in long-term population declines (Knick and Hanser 2011). Suitable habitat is needed to allow for connectivity between different resident populations. Connectivity promotes genetic exchange and reduces complications that may arise from inbreeding (Hagen 2011). Connectivity and core sage-grouse habitat should be conserved, enhanced, and restored to promote 2 Action designator refers to the BLM numbering system for DEIS actions found in Table 2-6. Subsequent references in this comment refer to actions and conservations measure numbers found throughout Table 2-6 movement and genetic diversity, with emphasis on those habitats occupied by sage-grouse (USFWS 2011). The NTT report, COT report, PECE policy and Oregon Strategy are clear on the importance of connectivity with emphasis on the need to designate, maintain and restore habitat connectivity (USFWS 2013, Hagen 2011, BLM 2011, USFWS 2003). The DEIS itself includes a clear objective to maintain or improve connectivity to and within PPMA and PGMA to promote movement and genetic diversity. DEIS at 2-41. (Objective SSS-1).

Despite a clear and compelling body of science, explicit policy direction and a stated intention within the DEIS, BLM's preferred alternative does not designate connectivity habitat and, in fact, contains little in the way of land use allocations or other prescriptions designed primarily to maintain or improve connectivity habitat. While PGMA areas overlie some connectivity corridors, the prescriptions for PGMA are inadequate to protect and maintain connectivity habitat. Similarly, focal areas are identified but expressly fail to require or prohibit any activities within the boundaries. DEIS at 2-22. The connectivity protections stemming from the plan decisions are woefully lacking. The failure to provide meaningful protection for connectivity habitat is a significant omission by BLM and one that must be remedied in the proposed action.

Isolated populations of sage-grouse - or, put differently, sage-grouse in disturbed areas - are at risk of extirpation and have a substantially reduced likelihood of reproductive success. 75 Fed. Reg. at 13915 (average nest success for sage-grouse drops from already low 51% in non-disturbed habitat to 37% in disturbed habitat). In edge habitats or connectivity corridors, a small additional population decrease can cause permanent abandonment of nearby leks and the loss of their unique genetic resources. See, e.g., 75 Fed. Reg. at 13957–61 (USFWS projecting that sage-grouse will decline substantially toward extinction in the foreseeable future if continued habitat degradation in existing sage-grouse areas continues). Sage-grouse are "slow to recolonize disturbed areas even though structural features of the shrub community may have recovered" (Knick et al. 2011). "Viable sage-grouse populations require large landscapes, so fragmentation resulting even from scattered disturbances may lead to disproportionate populations declines or regional extinctions." (Johnson 2011). As USFWS has explained, "[i]solated populations are typically at greater risk of extinction due to genetic and demographic concerns such as inbreeding depression, loss of genetic diversity, and Allee effect (the difficulty of individuals finding one another)." 75 Fed. Reg. at 14005.

Protecting core regions and maintaining connectivity with more isolated sage-grouse populations "may help reverse or stabilize the processes of range contraction and isolation that have resulted in longterm population declines" (Knick and Hanser 2011). It follows that connectivity corridors between priority habitat areas must be identified if they are to be adequately protected.

Although ODFW conducted a connectivity analysis in its most recent conservation assessment, it did not identify existing or potential corridors that interconnect core sage-grouse habitat areas (Hagen

2011). As a result, ODFW (and consequently BLM) proposes maximum protection for multiple isolated core populations, but not for the corridors that connect these core populations.3 Although the existence and location of connecting corridors cannot be determined with certainty in the absence of actual radiotag or GPS data, it would be imprudent to allow habitat loss where likely corridors have been identified 3 At least 16 significant PPH (Core) areas are identified, separated by PGH (Low Density) habitat subject to potential human impacts without regard to connectivity corridors based on new scientific findings and spatial analyses. As additional information on the actual sagegrouse use patterns from radio-telemetry and GPS collar studies becomes available the existence and location of these corridors can be fine-tuned. Until such information is available BLM should prioritize protection and restoration of these likely connectivity corridors. If BLM fails to identify and protect connectivity corridors, sage-grouse populations in Oregon will continue to decline due to habitat fragmentation and population isolation (Knick et al. 2011, Knick and Hanser 2011, Johnson 2011).

Connectivity Corridor Analysis

Despite assertions in the DEIS that PGMA will protect connectivity, large areas of important connectivity habitat have been ignored and specific management prescriptions for connectivity areas are largely absent from the preferred alternative. To remedy this shortcoming, the Oregon Natural Desert Association conducted an analysis of leks and sage-grouse dispersal resulting in likely connectivity corridors between the major sage-grouse population groups. The resulting map (See Attachment A to these comments) depicts important connectivity corridors where management actions can be taken to protect this important habitat.

The corridors are based on sage-grouse lek proximity. Knick and Hanser (2011) found that sagegrouse dispersal drops off precipitously when active leks are separated from other leks by a distance greater than 13–18 km. Using the maximum distance cited in the study, we created "distance lines" between all occupied4 leks that were within 18 km (rounded) of other occupied leks. Using distance lines, we identified corridors using the following criteria: (1) contiguous or nearly contiguous sagebrush habitat, (2) closest distance between occupied leks (excluding non-viable habitat), (3) predominantly PGH ("Low Density" habitat) designation, and (4) connects two or more proximal core populations. Corridors fall into two groups: "Critical" and "Potential." Critical corridors (16 total) are connected by one or more distance lines throughout the corridor. It is likely that these corridors currently exist as active corridors, based on lek proximity. Maintenance of these corridors is vital to the long-term existence of sage-grouse in Oregon because they preserve spatial continuity. In some cases, the viability of the corridor may be tenuous because leks are near the maximum dispersal distance for sage-grouse.

Preservation and restoration of sagebrush habitat in these corridors are critical to prevent population isolation and eventual extirpation (Knick et al. 2011, Knick and Hanser 2011, Johnson 2011). Potential corridors (8 total) meet all the criteria except that lek distances are greater than 18 km. along some portion of the corridor.5 It is possible that connectivity continues to be present to an attenuated degree along these corridors. At the least, these were likely important corridors historically and habitat restoration could provide connectivity once again. Collectively, the 24 identified corridors connect all PPH population groups in Oregon. By applying this same method additional corridors should be identified that connect PPH populations with those in Idaho and Nevada. This is an issue BLM should study in this and other regional EISs.

BLM should designate both critical and potential connectivity habitat areas in the proposed action. Management prescriptions designed to protect these important habitat areas should be included as discussed herein. Should BLM be unable to designate a separate habitat category in the proposed action for habitat connectivity areas, BLM should include the

critical and potential connectivity areas in PPMA until such time as connectivity analyses can be completed and a new habitat type designated through land use plan amendments.

BLM must identify and designate areas of connectivity habitat in the DEIS. Management actions must be developed for these areas that will result in clear protection and restoration of connectivity habitat. To address this shortcoming of the DEIS, ONDA strongly suggests connectivity habitat be identified and designated based the connectivity habitat model presented above.

Comment Number: OR-GRSG-0433-16
Comment Excerpt Text:
3. West Nile Virus

Water collected in livestock reservoirs and troughs—and even in cattle hoof prints—acts as mosquito breeding grounds, facilitating the spread of West Nile virus ("WNv") (Knick and Hanser 2011). Individual mosquitoes carrying the virus can fly more than eleven miles from these water sources (Walker and Naugle 2011). See also 75 Fed. Reg. at 13941.

Sage-grouse experience 100% mortality when exposed to West Nile virus. 75 Fed. Reg. at 13967–68. The virus is capable of extirpating a local sage-grouse population following a single outbreak (Walker and Naugle 2011). If they do not die in six to eight days following exposure, infected sagegrouse may "suffer persistent symptoms that reduce subsequent survival, reproduction, or both" (Walker and Naugle 2011). Empirical infection and mortality rate data demonstrates "projected declines" in sagegrouse population growth because of West Nile virus (Walker and Naugle 2011). The virus can simultaneously reduce juvenile, yearling, and adult survival, "three vital rates important for population growth" (Walker and Naugle 2011). West Nile virus mortality "typically comes at a time of year (July-September) when survival is typically high [], suggesting it is additive to other sources of mortality" (Walker and Naugle 2011).

Artificial water projects "that create mesic zones around stock tanks or ponds as habitat improvements for sage-grouse may inadvertently contribute to the WNV problem, because Culex tarsalis readily take advantage of water-filled hoof prints around tanks and ponds for breeding" (Walker and Naugle 2011) (also explaining that mosquitoes "prefer sites with submerged vegetation on which to oviposit and warm, standing water that promotes rapid larval development, including ephemeral puddles, vegetated pond edges, and hoof prints.").

The ONDA photographs in Figs. 1–4 above, taken in 2009 three years after BLM "maintained" and "reconstructed" these artificial water projects in 2006, show the typical, present-day effects of cattle grazing around these watering stations. Regardless of whether the stations have pumps or valves or design features that purport to keep water flowing in the troughs themselves, their actual effect on the environment is to create muddy, heavily trampled sacrifice zones where thousands of cattle hoof prints stand ready to host untold numbers of potential WNv-carrying mosquitoes. See especially Figs. 1, 3, 4.7 BLM's own 2009 photographs likewise reveal at all seven spring/riparian sites monitored that year heavily trampled areas with standing, stagnating water, devoid of vegetation, eroding or with severe channel head-cuts or obliterated stream channels, and small cages showing the type of vegetation that might have persisted had livestock not been released into the area. See Attachment D. In turn, those photographs are virtually identical with BLM photographs from 2000—which BLM characterized as 7 We note that BLM has claimed that none of the troughs in the LCGMA poses a stagnant water threat because some (but not all) lack floats and therefore presumably return any overflow water back to the original spring course via a pipe. Troughs that lack an outlet and therefore are equipped with floats to shut off inflow of water when it reaches a certain standing depth in the trough, result in warm, standing water—which is conducive to mosquito breeding (Walker and Naugle 2011). And BLM's records for LCGMA indicate that at least some of BLM's projects do have floats, and show replacement of float valves for

several water projects. representative of areas "not meeting" ecological standards under the Federal Rangeland Health regulations. See Attachment C (BLM's 2000 photographs; attached hereto).8 Cows even have been shown to host the virus, adding yet another layer to the WNv threat posed by livestock grazing and artificial water development (Walker and Naugle 2011). Dr. David Dobkin, one of the nation's leading sage-grouse experts and a Monograph peer reviewer, has, for example, described the WNv threat as "real, not theoretical" for the sage-grouse in Louse Canyon. 06-1311 Dobkin Decl. ¶ 40.9 Dr. Dobkin and Dr. Craig Miller, a GIS analyst for the Oregon Natural Desert Association, prepared a number of maps to illustrate this conclusion based on the spatial configuration of projects BLM had proposed in the LCGMA, and whose spatial configuration directly controls how livestock concentrate to graze in this extremely arid environment. See 06-1311 Miller Decl., Maps 1–10. 10 Dr. Dobkin also bases his "real, not theoretical" conclusion on the fact that sage-grouse have shown "no evidence of resistance" to WNv and exhibit 100% mortality rates (Walker and Naugle 2011). WNv is capable of extirpating a local sage-grouse population following a single outbreak (Walker and Naugle 2011). "Given that approximately 90% of nests and habitat used for brood-rearing occurs within 6 miles of leks, there is a clear and inescapable risk of WNV posed to a substantial portion of the region's sage-grouse population by BLM's LCGMA water developments." Dobkin Decl. ¶ 42 (emphasis added). This is why BLM's proposed action must include meaningful limitations on livestock water developments.

West Nile virus also implicates population viability. The best available science with respect to WNv, based on empirical infection and mortality rate data, demonstrates "projected declines" in population growth (Walker and Naugle 2011). WNv can simultaneously reduce juvenile, yearling, and adult survival, "three vital rates important for population growth" (Walker and Naugle 2011). There have been persistent, sometimes substantial, declines in late-summer survival of sage-grouse due to WNV mortality, including, for example, large mortality events in the LCGMA region in 2006 near Jordan Valley and Burns Junction (Malheur County, Oregon) and in Owyhee County (Idaho) (USGS 2006, Walker and Naugle 2011). West Nile virus mortality typically comes at a time of year (July– September) when survival is typically high, suggesting it is additive to other sources of mortality (Shroeder et al. 1999, Walker and Naugle 2011).

"In mid-summer, sage-grouse often congregate in flocks near both natural and man-made water sources" and these "habitats often support populations of breeding mosquitoes" (Walker and Naugle 2011). Congregations of sage-grouse near water sources—particularly artificial water sources where cattle already have created thousands of additional mosquito breeding grounds in hoof prints—"may lead to rapid spread of the virus within sage-grouse flocks and lead to severe local mortality events" 8 BLM, "Louse Canyon Geographic Management Area Assessment" (June 28, 2001).

9 BLM already has a copy of Dr. Dobkin's declaration, which is also available as docket number 82 in Oregon Natural Desert Association v. Freeborn, No. 3:06-cv-1311-MO (D. Or. filed Sept. 18, 2006). 10 BLM already has a copy of Dr. Miller's declaration, which is also available as docket number 81 in Oregon Natural Desert Association v. Freeborn, No. 3:06-cv-1311-MO (D. Or. filed Sept. 18, 2006). (Walker and Naugle 2011). From a population persistence standpoint, a viral outbreak therefore will affect sage-grouse at one of the worst possible times in the bird's annual cycle.

Though mortality rates have been determined to be essentially 100%, any sage-grouse that do survive WNv infection may later experience reduced survival or reproduction (Walker and Naugle 2011). If they do not die in six to eight days following exposure, infected sage-grouse may suffer persistent symptoms that reduce subsequent survival, reproduction, or both (Walker and Naugle 2011).

The spatial configuration of cattle water projects is important and should be addressed at the land use plan level in this EIS. Up to now, BLM's approach has often been to draw small buffers around known lek sites. Even then, that analysis was only for general impacts to sage-grouse, as opposed to also specifically evaluating WNv. Small buffers are inadequate based on the latest science. That is because one of the major challenges in managing sage-grouse and conserving sage-grouse populations is that it is a landscape species that depends upon different types of habitat for each stage of its annual cycle (Connelly et al. 2011).

For example, in its LCGMA analysis, BLM used a 0.6-mile buffer around water projects to evaluate the impacts of grazing projects on sage-grouse (BLM 2005b). However, almost all of BLM's "maintained" and "constructed" springs, and constructed troughs and pipelines, fell inside the bare minimum 3.0-mile buffer around sage-grouse breeding areas that current science prescribes. See 06- 1311 Miller Decl., Map 1; see also Dobkin Decl. ¶ 31–33 (stating that BLM's 0.6-mile buffer was inadequate, that 3.1- to 6.2-mile buffers are the minimum acceptable to ensure population viability, and that the habitat farther away from leks is of disproportionate importance to sage-grouse nesting success).

For these reasons, BLM's proposed action must incorporate mandatory buffers around livestock water projects that are adequate to analyze impacts of the projects on sage-grouse and are based on current best science.

Environmental factors also indicate a likelihood of West Nile virus exposure. The best available science indicates that, in addition to distribution of anthropogenic water sources, WNv transmission also is regulated by environmental factors including temperature and precipitation (Walker and Naugle 2011). Mild winters are conducive to early outbreaks in sagebrush habitats (Walker and Naugle 2011). For example, Malheur County reported mosquitoes emerging beginning in early April in 2012 (Meter 2012)—at least a month earlier than the typical mid-May to mid-September WNv transmission period (Walker and Naugle 2011).

Similarly, higher summer temperatures and drought conditions facilitate greater mosquito activity and more rapid development of the virus (Walker and Naugle 2011). The "risk of exposure to WNV for Greater Sage-grouse may be elevated if WNV outbreaks coincide with drought conditions that aggregate birds in mesic areas or near remaining water sources" (Walker and Naugle 2011). The State of Oregon's Water Resources Department currently classifies essentially all of eastern Oregon as experiencing "Severe" drought.11 11 See http://droughtmonitor.unl.edu/ (last visited Feb. 11, 2014).

Thus, key environmental factors that increase the chances of WNv outbreaks are also lining up on top of the livestock grazing and water developments that make exposure likely in the absence of meaningful management changes as part of these land use plan amendments.

West Nile virus exposure and mortality is likely under- or un-reported in eastern Oregon.

The documented sage-grouse die-offs at the human population centers nearest to Louse Canyon—Jordan Valley and Burns Junction—are significant. Indeed, they are highlighted by the USFWS in its "warranted" decision, 75 Fed. Reg. at 13968, and by Walker and Naugle (2011). Yet, those two well documented events cannot be assumed to be the only WNv mortalities sage-grouse have experienced in the region since 2005; nor can they be assumed to be representative of the general frequency of WNv infection in southeast Oregon.

Most WNv mortality in wild bird populations goes unnoticed or unreported. The virus is thought so far to have killed millions of wild birds in North America even though only 48,000 infected dead birds had been reported as of 2005. (Walker and Naugle 2011) (also noting that "the distribution of mortality rates used in simulations may underestimate mortality in wild populations"). Sage-grouse mortality events and die-

offs are less likely to be detected and reported in remote, non-human-populated areas like Louse Canyon (Walker and Naugle 2011) (noting, "Impacts of WNV mortality, and even severe WNV outbreaks, may go undetected without radio-marked individuals . . . and lead to the misperception among managers and policy-makers than WNV is no longer an issue for Greater Sagegrouse").

Comment Number: OR-GRSG-0433-2

Comment Excerpt Text:

Management Actions for Designated Sage-grouse Habitat Areas

One of the primary mechanisms to conserve sage-grouse habitat in the preferred alternative is to limit anthropogenic disturbances to less than 3% of the area designated as PPMA. DEIS Action D -SSS 2. This "disturbance cap" is intended to maintain sustainable habitat for the sage-grouse and to help prioritize enhancement and restoration efforts. ONDA supports the concept of prioritizing habitat protection and targeting resources. However, limiting anthropogenic disturbances in PPMA to 3% is insufficient to effectively improve sage-grouse habitat and populations—i.e., to provide for both survival and recovery of the sage-grouse. Sage-grouse are a candidate for endangered species listing due to habitat and population fragmentation, coupled with inadequate regulation to control development in critical areas. As the amount of anthropogenic disturbance on the landscape increases, sage-grouse persistence decreases (Knick et al. 2013). It appears that the threshold of 3% disturbance on the landscape is the critical point where habitat impacts equate with fewer leks and decreased sage-grouse populations.

If 3% disturbance is a minimum habitat requirement for sage-grouse persistence it makes little sense for BLM to allow that level of development in priority habitat. Instead, a more conservative and effective approach is to limit disturbance to a level below this critical threshold to ensure the possibility of sage-grouse recovery. The State of Oregon's policy for Category 1, Core habitat is that "essential" and "irreplaceable" areas must be managed for "no net loss" (Hagen 2011). In effect the state policy for PPMA or core areas has been to cap new disturbance in these irreplaceable habitat areas at 0%.

By contrast, the DEIS preferred alternative proposes to allow an increased level of disturbance in PPMA by allowing the total amount of disturbance (both new and existing) to be as high as 3%. Given the purpose and need for the DEIS and current understanding of the impacts of anthropogenic disturbance, it is imperative that BLM adopt a more conservative disturbance cap. ONDA urges BLM to select Action E –SSS 2 and limit any additional anthropogenic disturbance at 0%. In addition to limiting disturbance in PPMA, it is also important to consider the effects of disturbance to other sage-grouse habitat types and the requirements of other land uses managed by BLM. PGMA affords an opportunity to both limit human disturbance and accommodate a reasonable level of anthropogenic disturbance from other land uses. Rather than adopt an across-the-board 3% cap as discussed in Alternative C, ONDA suggests that BLM limit disturbance (not including fire) in PGMA to 5%. Mitigation efforts should be mandatory within PGMA allowing for anthropogenic disturbances to be offset to below the 5% cap thereby accommodating multiple uses of the landscape while ensuring strong protection for sage-grouse habitat.

The conservation benefits of connectivity, discussed above, can only be realized with protective measures for this critical habitat type. To maintain connectivity of habitat and sage-grouse populations, efforts will be required to rehabilitate acres lost to conversion of exotic weeds and grasses, juniper encroachment, and seedings within the extant range of sage-grouse (Hagen 2011). Detailed information about the specific uses and seasonal importance of connectivity habitat is only now becoming clear with much still to be studied and understood. Data are still lacking that demonstrate the level of connectivity of populations and the sedentary and/or migratory behavior of sage-grouse throughout much of the state.

Identifying seasonal movements and migrations are key factors in assessing and monitoring core

sagegrouse habitats (seasonal and yearlong) and its management (Connelly et al. 2000b). Given this uncertainty BLM must adopt a conservative approach to the management of connectivity habitat by capping total new human disturbance (not including fire) in critical connectivity habitat at 0%. New development that cannot be avoided may be permitted in potential connectivity habitat only with appropriate on-site mitigation. BLM must also develop a management approach to modify connectivity habitat boundaries when new, credible information about sage-grouse use of connectivity habitats becomes available.

Comment Number: OR-GRSG-0433-23

Comment Excerpt Text:

In addition to strictly limiting and mitigating new disturbance in critical and potential connectivity habitats, BLM must prescribe methods for restoring connectivity. Restoration measures should be prioritized to occur in potential connectivity habitat and only permitted in critical connectivity habitat where such actions will address significant existing disturbances. Restoration of sagebrush will not be successful in increasing the viability of sage-grouse populations long-term if those areas also are heavily influenced by human activities or fire (Knick and Hanser 2011). Potential connectivity habitat can and should be used to conduct off-site mitigation for projects to be conducted in PGMA or nonhabitat areas and mitigation projects should be designed to restore potential connectivity habitat to a functional condition.

Comment Number: OR-GRSG-0434-1

Comment Excerpt Text:

Despite a clear and compelling body of science, explicit policy direction and a stated intention within the DEIS, BLM's preferred alternative does not designate connectivity habitat and, in fact, contains little in the way of land use allocations or other prescriptions designed primarily to maintain or improve connectivity habitat. While PGMA areas overlie some connectivity corridors, the prescriptions for PGMA are inadequate to protect and maintain connectivity habitat. Similarly, focal areas are identified but expressly fail to require or prohibit any activities within the boundaries. DEIS at 2-22. The connectivity protections stemming from the plan decisions are woefully lacking. The failure to provide meaningful protection for connectivity habitat is a significant omission by BLM and one that must be remedied in the proposed action.

Comment Number: OR-GRSG-0434-2

Comment Excerpt Text:

Corridors fall into two groups: "Critical" and "Potential." Critical corridors (16 total) are connected by one or more distance lines throughout the corridor. It is likely that these corridors currently exist as active corridors, based on lek proximity. Maintenance of these corridors is vital to the long-term existence of sage-grouse in Oregon because they preserve spatial continuity. In some cases, the viability of the corridor may be tenuous because leks are near the maximum dispersal distance for sage-grouse. Preservation and restoration of sagebrush habitat in these corridors are critical to prevent population isolation and eventual extirpation (Knick et al. 2011, Knick and Hanser 2011, Johnson 2011).

Potential corridors (8 total) meet all the criteria except that lek distances are greater than 18 km. along some portion of the corridor.5 It is possible that connectivity continues to be present to an attenuated degree along these corridors. At the least, these were likely important corridors historically and habitat restoration could provide connectivity once again. Collectively, the 24 identified corridors connect all PPH population groups in Oregon. By applying this same method additional corridors should be identified that connect PPH populations with those in Idaho and Nevada. This is an issue BLM should study in this and other regional EISs.

5 The exception is the Trout Creek Corridor. Although this corridor is connected throughout by distance lines (thereby meeting the criteria for a "critical" corridor), the southern extremity was burned in the 2012 Holloway and Long Draw fires, resulting in the near-certain loss of connectivity.

BLM should designate both critical and potential connectivity habitat areas in the proposed action. Management prescriptions designed to protect these important habitat areas should be included as discussed herein. Should BLM be unable to designate a separate habitat category in the proposed action for habitat connectivity areas, BLM should include the critical and potential connectivity areas in PPMA until such tikme as connectivity analyses can be completed and a new habitat type designated through land use plan ammendments.

BLM must identify and designate areas of connectivity habitat in the DEIS. Management actions must be developed for these areas that will result in clear protection and restoration of connectivity habitat. To address this shortcoming of the DEIS, ONDA strongly suggests connectivity habitat be identified and designated based the connectivity habitat model presented above.

Comment Number: OR-GRSG-0434-3

Comment Excerpt Text:

If 3% disturbance is a minimum habitat requirement for sage-grouse persistence it makes little sense for BLM to allow that level of development in priority habitat. Instead, a more conservative and effective approach is to limit disturbance to a level below this critical threshold to ensure the possibility of sage-grouse recovery. The State of Oregon's policy for Category 1, Core habitat is that "essential" and "irreplaceable" areas must be managed for "no net loss" (Hagen 2011). In effect the state policy for PPMA or core areas has been to cap new disturbance in these irreplaceable habitat areas at 0%.

By contrast, the DEIS preferred alternative proposes to allow an increased level of disturbance in PPMA by allowing the total amount of disturbance (both new and existing) to be as high as 3%. Given the purpose and need for the DEIS and current understanding of the impacts of anthropogenic disturbance, it is imperative that BLM adopt a more conservative disturbance cap.

Comment Number: OR-GRSG-0434-4

Comment Excerpt Text:

Detailed information about the specific uses and seasonal importance of connectivity habitat is only now becoming clear with much still to be studied and understood. Data are still lacking that demonstrate the level of connectivity of populations and the sedentary and/or migratory behavior of sage-grouse throughout much of the state. Identifying seasonal movements and migrations are key factors in assessing and monitoring core sagegrouse habitats (seasonal and yearlong) and its management (Connelly et al. 2000b). Given this uncertainty BLM must adopt a conservative approach to the management of connectivity habitat by capping total new human disturbance (not including fire) in critical connectivity habitat at 0%. New development that cannot be avoided may be permitted in potential connectivity habitat only with appropriate on-site mitigation. BLM must also develop a management approach to modify connectivity habitat boundaries when new, credible information about sage-grouse use of connectivity habitats becomes available.

Comment Number: OR-GRSG-0567-20

Comment Excerpt Text:

We recommend that more precise target levels relevant to reducing threats to sage-grouse and their habitats be included in the final EIS to help us understand BLM's commitment and the direction BLM will be moving to meet the conservation needs of sage-grouse. Examples include: BLM will target a 5 percent invasive species reduction within PPMAs per year with the intent of reducing invasive species within PPMAs by 10 percent within 10 years; BLM will target juniper removal within one kilometer of leks to zero percent canopy cover (following Baruch-Mordo et al. (2013) suggestions) with the intent of reducing the overall juniper level near leks by 5 percent within 10 years; BLM will target completing 20 percent of their allotment reviews per year with the intent of completing reviews for all allotments at least once within 10 years, etc. Targets should be set for the boundary of the draft EIS and not District by District thereby providing additional flexibility on meeting the agreed upon targets (the targets would

be minimally agreed upon by BLM, the Service, and Oregon Department ofFish and Wildlife).

Comment Number: OR-GRSG-0567-29

Comment Excerpt Text:

While each of the four mining categories has some direction to maintaining sage-grouse populations, we recommend the following for all categories of mining:

- Avoid new mining activities and/or associated facilities within occupied habitats, including seasonal habitats.
- Implement a 3-mile lek buffer exclusion area for all four mining categories to provide assurance that mines will not be placed in seasonally-important habitats near leks,
- Add noise restrictions for important sage-grouse habitats (leks, nesting, brood-rearing, and wintering), In general, we recommend avoiding placement of mining activities in sagegrouse habitats; but if avoidance is not possible, minimizing impacts by limiting noise levels to no more than 10 decibels above ambient conditions (Blickely and Patricelli 2012), Noise restrictions should apply to initial construction and long-term operation of project facilities,
- Provide additional language committing to restore habitats disturbed by mining and associated facilities prior to additional leasing in sage-grouse habitats, The latter part of the conservation objective stresses no net loss of sage-grouse habitats in areas affected by mining.

Comment Number: OR-GRSG-0567-42

Comment Excerpt Text:

Elaborate on the mechanism(s) by which avoidance will be assessed and on the conditions for avoidance for PPMA, PGMA, and leks specific to noise stipulations, seasonal disturbance avoidance stipulations, NSOs, and lek exclusion/avoidance buffers, Alternative D: Does not describe a mechanism to provide for avoidance in PPMA. Also, NSO rules are unclear,

- Clarify the conditions for avoidance for which NSO rules are applied

Comment Number: OR-GRSG-0567-43

Comment Excerpt Text:

Clarify the conditions for which avoidance would be applied.

- RMPs should include supplementary standards so that any impacts within PPMA, PGMA, or to leks should be allowed only as absolutely necessary, only if accompanied by tradeoffs/mitigation that maintain the integrity of the habitat and yield overall net benefit, and only when satisfaction of these criteria are clearly demonstrated.
- Calculations of both the baseline and future changes should be based on anthropogenic and should take into consideration "natural" disturbances, such as fire. The scale at which these measurements are taken should be clearly identified and appropriate. We recognize that the starting point for these measurements is subject to debate. BLM should acknowledge, discuss, and possibly propose a position with respect to baseline determination.

Comment Number: OR-GRSG-0591-24

Comment Excerpt Text:

No exceptions to the surface disturbance cap should be allowed. Sage grouse population trends are cyclical in nature, with highs and lows on a 7 to 10 year cycle, perhaps tied to changing climate cycles. The surface disturbance thresholds will be meaningless if they can be exceeded every time the population is on an upswing. The impact of exceeding the surface disturbance threshold is long-lasting, and will continue to express itself during the next downswing in sage grouse numbers, given the 30-50 year life expectancy of producing oil and gas wells or other industrial sites. It is therefore inappropriate to create a situation in which the disturbance cap can be waived if the Management Zone population is on the rise at the time the waiver is granted. Similarly, waiving the disturbance cap when the sage grouse population is at

or above management targets and stable also is irresponsible, because exceeding the disturbance cap is likely to cause the sage grouse population to decline, and ultimately it will pass below the population target as a result. Sage grouse are not so overabundant that federal agencies can afford to engage in land management decisions known to depress their populations, simply because populations are steady prior to approval of exceeding the disturbance cap. This is regardless of whether offsite mitigation occurs in conjunction with the cap exceedence.

Comment Number: OR-GRSG-0591-3

Comment Excerpt Text:

The Preferred Alternative would apply a 3% limit on anthropogenic disturbance over an undisclosed area, but this disturbance limit would exclude human-caused fire. Relevant to the issue of the 3% disturbance cap, we ask the responsible official to make a formal determination concerning which of the available scientific information is the most accurate, reliable, and relevant in determining what percentage of land area, and at what spatial scale, should be allowed to be disturbed in order to achieve the stated goal of the RMP Amendment. BLM should consider the findings of Knick et al. (2013), which concluded in relevant part that 99% of the active leks in the study area (encompassing the entire western range of the greater sage grouse) were surround by habitat with 3% surface disturbance or less. See Attachment 1. We would ask the responsible official to consider the findings of Kirol (2012), which found for his study area immediately north of the planning area that surface disturbance greater than or equal to 4% of the land area had a significant negative impact on greater sage grouse brood rearing habitat. See Attachment 2. We would ask the responsible official to consider the findings of Copeland et al. (2013), which found that if all of the State of Wyoming sage grouse policy provisions (which include a 5% disturbance cap calculated using a Disturbance Density Calculation Tool) were implemented fully and to the letter, that a 9 to 15% decline in greater sage grouse populations would still occur statewide, including a 6 to 9% decline within designated Core Areas (where the 5% disturbance cap would be applied). We would ask the responsible official also to render the same determination regarding the accuracy, reliability, and relevance of science supporting the 3% disturbance cap proposed for implementation under Alternative B.

Comment Number: OR-GRSG-0591-30

Comment Excerpt Text:

Christiansen (2009) found similar results in a WGFD investigation near Farson, Wyoming, but found that marked fences also were a significant mortality cause for sage grouse. Attachment 15. Of course, eliminating fences has the effect of reducing collisions to zero. With this in mind, fences in sage grouse Preliminary Priority and General Habitats should be inventoried to identify the minimum necessary fencing required for livestock management. Fences determined to be unnecessary should be removed, especially in flat areas near leks, and remaining fences should be outfitted with reflectors or other visibility devices to reduce sage grouse collisions. No new fences should be permitted in sage grouse habitats within Priority Areas. New fences should be precluded on BLM lands within Priority Habitats, and the RMP should include language to prioritize dismantlement of existing fences and addition of visibility markers for those that remain

Comment Number: OR-GRSG-0591-41

Comment Excerpt Text:

Connectivity Areas need to be established to connect Priority Habitats. This is particularly true for the Baker population, for which "[isolation and small population size is (sic) a major threat" according to BLM. DEIS at 5-22. In addition, it is critically important for BLM to identify and protect winter concentration areas. These lands, once identified under the RMP supplement, should be withdrawn from future mineral leasing and entry of all kinds, with Conditions of Approval applying NSO stipulations inside and within 2 miles of these areas, disturbance limits of 3% per square mile and one wellpad per 640-acre section, exclusion of overhead powerlines, and seasonal road closures within the winter habitats.

Comment Number: OR-GRSG-0591-54

Comment Excerpt Text:

Manier et al. (2013) provides a fairly comprehensive review of potential impacts of livestock grazing on sage grouse. These researchers point out that a reduction in livestock stocking rates can directly increase residual vegetation substantially, potentially assisting in meeting this target level for grasses. Sage grouse require residual grass as cover as a component of nesting habitat. BLM should include residual grass requirements inside all sage grouse habitats to be applied in as amendments to Allotment Management Plans. Kaczor (2008) found that a residual stubble height of 10.2 inches best provided for the habitat needs of nesting sage grouse in South Dakota. Connelly et al. (2000a) and Hagen et al. (2007) recommended 18 cm for the Great Basin. The RMP should include at least one alternative that targets a residual summer height of 18 cm to 10.2 inches throughout sage grouse nesting habitat during the nesting season.

Comment Number: OR-GRSG-0591-83

Comment Excerpt Text:

Limitations on tall structures are repeatedly referenced in the alternatives description section, but are not defined. We are concerned that allowing tall structures to be constructed near sage grouse habitats will result in increased predation and habitat abandonment. Please add explicit Actions to the range of alternatives that address tall structures.

Comment Number: OR-GRSG-0606-18

Comment Excerpt Text:

The preferred alternative would implement a provision to "remove, modify, or mark fences in high risk areas within PPMa based on proximity to lek, lek size, and topography," but does not identify what constitutes a "high risk" area for fence collisions, nor the criteria to identify them later. DRMPA/DEIS at 2-86. The DRMPA/DEIS is the place to define how risk will be determined, and to set a limit on what level of fence-related mortality is sufficient to adversely affect sage-grouse populations. Instead, the BLM has left these trigger levels vague and at the discretion of local management for enforcement and implementation, but no meaningful monitoring schedules, minimum triggers, or timeframes for mitigation are specified.

SECTION 7.6 - BEST AVAILABLE INFO BASELINE DATA

Comment Number: OR-GRSG-0007-15

Comment Excerpt Text:

Mormon Basin Mining Operation has been left out of the EISA

On page 5-14, I see the Mormon Basin Fuels Treatment Project, however the Mormon Basin Mining project has been left out. This project was approved in 2010 and is a current, ongoing mining operation. The wildlife biological assessment for this project, on page 5 of the Mormon Basin TES Clearance Survey 2008, states for Mormon Basin, "The survey showed little habitat with potential to support sage grouse leks which typically use open areas within sage brush. No sage grouse or grouse pellets were found within the project area ". The EISA has designated Mormon Basin as PPMA. This area should be deleted from PPMA habitat. Also, the adverse effects to this mining operation are not discussed in the EISA, nor is it included in the cumulative effects section as NEPA requires.

Comment Number: OR-GRSG-0007-5

Comment Excerpt Text:

The fields along the South Fork Burnt River, even the town of Unity is designated PGMA. But there are no sage grouse, and no sagebrush steppe habitat.

Comment Number: OR-GRSG-0026-1

Comment Excerpt Text:

We ask that the BLM review and incorporate into its final decision-making process the findings of a recent study, Central & Eastern Oregon Land Use Planning Assessment: Sage-Grouse Habitat (attached). This report provides a description of the Oregon Planning Program and how it is carried out at the local level. Specifically, the report looks at the central and eastern Oregon regions including all or portions of Baker, Crook, Deschutes, Lake, Harney, Malheur, and

Union counties. The report identifies the overarching protections and land use safeguards that currently apply in all seven of Oregon's Sage-grouse counties. These include Urban Growth Boundaries to contain urban development, resource zoning that requires very large parcel sizes and limits development that is not related to farm, ranch, or forestry activities, and wildlife protection programs, some specific to GRSG.

Comment Number: OR-GRSG-0026-2

Comment Excerpt Text:

There is no baseline established in the GRSG Plan for Baker County to monitor its effectiveness or to target when we are achieving improved results. Without a bar to measure, this document becomes totally irrelevant, yet will continue to regulate excessively regardless of the success or failure of the recovery of GRSG in Oregon.

Comment Number: OR-GRSG-0062-2

Comment Excerpt Text:

Virtue Flats is located approximately 5 miles east of Baker City, entirely within PGH. It offers hills and rocky terrain with views of the Elkhorn and Wallowa Mountains and a variety of challenges for the beginner to advanced OHV enthusiast. We question whether the PGH determination is accurate, as "open" OHV areas typically do not conceivably resemble "sagebrush steppe" habitat with canopy components suitable for any role in functional Grouse habitat.

Comment Number: OR-GRSG-0093-132

Comment Excerpt Text:

Page 4-9. The RMPA assumes that paved roads and primary and secondary routes at 1.9 miles (3 km) influence GRSG. This statement is not supported by the studies cited.

Connelly et al. (2004) reports that leks within 7.5 km of Interstate I-80 appeared to decline at a higher rate than those further from the interstate. This publication does not support the assumptions about primary and secondary routes.

Holloran (2005) describes secondary roads as those roads accessing <5 wells (oil and gas). The BLM makes no explanation about how this study applies to secondary routes in Oregon. According to Holloran (2005) "Main haul roads within 3 km of leks, and a length of >5 km of main haul road within 3 km of leks negatively influenced greater sage-grouse male lek attendance." This implies a certain amount of traffic on the routes Holloran studied. The DEIS/RMPA does not explain how this study applies to secondary routes in Oregon.

Lyon (2000) does not talk about primary or secondary roads. Lyon (2000) did a split analysis of disturbed leks (< 3km to gas development) or undisturbed leks (> 3km to gas development). In general, this study suggests that roads associated with gas development had a negative impact on GRSG. Again, the DEIS/RMPA does not explain how this study applies to primary or secondary routes in Oregon.

Overall, the latter two studies can be characterized as looking at traffic volume, not just road type or distance (according to Holloran 2005). The DEIS/RMPA does not address traffic volume on primary and secondary routes, nor does it describe what such routes are in its assumption. The assumption is therefore unclear and inadequate for evaluating effects. Further, it does not provide enough information for the public to provide input on the assumption.

In addition, two citations that should be added to this section are Johnson, D., M. Holloran, J. Connelly, S. Hanser, C. Amundson, and S. Knick. 2011. Influences of environmental and anthropogenic features on greater sage-grouse populations, 1997–2007. In: S. T. Knick and J. W. Connelly (eds.) and Greater sage-grouse: ecology and conservation of a landscape species and its habitats. Berkeley, California: University of California Press. p. 407-450. Johnson et al (2011) states that the presence of secondary roads does not appear to influence lek trends. This study directly contradicts the BLM's assumption in the DEIS/RMPA.

This study may have implications for Oregon's primary routes, as well, depending on how they

compare to the secondary roads studied by Johnson et al (2011) and how BLM defines primary routes in the RMPA.

Comment Number: OR-GRSG-0093-40

Comment Excerpt Text:

It is equally critical that the BLM validate PPH and PGH before making designations or modifying existing activities. For example, in Alternative D, the decision to terminating grazing on "priority" RNAs, was developed with data that was not verified in the field. As a result, at least two "priority" RNAs in Lakeview District slated for permit and lease "termination" were estimated as being 97 and 99% moderate to PPH when in fact according to the Lakeview District's application of the HAF inventory methods, these RNAs were had 76% and 56% unsuitable habitat for GRSG. It is inappropriate to base management decisions, with serious consequences for public lands permit holders, on information that is speculative and unverified.

Comment Number: OR-GRSG-0093-43

Comment Excerpt Text:

Holloran (2005) is based in Wyoming, mainly looking at the effects of oil and gas development. He reports that GRSG may be excluded from attending leks within or near natural gas field developments. He also reports that a decline in male attendance at leks was associated with increased levels of development. This paper is centered on GRSG declines based on natural gas field developments. At most, this article supports a cap or mitigation measures related to natural gas development.

Walker et al. (2007) is another paper based on energy development, and specifically coalbed natural gas (CBNG) development. This research indicates that the number of males on leks declined more rapidly in CBNG fields, there were greater lek abandonment in CBNG fields, and fewer males per active lek were observed in CBNG fields. Walker et al. (2007) also state that CBNG development was a better explanatory variable for lek persistence (or abandonment) than power lines, roads, West Nile virus mortality, or tillage agriculture.

Doherty et al. (2008) was focused on CBNG development and impacts to GRSG winter habitat. Their research indicated that GRSG winter habitat preference declined with the presence and increased density of CBNG wells.

Doherty et al. (2011) focused on energy development as well. This article is centered on assessing future risks to GRSG populations in states where energy development is a concern/risk (Wyoming, Montana, Colorado, Utah, North Dakota, and South Dakota - NOT Oregon). This paper also considers areas where maintaining sagebrush-dominated landscapes provides benefits in core regions and in targeting restoration to promote connectivity of core regions.

Naugle et al. (2011a) (Ch 4 in Energy Development and Wildlife Conservation in Western North America) also focused on GRSG and energy development. This chapter uses the concept of core areas to prioritize conservation planning, while also discussing off-site mitigation for impacts from energy development.

Naugle et al. (2011b) (Ch 20 in Greater Sage-grouse: Ecology and Conservation of a Landscape Species and its Habitats) is also focused on energy development. This paper is very similar in content to Naugle et al. 2011a, stating a need for landscape conservation of GRSG to best offset the negative impacts of energy development. This article notes that "Ranching was the most environmentally benign land use that accumulated fewer human features than landscapes that also contained tillage agriculture, energy development, or both (cited from Holecheck 2007)."

These articles would support a decision that found that "human disturbance" does not include grazing and activities associated with grazing such as access roads (low traffic volume), water improvements, fences, and management of livestock. High traffic volume roads are not generally associated with ranch operations, but their existence should not affect grazing activities under the RMPA.

Comment Number: OR-GRSG-0101-8
Comment Excerpt Text:
West Nile Virus (WNV)

The Bureau of Land Management (BLM) completely ignores the main causes of the decline of the GRSG in areas of Eastern Oregon. According the University of Montana study, "West Nile virus outbreaks are more common during a drought". For the last three years the West has been in the grip of a severe drought. According to the study the GRSG hen survival July-August, 2003 was about 76% with no WNV and only 20% with WNV.

Thus the hen population decreased by nearly 75% and further information showed the WNV reduced the GRSG population by 25% in 2003. The GESG population had a lek attendance decline of about 85% in 2004 due to WNV. WNV has been detected in the GRSG in the states of CO, ID, MT, ND, NV, OR, SD, UT, & WY. WNV affects both sexes and all age classes. Lab tests confirm that all birds that contact the disease die.

Comment Number: OR-GRSG-0134-7
Comment Excerpt Text:
The plan should incorporate important, new information concerning sage-grouse and sagebrush steppe.

The National Environmental Policy Act requires agencies to use "high quality" information in planning (40 C.F.R. § 1500.1(b)) and the BLM's sensitive species policy commits the agency to "obtain and use the best available information deemed necessary to evaluate the status of special status species in areas affected by land use plans" (BLM Manual 6840.22A) (see also BLM NEPA Handbook H-1790-1, 6.8.1.2 (January 2008), "Use the best available science to support NEPA analyses…"). Finally, planning criteria for the draft Oregon plan commits BLM to use current scientific information to develop management strategies for sage-grouse (ES-11). The following new information related to sage-grouse and sagebrush steppe was published during preparation of the draft plan and should be considered in the final EIS, as appropriate.

1. Beschta, R. L., D. L. Donahue, D. A. DellaSala, J. J. Rhodes, J. R. Karr, M. H. O'Brien, T. L. Fleischner, C. Deacon-Williams, Cindy. 2012. Adapting to climate change on western publiclands: addressing the ecological effects of domestic, wild, and feral ungulates. Environmental Management, available at

http://fes.forestry.oregonstate.edu/sites/fes.forestry.oregonstate.edu/files/PDFs/Beschta/

Beschta_2012EnvMan.pdf.

- Domestic livestock and other ungulates alter vegetation, soils, hydrology, and wildlifespecies composition and abundances that exacerbate the effects of climate change onwestern landscapes. Removing or reducing livestock grazing across large areas of publicland would alleviate a widely recognized and long-term stressor and make ecosystems less susceptible to the effects of climate change.

2. Patricelli, G. L., J. L. Blickley, S. L. Hooper. 2012. The impacts of noise on greater sagegrouse: a discussion of current management strategies in Wyoming with recommendations for further research and interim protections. Unpublished report. Prepared for the Bureau of Land Management, Lander Field Office and Wyoming State Office, Cheyenne and Wyoming Game and Fish Department; available at http://www.wy.blm.gov/jiopapo/papo/wildlife/reports/sage-grouse/2012sgNoiseMon.pdf.

- Maximum noise levels from land use and development allowed under the Wyoming state sage-grouse core area policy near sage-grouse leks and other habitat are untested, may be difficult to measure, and may be too high to support sage-grouse conservation within and outside core areas.

3. Blickley, J.L., K. R. Word, A. H. Krakauer, J. L. Phillips, S. N. Sells, C. C. Taff, J. C.

Wingfield, G. L. Patricelli. 2012. Experimental chronic noise is related to elevated fecal

corticosteroid metabolites in lekking male greater sage-grouse (Centrocercus urophasianus). PLoS ONE 7(11): e50462. doi:10.1371/journal.pone.0050462.

- Anthropogenic noise from energy development and roads can cause greater sage-grouse to avoid otherwise suitable habitat and increase stress responses in birds that do remain, which could affect disease resistance, survival and reproductive success. The effects of noise from many common activities in the sagebrush biome significantly expands the human footprint on the landscape and impacts on sage-grouse.

4. Howe, K. B., P. S. Coates, D. J. Delehanty. 2014. Selection of anthropogenic features and vegetation characteristics by nesting Common Ravens in the sagebrush ecosystem. Condor 116: 35-49.

- The proximity of transmission lines was, among other factors, predictive of nest location for common ravens in/near sagebrush steppe. The research supports other findings that transmission lines subsidize ravens, a predator of sage-grouse.

5. Caudill, D., T. A. Messmer, B. Bibles, M. R. Guttery. 2013. Winter habitat use by juvenile greater sage-grouse on Parker Mountain, Utah: implications for sagebrush management. Human-Wildlife Interactions 7(2): 250-259.

- The loss or fragmentation of sage-grouse wintering areas can have a disproportionate impact on sage-grouse population size. Management should avoid eliminating or reducing sagebrush cover in winter habitat.

6. Chambers, J. C., B. A. Bradley, C. S. Brown, C. D'Antonio, M. J. Germino, J. B. Grace, S. P. Hardegree, R. F. Miller, D. A. Pyke. 2013. Resilience to stress and disturbance, and resistance to Bromus tectorum L. invasion in cold desert shrublands of Western North America. Ecosystems DOI: 10.1007/s10021-013-9725-5; available at

www.sagestep.org/pubs/pubs/092Chambers.pdf.

- Wildfire, livestock grazing and other factors can disturb and stress semi-arid native shrublands, reducing their reslience to invasion by cheatgrass. Invasability of native communities can also vary depending on environmental conditions. Strategies are recommended for improving ecosystem resiliency and managing communities already invaded by cheatgrass.

Comment Number: OR-GRSG-0134-9

Comment Excerpt Text:

Priority habitat contains known winter concentration areas (1-6; see also 3-6, Oregon core areas contain 99 percent of 1,695 winter locations; 3-7), which are considered crucial wildlife habitat (8-11), but the draft Oregon plan does not include a map of winter habitat.4

4The map of vegetation in the planning area (3-22, Figure 3-5) could be the basis of a sage-grouse winter range map.

Comment Number: OR-GRSG-0137-1

Comment Excerpt Text:

Our family owns valid mining claims where the lands were patented under the Stock Raising Homestead Act of 1916. These lands have been designated by BLM as PPMA. Designation of private land makes no sense to us. Our concern, is, that by designating private lands, BLM has sentenced private land owners, and the owners of the mineral estate, to an unwilling partnership with USF&WL Service if the grouse get listed.

Comment Number: OR-GRSG-0220-19

Comment Excerpt Text:

In reviewing the population trends for sage-grouse over the study area, we note that the BLM has

overlooked the survey data from the 1954 to 1993 time period conducted by the USFWS in Hart Mountain NAR (HMNARCP/EIS Appendix G). This is some of the best scientific data available and should be included in the analysis.

Comment Number: OR-GRSG-0231-1
Comment Excerpt Text:
: The Council has concerns with the lack of information regarding the current level of disturbance. The categories of disturbance are not well defined and the level of enforcement is not explained.

Comment Number: OR-GRSG-0276-38
Comment Excerpt Text:
Text: Pg. 3-11, 3rd para.

Juniper encroachment affects over 12 million acres in the Great Basin alone (Miller et al. 2008). A decline of shrubs is the most documented shift in understory vegetation following western juniper encroachment. Conifer encroachment fragments sagebrush habitat for sage-grouse both by removing suitable cover and by providing tall structures that attract predators of sage grouse such as corvids (Doherty et al. 2008, 2010). Mountain big sagebrush sites show 20 to 25 percent declines in shrub cover in response to trees reaching 50 percent of the maximum site potential (Miller et al. 2000). Corvid abundances have been positively correlated with higher nest predation rates of many birds, including GRSG (Hagen 2011).

Comment: Very limited information is available on the direct behavioral response of sage-grouse to tall structures. The most frequently cited literature supposedly providing evidence of avoidance of tall structures by sage-grouse are either unpublished or non-peer reviewed reports (Ellis 1985, 1987; Braun 1998; Braun et al. 2002). Walters et al. (2014) in a literature review of the effects of tall structures on birds and concluded that none of the reviewed studies provided data on presence of predatory birds or measured survival associated with distance from a structure. Recent studies have shown that sage-grouse responses to tall structures are variable and do not necessarily show avoidance of structures and associated habitat. LeBeau (2012) found that sage-grouse did not avoid wind turbines during the nesting and brood-rearing periods, but selected for habitats closer to turbines during the summer season. Although sage-grouse nest and brood survival decreased in habitats in close proximity to wind turbines, female survival appeared not to be affected by wind turbines. Also, wind energy infrastructure appears not to be affecting male lek attendance 4 years post development. Ongoing studies associated with the Falcon-Gondor transmission line (Nonne et al. 2011, 2013) did not show avoidance behavior of radio-tracked sage-grouse of tall structures (power line corridors).

There is no published information available documenting that conifer encroachment leads to increased predation risks of sage grouse by corvids. Doherty et al. (2008, 2011) do not provide information on sage grouse predation by corvids due to the presence of invading junipers. Hagen (2011) reviewing sage-grouse predation literature, concluded that on average predation is not limiting sage-grouse populations, except in fragmented landscapes. Furthermore, Hagen (2011) stated that "[C]orvid abundances have been positively correlated with higher nest-predation rates of many bird species, including grouse". No reference is made to sage grouse. We strongly suggest that RMPA/DEIS correctly reflects what is reported in the literature, not conjecture.

Comment Number: OR-GRSG-0276-39
Comment Excerpt Text:
Text: Pg. 3-11, 3rd para.

Lek abandonment was most likely to occur in areas with over 25 percent cultivated cropland within 18 miles of the lek (Aldridge et al. 2008). Transmission lines, in addition to reducing habitat suitability and increasing fragmentation, can cause GRSG mortality through bird collisions with lines and facilitate raptor predation of GRSG. Transmission structures and communication towers may also provide nesting sites for corvids and raptors in habitats with low

vegetation and relatively flat terrain (Ellis 1984; Steenhof et al. 1993; Johnson et al. 2011). Lek count trends tend to be lower on leks within three miles of interstate highways (Johnson et al. 2011) but no apparent relationship has been found between lek count trends and the presence of secondary roads (Aldridge et al. 2008). Generally, road-effect distances (the distance from a road at which a population density decrease is detected) are positively correlated with increased traffic density and speed (Forman and Alexander 1998). Rates of decline in sage-grouse male lek attendance increased as traffic volumes on roads near leks increased, and vehicle activity on roads during the daily strutting period (that is, early morning) had a greater influence on male lek attendance compared with roads with no vehicle activity during early morning in southwestern Wyoming (Holloran 2005). Generally, oil and gas developments within two to four miles of leks or nesting areas had deleterious effect on populations, with the impacts increasing with increasing well density (Lyon and Anderson 2003; Walker et al. 2007; Johnson et al. 2011). Knick and Connelly (2011) found that fire and human disturbance were the primary factors influencing fate of leks. Knick et al. (2003) reported 95 percent of active leks (3,184 leks) in their western states study area were in landscapes with less than 3 percent development; all lands surrounding leks were less than 14 percent developed.

Comment: Very little published information is available on the collision rate of sage-grouse with powerlines. The US Fish and Wildlife Service (2010) in an extensive survey of the literature found that 3 sage- grouse died as a result of collisions with a telegraph line in Utah (Borell 1939). Braun (1998) and Connelly et al. (2000) report on sage-grouse collisions with powerlines but do not provide any details. Beck et al. (2006) reported 2 out of 43 (4.6%) radio-tracked sage-grouse killed by colliding with a power line. Power line collisions for sage grouse have not been documented by the Avian Power Line Interaction Committee (APLIC) utilities. Despite years of data collection by utilities on collision and electrocution at power lines, no collision of sage grouse have been documented (Messmer et al. 2013). Thus, the mortality risk of sage grouse colliding with distribution or transmission lines is very low and over-stated by the BLM.

Research findings by Johnson et al. (2011) appear to be overstated. Johnson et al. 2011) stated that for oil and gas wells "leks tended to have more positive trends if they were farther away from producing wells." Also, leks trends appeared to increase to about 20 km in the Great Plains and Wyoming Basin. Johnson et al. (2011) also reported a declining trend in leks within 5 km-, but a less strong relationship within 18 km for interstate highways. The presence of secondary roads appeared not to influence lek trends.

Knick et al. (2013) modeled greater sage-grouse presence based on known greater sage-grouse leks and measured variables for the 1-km2cell within which the lek was located, as well as in a 5- and 18-km radii surrounding the lek. Variables measured at a 18-km radius (11.2 miles) did not perform well and were dropped in subsequent analyses. This suggests that measured variables at this latter scale did not influence lek persistence. At the 5 km radius scale Knick et al. (2013) found that 95% of all active leks were in landscapes with <3% developed acreage. However, such results were not reported within a 1 km2 cell within which the lek was located or for each 1 km2 comprising the PPMA. According to Knick et al. (2013) an area of 2.4 km2 (0.9 mi2) could be developed in a 5-mile radius around an active lek (78.5 km2, or 30.3 mi2). This appears to be the smallest scale to be considered in PPMA. However, the RMPA/DEIS, considers the 1 mi2 the smallest hierarchical arrangement allowing concentrated anthropogenic disturbance. Thus, Knick et al. (2013) study appears not to support the BLM's smallest scale at which anthropogenic disturbance is measured (30.3 mi2 versus 1 mi2 respectively).

Comment Number: OR-GRSG-0276-6

Comment Excerpt Text:

These negative consequences may include increased competition from other species that benefit from guzzlers, such as domestic and wild ungulates, or

predators and the associated increase in predation risk (Braun 1998). – (Oregon RMPA/DEIS. Pg. 3-135)

Braun (1998) opined that use of areas near transmission lines by sage-grouse increased with increasing distance to transmission lines. He assumed that this was evidence of avoidance of the transmission line (Presentation abstract from unpublished data). Braun (1998) did not provide any details on his unpublished information, such as how many transects were established, the frequency and timing of surveys, and habitats that were surveyed. No controls or treatments were identified. Therefore, his statement is based on unreliable data and should not be perpetuated as science.

GRSG avoidance of vertical structures, likely due to raptors perching on the structures, may result in habitat exclusion via behavioral response with reference to Ellis (1984) – Oregon RMPA/DEIS. Pg. 4-17.

Power lines and other vertical structures located in areas naturally devoid of perching opportunities provide a perch for raptors and subsequently increase the potential for GRSG to abandon leks (Ellis 1984) – (Oregon RMPA/DEIS. Pg. 4-172)

Ellis (1984) describes the behavioral response of sage-grouse to golden eagles at a lek. Some males flushed, others remained ("master cocks") and continued displaying after a while. There is no evidence provided that the lek was abandoned because of the presence of golden eagles. IPC suggests that the BLM carefully evaluates Ellis (1984) and makes changes to the statement in the Oregon RMPA/DEIS accordingly.

Comment Number: OR-GRSG-0281 (FrmLtr11)-25

Comment Excerpt Text:

CLAIRIFY: Vol 1, Page 3-3 entire section: What are the specific GRSG population targets for individual RMPs? How were the RMP numbers derived and how was lek data converted to population data? What specific data are you relying on to support that statement on private land?

Comment and Solution: The solutions are in the NTT report (page 30) and the DEIS needs to provide clarity about the accuracy and reliability of the population estimates.

- Counts of males attending leks in the spring have been used by wildlife agencies as the primary index to population trends since Patterson suggested that this method might be useful in 1952 (Patterson 1952). Use of convenience sampling to monitor bird populations has been criticized (Ellingson and Lukacs 2003), and lek counts in particular have been challenged as inconsistently conducted, inherently biased and without any known relationship to population size (Beck and Braun 1980, Walsh et al. 2004, Sedinger 2007). Despite limitations of the method, lek counts remain the best available information on population trends over time, and pragmatic strategies to improve population estimation remain elusive (Reese and Bowyer 2007).

Lek counting may be the "best" you have now and it may have a lot of error. With that recognition, it seems the DEIS and BLM should commit to developing a better population estimate. Left as the "best available" suggests that the DEIS means "Oh well, good enough." The DEIS should take a stronger position and develop a way to produce a step-up plan to get a true population estimate.

Comment Number: OR-GRSG-0281 (FrmLtr11)-26

Comment Excerpt Text:

GENERAL: Vol 1, Page 3-14: The document states that it is assumed historic GRSG population were greater based on the assumed larger distribution map for historic sagebrush communities. The document should explain that data does not exist to make the assumption

Comment Number: OR-GRSG-0281 (FrmLtr11)-38

Comment Excerpt Text:

Environmental Consequences

Comment, Vol 2, page 4-4 to 4-7: GIS data have been used to develop acreage calculations and to generate the figures. Calculations depend on the quality and availability of data. Acreages and other numbers are approximate projections, for comparison and analysis only. Readers should not infer that they reflect exact measurements or precise calculations. In the absence of quantitative data, best professional judgment was used. Impacts were sometimes described using ranges of potential impacts, or they were described qualitatively, when appropriate. The approximations indicate the level of confidence that the public can place on the DEIS information. We have urged caution about the DEIS providing step-by-step guidance about site specific actions where exact measurements are not available. The ranges of potential impacts cannot be reviewed with much certainty that the impacts from the land use activities are likely or unlikely to take place.

Solution: It is unclear based on the statement shown above, how the DEIS determined the PPMA and PGMA in the plan areas other than assumptions based on models. What Breeding Bird Density was used? ODFW counts leks and to go beyond that first data set, it seems reality and some common sense about extrapolating information from an extrapolated bit of information would not allow much more than a guess. The BLM must provide information about the models and where and when they were ground-truthed. Modeling is not science based when they are formed through assumptions of certain conditions that may or may not be present. The model then projects forward how different events may or may not take place. The models must be verified on-the-ground to know if they are at all reliable.

Comment Number: OR-GRSG-0309-11

Comment Excerpt Text:

North Bluejoint: Allotment 512

At the north end of this allotment there is an area designated as general habitat. Most of this area is a crested wheat seeding devoid of sagebrush which I believe would not be conducive to habitat for Sage grouse. I believe that this was an oversight and an error and would like to see the BLM correct this.

Comment Number: OR-GRSG-0356 (FrmLtr07)-1

Comment Excerpt Text:

In the draft Resource Management Plan AmendmentlEnvironmental Impact Statement (hereafter RMPA, or Plan) the reports and studies based the decline on population levels from the middle 1980s rather than using population levels based on scientific studies from the USGS (U,S, Geological Survey) from 1946 through 2013, Therefore, the GRSG decline is based on a peak population period rather than on a long established average.

Comment Number: OR-GRSG-0378-2

Comment Excerpt Text:

Section 4.2.2. of the DEIS states "fences are often associated with power lines." This statement is inaccurate; power lines typically do not have associated fencing; fencing would typically be limited to substation boundaries. APLIC requests that the BLM consider these studies, which use current telemetry techniques, and specifically investigate sage-grouse responses to power lines, when addressing power lines in its RMP update.

The 2013 proposed Bi-State sage-grouse listing decision continues to reiterate anecdotal information and opinion, and misrepresent information in cited literature concerning sage-grouse and tall structures. APLIC encourages the BLM to consider the UWIN (2010) literature review and 2013 update (Messmer et al. 2013), as well as Walters et al. (2014) and apply valid scientific data in its review of the literature related to sage-grouse and tall structures

Comment Number: OR-GRSG-0381-1

Comment Excerpt Text:

Another way to understand population trends is to consider lek occupancy and lek abandonment over

time. BLM has failed to study this aspect, so I request BLM to include the following ODFW data in its record of decision document. Using ODFW data from 2004, 2010, and 2013, I demonstrate that the status of 166 occupied sage-grouse leks in Oregon have been abandoned2 (see attached table). There are currently 575 known occupied sage-grouse leks in Oregon. These data suggest that 166/(166+575), or approximately 22% of sage-grouse leks in Oregon have been abandoned over the past 10 years. Conversely, just a single lek has become reoccupied3 during the same time. These data indicate a precipitous decline of sage-grouse in Oregon, even more sobering than the trend lek data. Unlike lek counts, once a lek is abandoned it almost never reoccupied. This frightening decline is seriously understated in the EIS.

Comment Number: OR-GRSG-0381-2

Comment Excerpt Text:

Of perhaps equal concern is the complete lack of connectivity corridor information. If BLM does not rectify this omission, connectivity corridors will be severed because BLM has not identified any! BLM admits that connectivity corridors are essential to sage-grouse survival, but does not take the next logical steps of identifying the actual location of these corridors and then recommending protection of these actual locations. The abandonment of a single lek within a connectivity corridor has a greater consequence than the loss of a lek in either core or peripheral habitat, because connectivity between core populations can be lost resulting in population isolation and eventual extirpation. Therefore, the identification and protection of connectivity corridors is of immense importance to the long-term viability of sage-grouse. I urge BLM to incorporate the recommendations of ONDA and the Wilderness Society to include maximum protection for connectivity corridors, and to either use those identified by ONDA, or conduct its own analysis to determine where these important corridors lie.

Comment Number: OR-GRSG-0409-2

Comment Excerpt Text:

Section 1.4.2 describes how the BLM intends to use their Northern Great Basin ecoregion Rapid Ecoregional Assessment (REA) to guide their collaboration across jurisdictional boundaries. While we support this approach, we encourage the BLM to use data sets being developed by the State of Oregon in addition to, or instead of those used in the REA. Below we identify key data sets and the kinds of analyses we recommend the BLM use to refine the focal areas maps and create an All Lands, All Threats adaptive landscape conservation plan to guide regional conservation and mitigation investments.

Important Biological and Ecological Data

- Distribution of leks, core habitat, seasonal habitats, habitat suitability and areas of important connectivity for GRSG
- Distribution and condition of vegetation
- Distribution of other species of conservation concern
- Local and regional permeability
- Factors affecting resilience to climate change
- Geophysical settings
- Past fire perimeters and modeled fire risk
- Current and predicted Invasive species distribution models
- Distribution of juniper by phase

Important Socio-Economic Data

- Local land use and zoning
- Existing permitted land uses
- Distribution of existing infrastructure (roads, transmission lines, fences, etc.)
- Distribution of important natural other economic resources and factors that would enable their development

Analysis

By combining data sets above the BLM could set priorities for different kinds of investments. For example, combining the distribution of key GRSG habitat with:

- The distribution of other species or habitats of conservation concern (e.g. deer winter range, golden eagle concentrations) we can identify areas where investment in activities to benefit GRSG will benefit other species to either help prevent listing of other species and achieve mitigation obligations from multiple species.
- Local land use, zoning and the distribution of key economic resource areas we can identify GRSG habitat areas that may have a higher and best use for economic development where investments in conservation should be avoided.
- The distribution of modeled fire risk to identify where to strategically implement fuels reduction treatments.
- The distribution of zoning could identify where investments in conservation easements with willing sellers would provide significant protection of critical habitat on private lands.
- Geophysical settings and vegetation condition could identify areas to target specific restoration treatments to have the greatest chance of conservation success.

We would be happy to assist the BLM and State of Oregon with these types of analyses

Comment Number: OR-GRSG-0481-1

Comment Excerpt Text:

There are a number of issues that have not been adequately addressed in Alternative D. Specifically: wildfire, invasives (mainly cheatgrass and medusa head and their association with the fire cycle), and juniper encroachment. Grazing was not a primary threat to Greater Sage-Grouse as identified in the USFWS March 2010 Decision on Greater Sage-Grouse; on the contrary, Alternatives B, D, and E all acknowledge strategic use of grazing as a tool for fuels reduction to control the range and size of wild fires and for control of invasive species. Please incorporate here the studies made by OSU scientist Tony Svejcar concerning the benefits to sage grouse from grazing practices. (btp_:j1grmor.lstpte.eduj_degjeoarchpblication/2014/.794). The catastrophic fires this region has experienced in the last few years have done more to damage the future of the sage grouse than any other land related event. The final Plan must incorporate a long term approach to fire reduction strategy and must emphasize the relative impact of fire, as compared to all other activities occurring on sage grouse habitat.

Comment Number: OR-GRSG-0489-1

Comment Excerpt Text:

In finalizing the Resource Management Plan Amendment, I encourage BLM to ensure there is a clear line of sight between the threats listed in the COT Report and the Goals and Actions identified in the RMPA. Unfortunately, that clear line of sight does not exist in the Draft RMPA. In order to achieve this, I make the following recommendations:

1. Reference the COT Report and the threats identified in that document. These threats should receive priority for being addressed,

2. Given that budgets are chronically limited, the RMPA should lay out a strategic framework that clearly directs available resources to the addressing the highest priority threats, which are fire, invasive annual grasses, and conifer encroachment.

3. For each of these threats, the RMPA should clearly evaluate the current extent of the threat (how many acres and which acres are affected), establish targets for treatment of the threat (again, how many acres to treat and which acres are most important to treat), and explain the conservation measures that will be used to address the threat. In the DEIS, there are many conservation measures listed, but without

adequate information on the current extent of the threat or targets for treatment it is difficult to get a clear picture of how beneficial those conservation measures will be. Providing greater specificity in this area will assist BLM staff in effectively implementing the RMPA and will assist FWS in evaluating the expected conservation benefits of the plan when considering a listing decision for greater sage-grouse.

4. Where data is currently on existing conditions, the RMPA should identify clear actions to collect that data and explain how the data will then be used to establish targets and prioritize treatment

Comment Number: OR-GRSG-0503-2
Comment Excerpt Text:
The draft DEIS, Purpose and Need completely omits a major threat to the GESG habitat, and that is disease. According to the U of Montana study "West Nile Virus: Ecology and Impacts on Greater Sage Grouse Populations" West Nile Virus (WNV)" outbreaks more

common during drought"

Comment Number: OR-GRSG-0532-105
Comment Excerpt Text:
Pg. 4-21 - Provide source for subpopulation designations e.g., 902, 903, 904, 906 and P04. These designations are not commonly known or recognized.

Comment Number: OR-GRSG-0532-124
Comment Excerpt Text:
Table F-1, Alternative D - It is not clear how BLM will differentiate between nesting, brooding, breeding, and wintering habitats. LANDFIRE data is unlikely to provide useful or accurate results. We suggest that BLM examine newer ILAP-like products (INR 2013) for which habitat use type models are being developed.

Comment Number: OR-GRSG-0532-125
Comment Excerpt Text:
It is also unclear how BLM will define connectivity. While ODFW provides one methodology for defining connectivity it results in a more broad land area than other methods such as those used by the Washington Wildlife Habitat Connectivity Working Group that incorporate circuit theory.

Comment Number: OR-GRSG-0532-139
Comment Excerpt Text:
Throughout the text and appendices there is conflicting statements about the methodology that would be used to assess habitat quality for GRSG. In the presentation on ACEC/RNA management BLM states that "annual statistically valid monitoring of vegetative condition" will be implemented, but there is no reference to the methodology to be used. In other parts of the text the Habitat Assessment Framework (HAF) (Stiver et al. 2010) is cited. In some text HAF will be the methodology used, in other text, HAF will be applied with "regionally adjusted values". Later in the text there is reference to the Standard for Rangeland Health (Appendix M) being the methodology used to assess habitat quality. At the Lakeview public meeting Bob Hopper (member DEIS development team) suggested the Standard for Rangeland Health would be the method used. It seems reasonable that any method selected would be applied with consideration of regional variations as well as the growth potential of specific vegetation associations being assessed. At this time it is unclear how habitat will be monitored.

Comment Number: OR-GRSG-0532-142
Comment Excerpt Text:
The identification of Restoration Focal Areas is to be applauded, however, the BLM should provide some explanation of how and why these focal areas were selected in order to better understand types and level of improvements to GRSG habitat that can be expected from work in these areas. Additionally, the BLM should indicate how Focal Areas align with Core and Low Density designations.

Comment Number: OR-GRSG-0532-43
Comment Excerpt Text:
Finally, Oregon is concerned that Alternative D does not provide sufficient for connectivity between PAC's. Knick et al. (2013) highlighted the need to maintain interconnected populations to reduce the risk of extirpation caused by local impacts and allow

for recolonization. The State recognizes that data needed to accurately identify key connectivity corridors is limited. Therefore, the State recommends that the BLM work with ODFW, USFWS, INR, and others to evaluate available methodologies to identify important habitat corridors linking PAC's, followed by development of strategic approaches for prioritized restoration and protection of such corridors. One such approach that warrants further evaluation is highlighted by Knick et al. (2013) as they mapped Habitat Suitability Index scores and modeled pathways of potential sage-grouse movement among leks and populations using Circuitscape (McRae 2006).

Comment Number: OR-GRSG-0532-50

Comment Excerpt Text:

The State strongly recommends using Core (i.e., PACs) and Low Density designations, rather than "focal areas" for prioritization. Identification of priority areas on state and private lands is also important and should be developed and integrated with the federal lands component. The State is committed to working with BLM to identify and adaptively manage this prioritization system.

Comment Number: OR-GRSG-0591-11

Comment Excerpt Text:

Text on Affected Environment with regard to sage grouse habitat also failed to discuss the winter habitat needs of the birds, in spite of clear scientific evidence that impacts to sage grouse by oil and gas development on winter ranges can have profound effects on the birds (Walker 2008).

Comment Number: OR-GRSG-0591-27

Comment Excerpt Text:

Protecting sage grouse leks and associated nesting and brood-rearing habitat are key to conserving the species. The best available science has recorded significant negative impacts from individual producing (post-drilling) oil and gas wells drilled within 1.9 miles from active leks (Holloran 2005), measureable impacts from coalbed methane fields extend out to 4 miles (Walker 2008), and new research has recorded effects as far away as 12.4 miles from leks (Taylor et al. 2012). WGFD, using lek buffers of 0.25 mile, 0.5 mile, 0.6 mile, 1.0 mile, and 2.0 mile, estimated lek persistence of 4, 5, 6, 10, and 28 percent, respectively (Christiansen and Bohne 2008, Attachment 12).

Comment Number: OR-GRSG-0591-79

Comment Excerpt Text:

In particular, measures to protect sage grouse wintering habitat are almost entirely absent from all alternatives, and there is no impacts analysis for permitted activities on wintering sage grouse and their habitats. There is a notable absence of baseline information in the DEIS on wintering habitats, and the lack of impacts analysis leaves open the question of how heavily wintering sage grouse will be affected by permitted activities under the new RMP, and what effect this will have on the viability of sage grouse populations both inside and outside Priority Habitats.

Comment Number: OR-GRSG-0591-8

Comment Excerpt Text:

The BLM must reach a determination regarding the science that is most relevant, reliable, and accurate regarding the amount of forage that needs to remain to provide sage grouse hiding cover. Herman-Brunson et al. (2009) found that sage grouse nest survival decreased when residual grass cover was < 16 cm in height. According to Kaczor (2008: 26) grass height is positively correlated with nest success, and this researcher recommended, "Land managers should attempt to leave or maintain maximum grass heights [greater than or equal to] 26 cm, the inflection point for 50% nest success." See Attachment 8, and see Kaczor et al. (2011), Attachment 9. Heath et al (1997) also found that near Farson, Wyoming, nests with taller grass heights were more successful than those with shorter heights. The agencies should implement a standard within the plan to address a measurable stubble height that must remain throughout the nesting season in grouse nesting habitat. We recommend at minimum using the 7.1-inch residual stubble height standard as recommended by Connelly et al. (2000a) and confirmed by Hagen et al. (2007). Attachment 10. The BLM should evaluate this standard and other residual stubble height standards for nesting and

other habitats to determine which approach best represents the best science.

Comment Number: OR-GRSG-0606-13

Comment Excerpt Text:

The DRMPA/DEIS is deficient on baseline information that would give the reader context in review of the preferred alternative. Baseline information allows the reader determine whether BLM, with the information it had available, reached reasonable conclusions. This includes sage-grouse lek data and surveying/monitoring information and livestock grazing management information, both of which are seriously lacking.

BLM throughout this process must provide the public full access to all lek counts and other survey data used in any way in this process. Agencies must provide all steps used in modeling and mapping. Data for all leks must be provided. This should be Posted on BLM's Website, and be available for public scrutiny. For all leks where information is available, BLM must show who surveyed leks, when, how often, count results for all visits, intensity of surveys, and all other relevant information. It is necessary to understand which leks are actually being surveyed, whether the most frequently surveyed leks are being cherry-picked to represent those with consistently higher numbers, and to show which leks have disappeared/been lost. See WWP' Scoping Comments at 33-34.

Comment Number: OR-GRSG-0606-6

Comment Excerpt Text:

In 2004, BLM published its National Sage-Grouse Habitat Conservation Strategy ("Strategy").6 Among other commitments, this policy binds the BLM to "use the best available science and other relevant information to develop conservation efforts for sage-grouse and sagebrush habitats."7 WWP has referenced a number of scientific studies, compiled in the Literature Cited section of these comments, which BLM must read and consider in order to meet its obligation to "use the best available science" including publications specifically mandated under the Strategy.

SECTION 7.7 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0002-1

Comment Excerpt Text:

Board Recommendation 1-1: The Plan (Volume 1, pg. ES-15) stipulates that human-caused disturbance (including current on-the-ground disturbance) will not be allowed to effect or cover more than three percent of a Preliminary Priority Management Area (PPMA), regardless of ownership. The meaning of that statement is of major concern and what consequences it may have on private lands. The Plan, under any alternative and prior to adoption, must clearly define how that will affect private lands.

Comment Number: OR-GRSG-0002-7

Comment Excerpt Text:

Recreation and Public Access: In 1986, Mayo Call and Chris Maser published their findings (General Technical Report PNW-187) and concluded that sage-grouse were tolerant of automobiles and that they may be watched from fairly close range if the observers did not leave their vehicle.

The Oregon Dept. of Fish and Wildlife concluded in their March 2011 study that "Road density nor distance to nearest roads were significant factors in the long-term persistence of sage-grouse across the range (Aldridge et al, 2008)" [emphasis added].

Comment Number: OR-GRSG-0009-2

Comment Excerpt Text:

The DEIS fails to provide meaningful alternatives for analysis. There is scientific evidence that cattle grazing benefits Sage Grouse habitat, but the effects of increased grazing above background was not analyzed. The DEIS also fails to properly analyze how grazing of habitat during the nesting time actually relates to the survival of Sage Grouse. If you watch baby grouse as they try to wade through tall grass, they leave a clear trail of waving grass for a coyote or other predator to pounce on the chicks. Cattle will not be able to utilize BLM grazing allotments efficiently if they are not allowed to graze when palatable grass and water are available. Grazing removes some of the grass making it easier for a

chick to hide by increasing their ability to rapidly run from open space to cover. Denying grazing during nesting season is likely to hasten the listing of the GRSG rather than avoid it. The DEIS does not adequately address the increased fuel loads, increased fire risks, and increased noxious weed risks or the decreased grass and forb vigor, decreased insect production, and uitimate destruction of GRSG habitat that is likely to occur with the changing of the timing and intensity of cattle grazing.

Comment Number: OR-GRSG-0026-16

Comment Excerpt Text:

BLM is tasked with managing or restoring priority habitats, while recognizing valid existing rights. BLM does not "maintain or increase current populations". That would be the task of ODF&W, an agency that still has a hunting season for the birds, and that does not have a season on ravens. Restricting the discovery and development of minerals, with the resulting loss of economic benefit from such discovery and development, all while failing to analyze the impacts of predators and hunting is unacceptable. Hunting of sage grouse provides only limited economic benefit to society and no benefit to sage-grouse. Lack of analysis of hunting is a flaw in the document.

Comment Number: OR-GRSG-0061-15

Comment Excerpt Text:

Text: 4-40: Alternative C

Under Alternative C, the BLM would manage lands to conserve, enhance, and restore GRSG habitat. Management actions would be applied to all occupied GRSG habitats, both PPMA and PGMA (Table 4-2) and would apply a zero percent limit to surface disturbance in occupied habitat. Management would focus on removing livestock grazing from occupied habitats and passive approaches to restoration.

Comment: This does not seem to be the case in previous tables eg. Tables 4-6, 4-8 4-9, 4-12, and 4-14, all of which have greatly limit surface disturbance from energy development and infrastructure than the other Alternatives except for sometimes Alt. F

Comment Number: OR-GRSG-0062-3

Comment Excerpt Text:

BRC believes the agency has not clearly articulated the concept of limiting OHV use to existing and/or designated roads and trails as a primary strategy to help protect Grouse habitat. BRC believes this is the appropriate method by which to "minimize" impacts and otherwise comply with applicable law.

Comment Number: OR-GRSG-0073-1

Comment Excerpt Text:

The RMPA needs to more accurately reflect and analyze the benefits of grazing and juniper removal, and ranches, to sage-grouse in all of its parts, including the baseline, the cumulative effects, and the alternative analysis. Any decrease in the ability of ranchers to use public lands will in turn reduce income, thereby reducing the ranchers' ability to continue with present ongoing habitat improvement efforts.

Comment Number: OR-GRSG-0074-22

Comment Excerpt Text:

Travel Management: This currently is not a primary threat in the project area and if it is a threat it would be in the vicinity of Leks during breeding season. Therefore I view recommendations in the preferred alternative and Alt.s B,C and F as restrictions on human access that will have little to no benefit to GRSG. The information which supports this view is found in the draft RMPA vol.3, chapter 4, Tables 4-3&4-4 and chapter 5 pg. 5-30. Please explain with the pg. and tables cited as your support, Why does the analysis in BLMs' collective opinion indicate restriction of travel in PPMA would improve GRSG habitat. If it is the disturbance factor of breeding or nesting birds please provide use data from the project area that supports this finding? Therefore BLM should maintain current RMP guidance and retract the unnecessary access restrictions presented in the preferred alternative. The BLM failed to provide data that would indicate a further threat from human access so there is no reason for BLM to create a travel plan in 5 years.

Comment Number: OR-GRSG-0078-5

Comment Excerpt Text:

The RMPA/DEIS does not address current restrictions of lands with special designations. It defers to current BLM policy and manuals. However current BLM policy and handbooks may be a significant obstacle to properly managing ecosystem threats and may be directly contributing to the decline of sage-grouse habitat within lands with special designation through restrictions on fire suppression and vegetation management. The RMPA/DEIS does not fully analyze where these land use designations obstacles occur, what impact they have on proposed actions, and what actions need to be taken to address the situation.

Comment Number: OR-GRSG-0093-1

Comment Excerpt Text:

In addition to its unfounded attack on grazing, the BLM utterly fails to explain and evaluate the harm to GRSG habitat should grazing permit and lease holders be absent from the landscape. Specifically, the BLM did not address the harm to GRSG and GRSG habitat from the loss of Rural Fire Protection Associations, who provide initial attack and fire suppression efforts that the BLM cannot duplicate or the loss of West Nile virus control efforts by local ranchers who graze on public lands. The DEIS/RMPA also underplays the impact to invasive control from the loss of cooperate weed agreements with grazing permit and lease holders. In other words, the DEIS/RMPA fails to adequately state and evaluate the harm to GRSG should the BLM proceed with its intended reductions and terminations of grazing on public lands. The BLM failed to take a hard look at the impacts to GRSG from the loss of grazing. It also failed to adequately address real threats to the GRSG such as wildfire, invasives, and predators.

Comment Number: OR-GRSG-0093-114

Comment Excerpt Text:

On page 2-110, Table 2-7 states that "Alternative A has low probability of adjusting grazing management to maintain GRSG habitat from degradation due to the lack of direction in the older land use plans."

This statement is in direct conflict with statements from Pages 4-23 and 4-24, in the evaluation of environmental consequences of Alternative A. There, the DEIS states:

Livestock grazing would continue to be managed through existing grazing management plans unless monitoring and new information or assessments indicate a change is necessary in existing management. Methods and guidelines from the existing RMPs would be used to achieve land health standards, maintain ecological conditions, and enhance wildlife habitat during implementation of grazing regimens. Monitoring would be used to maintain the effectiveness of grazing management practices and integrated ranch planning used to plan allotments as single units.

For both livestock grazing allotments and wild horse and burro management, land health assessments and other management evaluations would support rangeland health standards, which would provide for the health of rangeland vegetation that also supports GRSG and other wildlife. Standards for Rangeland Health and Guidelines for Grazing Management require periodic assessments of range conditions and adjustments to grazing practices to improve ecosystem function, although the standards do not specifically address GRSG habitat needs.

Grazing management guidelines are less specific in older land management plans; however, Standards for Rangeland Health and Guidelines for Grazing Management will apply. Allowable grazing utilization levels can be adjusted during permit renewals and in annual operating plans to account for the current conditions. Newer plans often have some guidance related to drought, but IM 2013-094 provides detailed procedures for adjusting grazing during drought that apply to all LUPs. Application of permit modifications to limit vegetation loss would reduce the loss of sagebrush understory.

Range improvements under Alternative A would be designed to meet both wildlife and range objectives for livestock or wild horses and burros. Fences would

be built or modified to permit passage of wildlife and to decrease GRSG risk of collision with fences. These modifications would reduce the risk of loss or disturbance of GRSG

Where land health standards are not being met, livestock or wild horse and burro management will be modified to make progress towards achieving desired conditions and suitable habitat conditions for GRSG. Riparian habitats would be managed to achieve or make significant progress towards achieving proper functioning condition, to maintain desired plant community for wildlife habitat, to improve watershed conditions, and to protect riparian acreage from excessive livestock use. Restricting livestock or wild horse and burro use or changing timing and intensity of grazing in riparian areas would enhance riparian habitat for wildlife, including GRSG. These approaches would reduce the risk of habitat degradation or fragmentation from livestock or wild horse and burro grazing. In other words, the representation in Table 2-7 that existing controls will not maintain or improve GRSG habitat are simply inaccurate.

Remove and replace this statement with the following: "Alternative A will maintain or improve GRSG habitat through the implementation of periodic assessments and adjustments in grazing activities to achieve rangeland health through permit terms and grazing regulations."

Comment Number: OR-GRSG-0093-133
Comment Excerpt Text:
4.2.2 Nature and Types of Effects

Page 4-10, 4-13 to 4-15. The USFWS identified "improper grazing by livestock" as a threat to GRSG. Page 4-10. However, according to multiple studies, research, and the RMPA itself, grazing is and can be a benefit to GRSG. Grazing can be used to reduce fuel load, protect intact sagebrush habitat, increase habitat extent and continuity, and reduce the spread of invasive grasses. Page 4-13. Also, light to moderate grazing does not reduce cover of perennial grasses important to GRSG nest cover. Page 4-13 (citing to Reisner et al 2013 and Strand and Launchbaugh 2013).

It is important to note that Reisner et al (2013) does not clearly support the statement concerning light to moderate grazing. Further, Strand and Launchbaugh (2013) is an accurate citation in the DEIS/RMPA but is a synthesis report and not a peer-reviewed article. The statement made in the DEIS/RMPA is taken from a summary table in Strand and Launchbaugh (2013) and is likely based off of results cited from Davies et al (2010). This study is more fully cited as: Davies KW, Bates JD, Svejcar TJ, Boyd CS. 2010. Effects of long-term livestock grazing on fuel characteristics in rangelands: an example from the sagebrush steppe. Rangeland Ecology and Management 63: 662–669.

In addition to actually citing Davies et al 2010, other sources to support the DEIS's statements about light/moderate grazing would be the following:

- Appropriate grazing can be used to increase or stimulate forb production and growth an important habitat feature for sage-grouse Neel (1980), Klebenow (1982), Evans (1986).
- Moderate grazing, that left protective hiding cover for sage-grouse, did not affect sagegrouse use of meadows. Klebenow (1982)
- Grazing intensity is thought to be the most important factor when considering livestock grazing in sage-grouse habitat, followed closely by timing and duration. Adams et al. (2004).
- Moderate grazing levels with periods of rest or deferment do not negatively impact sagebrush plant communities. West et al. (1984), Courtois et al. (2004), Manier and Hobbs (2006).
- Moderate grazing is generally compatible with maintaining perennial bunchgrass. France, K.A., D.C. Ganskopp, C.S. Boyd. 2008 Interspace/undercanopy foraging patterns of beef cattle in sagebrush habitats. Rangeland Ecol. Manage. 61(4):389-393. Results from

France et al (2008) also indicate that light to moderate grazing causes only slight decreases in hiding cover for GRSG.

Comment Number: OR-GRSG-0093-134

Comment Excerpt Text:

Page 4-14 also does not substantiate the statement that standing water for livestock contributes to the spread of West Nile virus. Walker and Naugle (2011) is used as the citation for this assumption, but Walker and Naugle (2011) did not state that livestock water contributes to the spread of West Nile virus. Walker and Naugle (2011) cite Doherty (2007) for descriptions of mosquito breeding habitats, which include ponds created for coal bed natural gas (ponds influenced by effluent water and were < 50% vegetated (new) or >50% vegetated (mature)), irrigated agriculture (water sources were small ponds and ditches from agricultural irrigation), sagebrush steppe under coal bed natural gas development (natural water sources such as springs,drying river beds, oxbow lakes, and stock ponds) and undeveloped sagebrush steppe (water sources included natural water sources, stock ponds, overflowing stock tanks, and ephemeral pools; only sampled one summer). Many of the coal bed natural gas ponds were previously used as stock water but had been deepened and enlarged to accommodate the CNBG effluent water needs, therefore livestock watering was no longer the pond objective. Doherty (2007) reports that the undeveloped sagebrush steppe locations produced the least amount of mosquitoes, though the analysis was based on one summer's sampling effort. Further, it notes that the sagebrush steppe under coal bed natural gas development (natural water sources) produced less mosquitoes than the coal bed natural gas ponds. Additionally, a lack of vegetation in the water source decreased larval mosquito production; suggesting that livestock ponds and tanks that lack vegetation are not a significant threat to the spread of West Nile virus.

Walker and Naugle (2011) also cite Doherty (2007) for mosquitoes readily using hoofprints around tanks and ponds as breeding sites. Doherty (2007) does not state this anywhere in the thesis, therefore this is an incorrect interpretation of results and should not be interpreted in the DEIS/RMPA to support the idea that livestock water increases the spread and risk of West Nile virus.

From a practical perspective, water would only be in cow hoof prints in the desert during the spring and long before the weather that triggers West Nile virus. West Nile virus does not replicate until there have been 10 days of 90 degree weather. It is inaccurate to say that water in cow tracks contribute to West Nile virus.

Recommendation: Remove from Page 4-14 and elsewhere (i.e. page 4-24) in the RMPA/DEIS, the statement that standing water for livestock contributes to the spread of West Nile Virus (Walker and Naugle 2011). This statement is unfounded—both from a scientific and practical perspective.

Comment Number: OR-GRSG-0093-135

Comment Excerpt Text:

Page 4-15 also raises the issue of fences, but says nothing about the fact that fences may be beneficial to GRSG habitat where used to manage livestock, that there are certain circumstances in which fences are a high risk for collision and others in which the collision risk is quite low or non-existing, or that fences can be marked to address collision risks.

For example, IM 2012-043 states that the BLM should:

- Evaluate the need for proposed fences, especially those within 1.25 miles of leks that have been active within the past 5 years and in movement corridors between leks and roost locations. Consider deferring fence construction unless the objective is to benefit Greater Sage-Grouse habitat, improve land health, promote successful reclamation, protect human health and safety, or provide resource protection. If the BLM authorizes a new fence, then, where appropriate, apply mitigation (e.g., proper siting, marking, post and pole construction) to minimize or

eliminate potential impacts to Greater Sage-Grouse as determined in cooperation with the respective state wildlife agency.

- To improve visibility, mark existing fences that have been identified as a collision risk. Prioritizing fences within 1.25 miles of a lek, fences posing higher risks to Greater Sage-Grouse include those:
  - On flat topography;
  - Where spans exceed 12 feet between T-posts;
  - Without wooden posts; or
  - Where fence densities exceed 1.6 miles of fence per section (640 acres).

Recommendation: Expand the discussion of fences in Section 4.2.2. Include information from IM 2012-043 to reflect the benefits of fencing to GRSG habitat and the mitigation that can be applied to reduce the risk of fence collisions.

Comment Number: OR-GRSG-0093-136

Comment Excerpt Text:

Page 4-15 The discussion of wild horse and burros management lumps livestock and wild horses together, particularly in the last paragraph describing indicators of potential impacts. This description does not appropriately recognize the significant distinctions between uncontrolled wild horse impacts and control, managed, and regulated livestock grazing. Further, the indicators of impacts could be attributable to multiple sources and are not appropriately characterized as being a result of livestock grazing under the proposed alternatives.

Comment Number: OR-GRSG-0093-138

Comment Excerpt Text:

4.2 Greater Sage-Grouse and Sage Grouse Habitat

4.2.6 Alternative C

Page 4-42 does not carefully define the impacts (positive or negative) of the removal of grazing. For example, it does not qualify the statement that habitat areas would be improved by reducing loss of herbaceous cover by explaining that this change would be minimal because existing grazing regulation and standards assessments apply to grazing activities to prevent loss of herbaceous cover, consistent with local ecological site potential. This discussion refers to Section 4.2.1 as describing impacts to habitat from livestock grazing, but there is no such discussion in Section 4.2.1. However, Section 4.2.2. does discuss grazing activities, and finds that "it is possible for light to moderate grazing to occur without degrading GRSG habitat." Page 4-15.

Comment Number: OR-GRSG-0093-51

Comment Excerpt Text:

While the statement of ODFW's authority is correct, it does not mean that the BLM must not or cannot evaluate the impacts of predators or evaluate the BLM's ability to control predators. For example, conifer removal will have impacts on the location of avian predators, thereby controlling and reducing such predation. Indeed, the BLM at least recognizes this threat on Page 4-17, and on Page 5-28 the DEIS states that "Mature trees may offer perch sites for raptors, so woodland expansion may also represent expansion of raptor predation threat." Conifer removal is squarely within BLM's authority. Further, BLM's work to remove perches occurs in concert with other efforts and has a cumulatively positive impact on GRSG.

The BLM does briefly acknowledge in its design features that it should "Remove standing and encroaching tress within at least 110 yards of occupied sage-grouse leks and other habitats to reduce the availability of perch sites for avian predators as resources permit." Appendix C Required Design Features for Alt. B, C, D, F, Page C-6. However, it does not include this information as part of a discussion or evaluation of alternatives for predator control, nor does it evaluate other methods for predator control in the RMPA/DEIS.

Most importantly, the BLM Land Use Planning Handbook makes clear that the BLM is expected to

cooperate with state wildlife agencies to achieve goals for wildlife populations on BLMmanaged land by "working in close coordination with state wildlife agencies, "drawing on state comprehensive wildlife strategies," and identifying actions "needed to achieve desired population and habitat conditions while maintaining a thriving ecological balance and multiple use relationships." The DEIS/RMPA utterly fails to address any of these requirements.

The DEIS/RMPA must include a section that discusses the impacts of predators to GRSG populations and the means by which the BLM can affect those impacts, including an objective of partnering with ODFW to study and manage predators, specifically crows and ravens, in GRSG habitat.

Comment Number: OR-GRSG-0093-57

Comment Excerpt Text:

The DEIS also fails to evaluate the potential impact of new fence construction on GRSG, which would be necessary in order to exclude cattle from grazing in these areas. Given that these areas are proportedly being designated as GRSG habitat, impacts from fences should be considered

Comment Number: OR-GRSG-0093-68

Comment Excerpt Text:

Page 4-10, Section 4.2.2 states: "Threats posed by conversion to agriculture, infrastructure, wildfire, invasive plants, conifer encroachment, energy development, and improper grazing by livestock, wild horses, and burros are all associated with loss, fragmentation and degradation of habitat. "

This is a laundry list that is not explained or supported. The BLM does not have evidence supporting the idea that livestock grazing is the cause of fragmentation across the DEIS/RMPA planning area. Livestock grazing is not improper on public lands because it is managed using pasture rotations, grazing periods, stocking rates appropriate for the pastures, and permittee work riding, herding and salting for added management techniques.

Comment Number: OR-GRSG-0093-7

Comment Excerpt Text:

BLM must evaluate and explain whether the existing regulatory mechanisms in place for grazing activities will be protective of GRSG habitat and GRSG within the planning area. BLM must also provide a system for collecting and standardizing data it collects so that it can provide useful information about the condition of rangelands it manages.

If the BLM's existing regulatory mechanisms are designed to ensure rangeland health conditions that are beneficial to GRSG, the RMPA should not further restrict grazing activities or remove grazing from select areas, such as the priority RNAs.

Comment Number: OR-GRSG-0095-7

Comment Excerpt Text:

the DEIS only discusses the impacts of ROW avoidance in PPMA in terms of electricity and communication concerns; they should also discuss the positive effect that could accrue to sage-grouse.117 Thus designating ROW avoidance, as opposed to exclusion, is discretionary and could allow unencumbered new ROW disturbance in PPMA and decline in GRSG populations and habitats.

117 DEIS, at 2-120 to 121.

Comment Number: OR-GRSG-0095-8

Comment Excerpt Text:

We do not agree with the DEIS claim that Alternative D's "flexible approach may be most effective in protecting GRSG habitat."120 Allowing continued and new ROW development in PGMA will allow very little restriction to new disturbance to sage-grouse in 5.66 million acres of the species' habitat.

118 DEIS, at 2-23 and 2-28.

119 DEIS, at 2-92.

120 DEIS, at 2-111.

Comment Number: OR-GRSG-0121-1

Comment Excerpt Text:

The RMPA should take into account more distinctly the values derived from livestock grazing that benefits sage grouse habitat. I refer to fire control by the reduction of burnable fuels, Prior range management would include reduction of junipers, invasive weeds, water locations, etc,

Comment Number: OR-GRSG-0122-1

Comment Excerpt Text:

Other examples that should be part of the evaluation include the naturally occurring mortality rate of sage grouse compared to the mortality rate associated with OHV recreation. The evaluation and disclosure to the public must include the analysis and a comparison of the magnitude of OHV impacts to naturally occurring impacts for all resource areas used to assess impacts based on site-specific data. Lack of the comparison of impacts to naturally occurring levels combined with the lack of site-specific data could allow inaccurate statements and opinions due to the lack of an adequate sense of magnitude.

Comment Number: OR-GRSG-0122-2

Comment Excerpt Text:

The EIS must evaluate and acknowledge that close range viewing of sage grouse leks produces significantly more impacts on sage grouse than motorized recreation which is located some distance away. The EIS must include an accurate inventory of all viewing activity in order to reasonably assess this activity and its impact. Examples of the popularity and magnitude of the lek viewing activity include:

- http://www.craigdailypress.com/news/2011/mar/01/local-environmental-groups-organizingsage-grouse-/
- http://www.siskadee.org/view.htm
- http://www.gorp.com/parks-guide/travel-ta-birdwatching-la-junta-comanche-and-cimarronnational-grasslands-golden-spike-national-historic-site-sidwcmdev_055433.html
- http://coloradobirdingsociety.net16.net/zsbirdingspots.htm
- http://www.naturescapes.net/phpBB3/viewtopic.php?f=9&t=150579
- http://gf.state.wy.us/wildlife/wildlife_management/sagegrouse/index.asp
- http://www.blm.gov/nstc/library/pdf/TN424.pdf
- http://wildlife.state.co.us/Viewing/EventsFestivals/Pages/ViewingEvents.aspx
- http://billingsgazette.com/lifestyles/recreation/blm-wgf-holds-sage-grouse-lek-viewingtrip/article_d3f3abe0-d2ec-56b1-9eb9-3cfad0a1d561.html?print=1
- http://uwacadweb.uwyo.edu/wildlifesociety/NewSite/photo_gallery/LekViewing/LekViewing.htm
- BLM Buffalo Field Office Hosts Sage-grouse Lek Viewing Trip

Comment Number: OR-GRSG-0122-6

Comment Excerpt Text:

This region's sage grouse production is in good shape due to decades of cooperation between ranchers and the BLM. The EIS must adequately acknowledge this condition.

Issue:

The EIS should include an analysis of the importance of this public-private partnership to the sage grouse. Please explore things the FS and BLM can do to strengthen this partnership by keeping ranches economically viable.

Comment Number: OR-GRSG-0122-9

Comment Excerpt Text:

The analysis should also disclose impacts of the hunting of the Grouse, which is still allowed in at least 8 of the 11 states where it is found.

Comment Number: OR-GRSG-0162-1

Comment Excerpt Text:

There seems to be only anecdotal references as to the impact of OHV recreation on the Sage Grouse population, we can find no studies done that documents a reduced Sage Grouse population due to OHV recreation.

Comment Number: OR-GRSG-0206-10

Comment Excerpt Text:

The proposed EIS fails to consider wild horses as required under the law "" (WFRHBA, 1971). Wild horses and burros contribute to the biological diversity, and are unique in possessing less efficient post-gastric digestive systems that contribute to higher material passage rates (Feldhamer, Thompson, Chapman, 2003). Horses also tend to utilize more abundant, but poorer nutritional quality plant species (Feldhamer, Thompson, Chapman, 2003). Horse droppings pass most seeds intact, which facilitates seed dispersal, and cycles nutrient rich material that builds soil moisture retention resulting in an increase in native plant diversity near horse trails (Downer, 2007) (Ostermann-Kelm, Atwill, Rubin, Hendrickson, Boyce, 2009). Competition between wild horses and burros and other native or domestic species has not been substantiated (Feldhamer, Thompson, Chapman, 2003). Wild horses utilize a broader range of plant species in their diet and are one of the least-selective grazers in the western states (Beever, 2003). Approximately 80% of their diet is composed of shrub and grasslands with less than 1% comprised of riparian vegetation (Berger, 1986). Wild horses use the land and resources at different intensities throughout the year, allowing for a natural rest and rotation of foraging pressures (Downer, 2007). Also, wild horses tend to use relatively few trails to travel to and from grazing, resting and water sources minimizing trampling and riparian damage near waterways (Beever, 2003) (Ganskopp, Vavra, 1986). These wild horse and burros "natural systems of the public lands" adaptations minimize impacts to their environment and illustrate sustainable integration within the ecosystem and assist in rebuilding and maintaining health of the sage grouse habitat.

Comment Number: OR-GRSG-0206-2

Comment Excerpt Text:

Decreasing or eliminating the authorized levels of privately owned domestic livestock grazing and limiting seasons of use will:

1. Prevent and limit future increases in ecological departure

2. Reduce the existing direct impacts from domestic livestock on sage-grouse and sage-grouse habitat

3. Allow the removal of fences to decrease sage-grouse/fence collision risks and mortality, and to decrease predation

4. Help reduce wildfire risks by reducing spread and establishment of invasive weeds

5. Allow recovery of meadows, and riparian areas on those allotments that failed to meet rangeland health standards

6. Allow recruitment of sage-brush in domestic livestock impacted areas

7. Ensure recovery of aspen groves

8. Protect pinyon-juniper communities

Domestic livestock grazing has at least the following major impacts and:

- Significantly Alters Plant and Animal Communities (Wagner 1978, Jones 1981, Mosconi & Hutto 1982, Szaro et al. 1985, Quinn & Wal-Genbach 1990, as cited in Fleischner, 1994) (Belsky, Matzke, Uselman, 1999) (Donahue, 1999) (Wuerthner, Matteson, 2002)
- Decreases Biodiversity (Fleischner, 1994) (Wilcove, Rothstein, Dubow, Phillips, Losos, 1998) (Belsky, Matzke, Uselman, 1999) (Wuerthner, Matteson, 2002)

- Leads to Elimination of Native Predators (Donahue, 1999) (Wuerthner, Matteson, 2002) (GAO, 2005)
- Leads to Introduction of Invasive Plants and Diseases (Mackie 1978, Longhurst et al. 1983, Menke, Bradford 1992, as cited in Fleischner, 1994) (Wilcove, Rothstein, Dubow, Phillips, Losos, 1998) (Donahue, 1999)
- Leads to Soil Compaction and Accelerated Erosion (Fleischner, 1994) (Belsky, Matzke, Uselman, 1999) (Donahue, 1999) (Wuerthner, Matteson, 2002)
- Leads to Hydrologic Disruption and Contamination (Fleischner, 1994) (Belsky, Matzke, Uselman, 1999) (Wuerthner, Matteson, 2002)
- Leads to Habitat Destruction (Fleischner, 1994) (Wilcove, Rothstein, Dubow, Phillips, Losos, 1998) (Belsky, Matzke, Uselman, 1999) (Donahue, 1999) (Wuerthner, Matteson, 2002)

The proposed EIS fails to fully analyze and address the negative impacts of domestic livestock grazing and the proposed EIS fails to consider the significant differences in range impacts caused by domestic livestock compared to wild horses, wild burros and other wildlife.

Comment Number: OR-GRSG-0206-5

Comment Excerpt Text:

Also omitted from the alternative(s) evaluation is the impact of private domestic livestock grazing as opposed to impacts from wild horse and burro use. There are extreme differences in the impacts generated by these users of public land and both the Center for Biological Diversity and Western Watersheds (WWP) have done extensive papers showing the impact of domestic livestock production to public land management. Wild horses, wild burros and other wildlife have minimal impact to the land when not impeded by allotment fencing, cattle guards and large turnouts of domestic livestock. To treat both of these uses as "grazing" is irresponsible to the purpose of the assessment to create an equitable management plan that is compatible with other provisions of the law and to protect the sage grouse.

Comment Number: OR-GRSG-0220-10

Comment Excerpt Text:

Harney County requests that the BLM redefine its alternatives such that it incorporates a more thorough analysis of the West Nile virus impacts.

Comment Number: OR-GRSG-0220-8

Comment Excerpt Text:

The failure to address the feral horse numbers and the impacts (both direct and cumulative) (Footnote 12: In the NEPA context "effects" include both "direct" as well as "indirect" effects. (40 C.F.R. §150S.S). The cumulative impact (40 C.F.R. § 1508.7) can include both the direct and indirect effects as well as the effects resulting from the failure to act. The NEPA document must discuss all of these potential effects) thereon is a significant omission in that it fails to recognize the repeated findings that the feral horse population is a significant factor affecting sage-grouse, and the population of feral horses in some management areas is significantly higher than the adopted management levels. While bringing the population of feral horses into alignment of the AMLs may be outside the scope of this project, it is nonetheless within the scope to assess the impact of feral horses on sage-grouse habitat and in this project address whether the AMLs need to be adjusted in response to impacts to sage-grouse.

Comment Number: OR-GRSG-0276-11

Comment Excerpt Text:

Energy extraction such as oil and gas, geothermal, and plan of operation mining influence GRSG to 11.8 miles (19 kilometers) based on direct impacts of field development, including associated infrastructure, noise, lighting, and traffic (Johnson et al. 2011; Taylor et al. 2012). – Oregon RMPA/DEIS. Pg. 4-9

Johnson et al. (2011) stated that for oil and gas wells "leks tended to have more positive trends if they were farther away from producing wells." Also, leks trends appeared to increase to about to about 20 km

in the Great Plains and Wyoming Basin. Distance from lek to nearest power line suggested no relationship across all sage-grouse management zones (Johnson et al. 2011). Taylor et al. (2012) report apparent contradictory information regarding the influence of energy development on sage-grouse populations. Energy development had the strongest influence on male counts within 12.4 mi (20 km) surrounding a lek, but much less on closer distances to leks. Thus, the statement in the RMPA/DEIS, regarding the spatial direct impacts if energy extraction, based on Johnson et al. (2011) and Taylor et al. (2012) is inaccurate and misinforming.

Comment Number: OR-GRSG-0276-13

Comment Excerpt Text:

The presence of new structures on the landscape would also contribute to indirect effects from potential avoidance behavior by GRSG (Freese 2009). – Oregon RMPA/DEIS. Pg. 4-16

Freese (2009) found that sage-grouse prefer (italics added) habitats with <5% western juniper cover. However, Freese (2009) did not investigate use of junipers as predator perch sites to explain avoidance of these habitats by sage-grouse. Thus, the inference made based on Freese (2009) in the RMPA/DEIS, is inaccurate and misleading.

Comment Number: OR-GRSG-0276-14

Comment Excerpt Text:

GRSG have been observed avoiding brood-rearing habitats within three miles of power lines (LeBeau 2012). Higher densities of power lines within four miles of a lek negatively influence lek attendance (Walker et al. 2007). – Oregon RMPA/DEIS. Pg. 4-17

LeBeau (2012) stated that much of the habitat surrounding the transmission lines was mostly comprised of a greater percent bare ground, uncharacteristic of sage-grouse brood-rearing habitats. Therefore, use of this habitat for brood-rearing by sage-grouse would be unlikely. Thus, avoidance of the power line by brood-rearing sage-grouse appears to be selective use of data to argue that power lines or other tall structures are avoided by sage-grouse.

Comment Number: OR-GRSG-0276-15

Comment Excerpt Text:

Mature trees can offer perch sites for raptors, so woodland expansion would also represent expansion of predation threat, similar to perches on power lines and other structures (Manier et al. 2013). – Oregon RMPA/DEIS. Pg. 4-70

The RMPA/DEIS relies on Manier et al. (2013) for a summary of scientific knowledge on sage- grouse. Unfortunately, Manier et al. (2013) make statements that are not supported by scientific information. However, the RMPA/DEIS simply quotes Manier et al. (2013) perpetuating myths and inaccurate information. Although power line structures can facilitate perching birds of prey and ravens, there is little information available whether sage-grouse actually avoid power line structures (tall structures) or that structures provide a hunting advantage to predators (Messmer et al. 2013). The most frequently cited literature supposedly providing evidence of avoidance of tall structures by sage-grouse are either unpublished or non-peer reviewed reports (Ellis 1985, 1987; Braun 1998; Braun et al. 2002). Walters et al. (2014) reviewed the effect of tall structures on birds, primarily functional habitat loss due to avoidance. They did not detect any consistent response to tall structures and concluded that a structure's "tallness" could not be isolated from other factors associated with the development such as human activity. Thus, the Draft RMPA/DEIS confuses fact with fiction by stating that tall structures cause avoidance of such structures by sage-sage. Extrapolating this to avoidance of juniper woodlands by sage-grouse because junipers could provide perches for sage-grouse predators an even worse unsupported inference is made.

Comment Number: OR-GRSG-0276-16

Comment Excerpt Text:

Transmission lines, in addition to reducing habitat suitability and increasing fragmentation, can cause GRSG mortality through bird collisions with lines and

facilitate raptor predation of GRSG. – Oregon RMPA/DEIS. Pg. 3-11

No references supporting this statement are presented. In fact, very little published information is available on the collision rate of sage-grouse with power lines. The US Fish and Wildlife Service (2010) in an extensive survey of the literature found that 3 sage-grouse died as a result of collisions with a telegraph line in Utah (Borell 1939).

Braun (1998) and Connelly et al. (2000) report on sage-grouse collisions with power lines but do not provide any details. Beck et al. (2006) reported 2 out of 43 (4.6%) radio- tracked sage-grouse killed by colliding with a power line. Power line collisions for sage- grouse have not been documented by the Avian Power Line Interaction Committee (APLIC) utilities. Despite years of data collection by utilities on collision and electrocution at power lines, no collision of sage-grouse have been documented (Messmer et al. 2013). Thus, the mortality risk of sage-grouse colliding with distribution or transmission lines is very low and over-stated in the RMPA/DEIS.

Comment Number: OR-GRSG-0276-17

Comment Excerpt Text:

Literature suggests increased road length, traffic levels, and traffic activity during the early morning within approximately two miles of leks all negatively influence male lek attendance (Holloran 2005; LeBeau 2012; Forman and Alexander 1998 and Lyon and Anderson 2003, cited in Manier et al. 2013). – Oregon RMPA/DEIS. Pg. 4-19

IPC suggests that the BLM carefully evaluates the studies that are quoted. LeBeau (2012) did not report on male lek attendance in relation to road length, traffic levels, and traffic activity, but on sage-grouse nest site selection, brood-rearing habitat, and summer habitat selection in relation to natural and anthropogenic features of the landscape. Forman and Alexander (1998) make general statements about the effects of roads on birds, but not specifically on sage-grouse.

Comment Number: OR-GRSG-0276-18

Comment Excerpt Text:

Power lines and other vertical structures located in areas naturally devoid of perching opportunities provide a perch for raptors and subsequently increase the potential for GRSG to abandon leks (Ellis 1984). Mitigation in the form of burying lines or including nonperching design features on lines would reduce perching opportunities and subsequent impacts on GRSG (Connelly et al. 2000b). – Oregon RMPA/DEIS. Pg. 4-172

Connelly et al. (2000b) investigated the effects of predation and hunting on adult sage-grouse. Burying of power lines to mitigate for predation by birds perching on power lines and installing of nonperching designs is not mentioned in this article. Suggesting that Connelly et al. (2000b) proposed burying of power lines to avoid mortality supposedly due to power lines (tall structures) is inaccurate and misleading.

Comment Number: OR-GRSG-0276-19

Comment Excerpt Text:

Use of Results from Retrospective, Cumulative Impact Studies of Other Energy Development to Infer Effects of Tall Structures on Sage-Grouse

Generally, oil and gas developments within two to four miles of leks or nesting areas had deleterious effect on populations, with the impacts increasing with increasing well density (Lyon and Anderson 2003; Walker et al. 2007; Johnson et al. 2011). – Oregon RMPA/DEIS. Pg. 3-11

Only Walker et al. (2007) evaluated the impact of power lines, and they found only weak effects. Walker et al. (2007) showed that all top models to explain lek persistence included a strong positive effect of sagebrush habitat and a strong negative effect of CBNG development. Furthermore, the best habitat-plus-CBNG model was 28 times more likely to explain patterns of lek persistence than the best habitat-plus-infrastructure model (including power lines) and 50 times more likely than the best habitat-only model. Last, models with power line effects

were weakly supported compared to models with CNBG, although power lines appear to have a negative effect on lek persistence. The power line variable included lines associated with CBNG, as well as non-CBNG power lines. Thus, no attempt was made to isolate the effect of power lines from the confounding effect of CBNG development. IPC suggests a more complete statement be included in the RMPA/DEIS regarding the effects of energy developments on sage-grouse lek persistence regarding the Walker et al. (2007) study.

Comment Number: OR-GRSG-0276-20
Comment Excerpt Text:
Selective Use of the Literature

Transmission lines and major power lines are widespread throughout GRSG range. The species responds negatively to increased human infrastructure in sagebrush habitats, including roads, power lines, and communication towers (Knick and Connelly 2011; Johnson et al. 2011). – Oregon RMPA/DEIS. Pg. 4-17

The RMPA/DEIS relies on Manier et al. (2013) for a critical review of sage-grouse literature. Manier et al. (2013) cites Johnson et al. (2011) 11 times in the document but fails to mention that Johnson et al. (2011) found no effect of transmission and distribution power lines on lek trends.

GRSG have been observed avoiding brood-rearing habitats within three miles of power lines (LeBeau 2012). Higher densities of power lines within four miles of a lek negatively influence lek attendance (Walker et al. 2007). – Oregon RMPA/DEIS. Pg. 4-17

This statement is incomplete and is another example of the selective use of the literature.

LeBeau (2012) found that brood-rearing habitat selection in 1 study area increased with distance to the transmission line up to 4.7 km, then declined, but in the other study area, brood-rearing habitat selection was highest in the area around the transmission line. LeBeau (2012) also found that sage-grouse selected nesting habitat closer to transmission lines that have existed for over 10 years and are within quality habitat at Simpson Ridge. Also, female survival in the study area was greatest at closer proximity to the transmission lines. Nest site selection was higher closer to transmission lines in one study area and not a factor in the other study area. The risk of nest failure increased as distance from the transmission line increased. Brood survival was not impacted by distance to transmission lines. The study found female survival was highest near the transmission lines throughout the study area. The RMPA/DEIS is selectively using data to argue that power lines or other tall structures are avoided by sage-grouse.

Comment Number: OR-GRSG-0276-21
Comment Excerpt Text:
Studies that Do Not Show an Impact of Power Lines on Sage-Grouse

Studies that show no or limited impacts of power lines do not seem to carry much weight or are ignored entirely (e.g., LeBeau 2012; Nonne et al. 2012, 2013), while negative impacts are emphasized, providing a potentially biased review of existing knowledge. LeBeau (2012) found that sage-grouse selected nesting habitat closer to transmission lines that have existed for over 10 years and are within quality habitat at Simpson Ridge. Also, female survival in the study area was greatest at closer proximity to the transmission lines. Nest site selection was higher closer to transmission lines in one study area and not a factor in the other study area.

Brood-rearing habitat selection in one study area increased with distance to the transmission line up to 4.7 km, then declined, but in the other study area brood-rearing habitat selection was highest in the area around the transmission line. The risk of nest failure increased as distance from the transmission line increased. Brood survival was not impacted by distance to transmission lines. The study found female survival was highest near transmission lines throughout the study area. Nonne et al. (2013) conducted a 10-year study of greater sage-grouse in response to a 345-kV transmission line in central

Nevada and reported that habitat conditions had a greater effect on sage-grouse nests, brood success, and overall survival than the proximity to the transmission line did. Furthermore, Nonne et al. (2013) found no evidence that predation increased with distance to the transmission line because nest survival and female survival did not show a relationship to distance to the line. Nonne et al. (2013) conducted 10 years of research in response to a BLM requirement of authorizing the Falcon–Gondor transmission line. It would seem the BLM would take this research into account. In a review of literature regarding the effects of tall structures on birds, including (sage) grouse, Walters et al. (2014) found no consistent response of birds to tall structures and did not find any support for either avoidance of tall structures due to increased predation risk or neophobia, a fear of new things or experiences. Furthermore, Walters et al (2014) concluded a structure's tallness could not be isolated from other factors associated with development, such as human activity. More seriously, Walters et al. (2014) found that ideas presented in the reviewed refereed articles and offered as hypotheses to explain an observed pattern were assumed by other researchers to represent an empirically-tested causal mechanism

Comment Number: OR-GRSG-0276-25

Comment Excerpt Text:

While most project proponents and agency staff can agree on the definition of direct impacts and how to quantify them, there is little information on indirect or unknown effects. Agencies commonly mention increased human use, increased predation, fear of tall structures, noise, and other factors as indirect effects, but there is very little in the literature to support these suppositions. The Draft RMPA/EIS should clearly identify and discuss indirect effects and provide a proposed method to quantify these or directly acknowledge the lack of information related to this potential effect. This should be provided to the public for review and comment prior to the issuance of the Final EIS.

Comment Number: OR-GRSG-0276-31

Comment Excerpt Text:

Text: Pg. 2-52, Table 2-5

According to Table 2-5, no cross-country travel would be allowed in PPH/PPMA/Core area habitats.

Comment: Idaho Power uses cross country travel within our ROWs and at times, to gain access to our ROWs, when existing roads are not available and are not necessary. We typically access our lines one to two times per year for inspections and as needed for operation and maintenance activities (this can typically be another one to two trips per year). Because we have relatively few trips to our facilities, we do not create roads unless they are needed for safe equipment access and operation. The prohibition on cross country travel would have the unintended consequence of encouraging us to create more roads not fewer roads.

Comment Number: OR-GRSG-0276-40

Comment Excerpt Text:

Text: Pg. 4-9 Assumptions

A 4.25-mile (6.9-kilometer) avian predator foraging distance is assumed to adequately encompass possible direct and indirect effects (Boarman and Heinrich 1999; Leu et al. 2008) in instances where increased predation from infrastructure (e.g. power lines, wind turbines, communication towers, agricultural and urban development) is a threat.

Comment: Engel and Young (1992) determined that non-breeding ravens traveled daily an average 6.9 km in Idaho (up to 62.5 km) from roost sites to distant human-subsidized food sources (i.e., landfills and feedlots). Leu et al. (2008) used the 6.9 km range for common ravens to delineate the ecological effect area of power lines for avian predators. However, other researchers found substantially smaller home ranges for common ravens. In the Mojave Desert of California, nesting ravens hunted live food an average of 0.57 km from their nest (Boarman and Heinrich 1999). Sherman (1993) found that nesting ravens in the east-Mojave Desert of California spent 75% of foraging time within 400 m of the nest with daily trips

of several kilometers, probably to obtain water. Based on this information, IPC does not believe that the selected 6.9 km range as the assumed range for avian predators is based on any information on actual predation of greater sage-grouse by avian predators, but rather on common ravens making foraging trips to landfills and feedlots that are widely spaced in the landscape.

Comment Number: OR-GRSG-0276-41
Comment Excerpt Text:
Text: Pg. 4-9 Assumptions

Energy extraction such as oil and gas, geothermal, and plan of operation mining influence GRSG to 11.8 miles (19 kilometers) based on direct impacts of field development, including associated infrastructure, noise, lighting, and traffic (Johnson et al. 2011; Taylor et al. 2012).

Comment: Research findings by Johnson et al. (2011) appear to be overstated. Johnson et al. (2011) stated that for oil and gas wells "leks tended to have more positive trends if they were farther away from producing wells." Also, leks trends appeared to increase to about to about 20 km in the Great Plains and Wyoming Basin. Johnson et al. (2011) reported a declining trend in leks within 5 km-, but a less strong relationship within 18 km for interstate highways. The presence of secondary roads appeared not to influence lek trends. Distance from lek to nearest power line suggested no relationship across all sage grouse management zones (Johnson et al. 2011). Thus, the statement in the RMPA/DEIS, regarding the spatial direct impacts if energy extraction, based on Johnson et al. (2011) is inaccurate.

Taylor et al. (2012) report apparent contradictory information regarding the influence of energy development on sage grouse populations. Energy development had the strongest influence on male counts within 12.4 mi (20 km) surrounding a lek, but much less on closer distances to leks.

Comment Number: OR-GRSG-0276-42
Comment Excerpt Text:
Text: Pg. 4-9 Assumptions

Interstate highways influence GRSG to 4.7 miles (7.5 kilometers) and paved roads and primary and secondary routes at 1.9 miles (3 kilometers) based on indirect effects measured through road density studies (Connelly et al. 2004; Holloran 2005; Lyon 2000).

Comment: Connelly et al. (2004) stated that lekking and nesting sage-grouse appear (italics added) to avoid road infrastructure and related activities (especially traffic). Along Interstate 80 in Wyoming and Utah between 1970 and 2003, no leks were found within 2 km (1.25 mi) of the interstate and fewer birds on leks within 7.5 km (4.7 mi) than within 7.5–15 km (4.7–9.3 mi) beyond the interstate. However, this is a post-hoc analysis and only the temporal relationship between leks and distance to the interstate were investigated, not the myriad of other changes that took place in the landscape. Therefore, IPC suggests that the conclusions as stated in the RMPA/DEIS should acknowledge the shortcomings of the study of Connelly et al. (2004) and restate the conclusions of this study accordingly.

Holloran (2005) investigated the impacts of gas- and oil filed developments on sage grouse which included both primary and secondary roads. He found that the number of displaying males increased with distance from leks to gas-field- related sources of disturbance within 3 km of leks.

Comment Number: OR-GRSG-0276-43
Comment Excerpt Text:
Text: Pg. 4-12 and 4-13

COT Report Threat-Conifer Expansion

Juniper expansion is also associated with increased bare ground and potential for erosion. Also, it offers additional perch sites for raptors; thus, woodland expansion may also represent expansion of raptor predation threat, which is similar to perches on power lines and other structures (Connelly et al.

2004). GRSG have been found to avoid habitats with increased predator perch sites (Freese 2009).

Comment: No published information is available documenting that conifer encroachment leads to increased predation risks of sage grouse by corvids or raptors. Hagen (2011) reviewing sage-grouse predation literature, concluded that on average predation is not limiting sage-grouse populations, except in fragmented landscapes. Freese (2009) found that sage grouse prefer (italics added) habitats with <5% western juniper cover. However, Freese (2009) did not investigate use of junipers as predator perch sites to explain avoidance of these habitats by sage grouse. Thus, the inference made based on Freese (2009) in the RMPA/DEIS, is inaccurate and misleading.

Comment Number: OR-GRSG-0276-44
Comment Excerpt Text:
Text: Pg. 4-16, 6th para.

The presence of new structures on the landscape would also contribute to indirect effects from potential avoidance behavior by GRSG (Freese 2009).

Comment: Freese (2009) did not investigate use of junipers as predator perch sites to explain avoidance of these habitats by sage grouse. Thus, the inference made based on Freese (2009) in the RMPA/DEIS, is inaccurate and misleading.

Comment Number: OR-GRSG-0276-45
Comment Excerpt Text:
Text: Pg. 4-17, 3rd para.

Impacts from Lands and Realty Management Transmission lines and major power lines are widespread throughout GRSG range. The species responds negatively to increased human infrastructure in sagebrush habitats, including roads, power lines, and communication towers (Knick and Connelly 2011; Johnson et al. 2011). Although transmission line and power line construction does not generally result in substantial direct habitat loss, it would temporarily disturb individual GRSG and habitat along the ROW.

Comment: Although power line structures can facilitate perching birds of prey and ravens, there is little information available whether sage grouse actually avoid power line structures (tall structures) or that structures provide a hunting advantage to predators. Power lines have been postulated as novel elements in a tree-less landscape to which sage grouse are not habituated and may associate with increased levels of predation. Avoidance of tall structures would essentially create an area around such structures that are not functionally used by sage grouse or less frequented, resulting in the loss or partial loss of habitat and fragmentation of the landscape for sage grouse. Walters et al. (2014) reviewed the effect of tall structures on birds, primarily functional habitat loss due to avoidance. They did not detect any consistent response to tall structures and concluded that a structure's "tallness" could not be isolated from other factors associated with the development such as human activity. However, avoidance behavior of sage grouse in relation to tall structures has not been published in peer-reviewed literature (Messmer et al. 2013).

Recent studies have shown that sage-grouse responses to tall structures are variable and do not necessarily show avoidance of structures and associated habitat. LeBeau (2012) found that sage-grouse did not avoid wind turbines during the nesting and brood-rearing periods, but selected for habitats closer to turbines during the summer season. Although sage-grouse nest and brood survival decreased in habitats in close proximity to wind turbines, female survival appeared not to be affected by wind turbines. Also, wind energy infrastructure appears not to be affecting male lek attendance 4 years post development. Long-term studies associated with the Falcon-Gondor transmission line (Nonne et al. 2011, 2013) did not show avoidance behavior of radio-tracked sage- grouse of tall structures (power line corridors).

Text: Pg. 4-17, 4th para.

Following construction, GRSG avoidance of vertical structures, likely due to raptors perching on the

structures, may result in habitat exclusion via behavioral response. One study reported that the frequency of raptor/GRSG interactions during the breeding season increased 65 percent; golden eagle interactions alone increased 47 percent in an area where a transmission line had been constructed (Ellis 1984).

Comment Number: OR-GRSG-0276-46
Comment Excerpt Text:
Text: Pg. 4-17, 5th para.

In addition, fences are often associated with power lines and communication towers. As discussed above under grazing, fences also pose a hazard to GRSG from collision as well as providing perches for predators and increasing fragmentation risk. Stevens (2011, p. 108) in a study of GRSG and fence interactions in Idaho found several factors contributing to collision risk. Fences within 2 kilometers (approximately 1.25 mile) of leks, fence densities exceeding 1 kilometer of fence (0.6 mile) per square km (0.4 square miles), and flat terrain posed greater risk.

Comment: IPC is not aware that "fences are often associated with power lines." In fact, fences are rarely associated with power lines or with power line right-of ways.

Comment Number: OR-GRSG-0276-47
Comment Excerpt Text:
Text: Pg. 4-17, last para.

GRSG have been observed avoiding brood-rearing habitats within three miles of power lines (LeBeau 2012). Higher densities of power lines within four miles of a lek negatively influence lek attendance (Walker et al. 2007).

Comment: LeBeau (2012) stated that much of the habitat surrounding the transmission lines was mostly comprised of a greater percent bare ground, uncharacteristic of sage-grouse brood-rearing habitats. Therefore, use of this habitat for brood-rearing by sage grouse would be unlikely. Thus, avoidance of the powerline by brood-rearing sage grouse is incorrectly inferred by the BLM. Interestingly, LeBeau (2012) also reported that sage-grouse selected for nesting habitat closer to transmission lines and summer habitat closer to wind turbines. It appears that the BLM is selectively using data to argue that powerlines or other tall structures are avoided by sage grouse

Comment Number: OR-GRSG-0276-48
Comment Excerpt Text:
Text: Pg. 4-18, 1st para.

The 3 percent disturbance cap under certain action alternatives would protect GRSG habitat from excessive disturbance in ROW avoidance areas.

Comment: It is unclear how the BLM is assessing ROW disturbance. Recent NEPA documents define direct impacts as the area of temporary and permanent ground disturbance, not the entire ROW width. In sagebrush ecosystem, utilities do not clear vegetation in ROWs as they would in forested environments.

Comment Number: OR-GRSG-0276-49
Comment Excerpt Text:
Text: Pg. 4-19

Literature suggests increased road length, traffic levels, and traffic activity during the early morning within approximately two miles of leks all negatively influence male lek attendance (Holloran 2005; LeBeau 2012; Forman and Alexander 1998 and Lyon and Anderson 2003, cited in Manier et al. 2013).

Comment: IPC suggests that the BLM carefully evaluates the studies that are quoted. LeBeau (2012) did not report on male lek attendance in relation to road length, traffic levels, and traffic activity, but on sage grouse nest site selection, brood-rearing habitat, and summer habitat selection in relation to natural and anthropogenic features of the landscape. Forman and Alexander (1998) make general statements about the effects of roads on birds, but not specifically on sage grouse.

Comment Number: OR-GRSG-0276-50
Comment Excerpt Text:
Text: Section 4.2.4 Alternatives

Tables 4-20, 4-26, 4-31, 4-36: Percent of GRSG Populations Affected by ROW Exclusion or Avoidance Areas

Comment: These tables are at best confusing and at worst incorrect. Based on the associated text IPC has interpreted the tables to read as the percent of populated areas that fall within exclusion or avoidance areas, e.g., the amount of PPMA that fall within exclusion or avoidance area. By the definition how can the vast majority of GRSG habitat be outside of these areas, as is the case with the Baker and Central Oregon populations. IPC does not know how to accurately interpret the purpose or intent of these tables. As IPC has interpreted them, they do not make sense.

Comment Number: OR-GRSG-0276-51
Comment Excerpt Text:
Text: Pg. 4-70, 3rd para.

[…]Mature trees can offer perch sites for raptors, so woodland expansion would also represent expansion of predation threat, similar to perches on power lines and other structures (Manier et al. 2013).

Comment: There is no published information available documenting that conifer encroachment leads to increased avian predation risks of sage grouse. Hagen (2011) reviewing sage-grouse predation literature, concluded that on average predation is not limiting sage-grouse populations, except in fragmented landscapes.

Avoidance of tall structures due to predation risk of avian predators would essentially create an area around such structures that are not functionally used by sage grouse or less frequented, resulting in the loss or partial loss of habitat and fragmentation of the landscape for sage grouse. Walters et al. (2014) reviewed the effect of tall structures on birds, primarily functional habitat loss due to avoidance. They did not detect any consistent response to tall structures and concluded that a structure's "tallness" could not be isolated from other factors associated with the development such as human activity. However, avoidance behavior of sage grouse in relation to tall structures has not been published in peer-reviewed literature (Messmer et al. 2013). In fact, ongoing studies associated with the Falcon-Gondor transmission line (Nonne et al. 2011, 2013) did not show avoidance behavior of radio-tracked sage-grouse of tall structures (power line corridors).

Comment Number: OR-GRSG-0276-6
Comment Excerpt Text:
These negative consequences may include increased competition from other species that benefit from guzzlers, such as domestic and wild ungulates, or predators and the associated increase in predation risk (Braun 1998). – (Oregon RMPA/DEIS. Pg. 3-135)

Braun (1998) opined that use of areas near transmission lines by sage-grouse increased with increasing distance to transmission lines. He assumed that this was evidence of avoidance of the transmission line (Presentation abstract from unpublished data). Braun (1998) did not provide any details on his unpublished information, such as how many transects were established, the frequency and timing of surveys, and habitats that were surveyed. No controls or treatments were identified. Therefore, his statement is based on unreliable data and should not be perpetuated as science.

GRSG avoidance of vertical structures, likely due to raptors perching on the structures, may result in habitat exclusion via behavioral response with reference to Ellis (1984) – Oregon RMPA/DEIS. Pg. 4-17.

Power lines and other vertical structures located in areas naturally devoid of perching opportunities provide a perch for raptors and subsequently increase the potential for GRSG to abandon leks (Ellis 1984) – (Oregon RMPA/DEIS. Pg. 4-172)

Ellis (1984) describes the behavioral response of sage-grouse to golden eagles at a lek. Some males flushed, others remained ("master cocks") and continued

displaying after a while. There is no evidence provided that the lek was abandoned because of the presence of golden eagles. IPC suggests that the BLM carefully evaluates Ellis (1984) and makes changes to the statement in the Oregon RMPA/DEIS accordingly.

Comment Number: OR-GRSG-0276-8

Comment Excerpt Text:

One study reported that the frequency of raptor/GRSG interactions during the breeding season increased 65 percent and golden eagle interactions alone increased 47 percent in an area in pre- and post-transmission line comparisons (Ellis 1984). – Oregon RMPA/DEIS. Pg. 4-17

The data provided by Ellis (1985) in an unpublished report and incorrectly quoted by Manier et al. (2013), lack detailed information and do not provide firm evidence for most of the study conclusions. Therefore, Ellis (1985) conclusions, as quoted by Manier et al. (2013), cannot be substantiated and should be interpreted with caution rather than accepted as fact. Specifically, there is scant evidence that sage-grouse do not tolerate construction of a new transmission line near a lek (200 m). Raptors will use transmission towers as perching and hunting sites, but there is no evidence this would result in increased predation of sage-grouse. Ellis (1985) conducted his study during 3 field seasons (1983 through 1985); 2 years prior to construction (1983 and 1984) and 1 year after the construction (1985) of a new transmission line. The number of sage-grouse displaying decreased over the period of study at the observed lek but increased at a "new" lek discovered in 1985, 1 km from the observed lek (Ellis 1987). It is unclear if the new lek discovered in 1985 had been used in previous years and could be considered a satellite lek. Interestingly, Walker et al. (2007) grouped leks within 2.5 km of each other in the same lek complex to avoid lek-count problems with leks close to each other. Therefore, the conclusion drawn by Ellis (1985) is premature because sage-grouse could either be displaced by golden eagles perching on the (newly) constructed transmission line or some other dynamic that influenced sage-grouse leks.

Comment Number: OR-GRSG-0276-9

Comment Excerpt Text:

Transmission lines and major power lines are widespread throughout GRSG range. The species responds negatively to increased human infrastructure in sagebrush habitats, including roads, power lines, and communication towers (Knick and Connelly 2011; Johnson et al. 2011). Although transmission line and power line construction does not generally result in substantial direct habitat loss, it would temporarily disturb individual GRSG and habitat along the ROW. – Oregon RMPA/DEIS. Pg. 4-17

Although power line structures can facilitate perching birds of prey and ravens, there is little information available whether sage-grouse actually avoid power line structures (tall structures) or that structures provide a hunting advantage to predators. Power lines have been postulated as novel elements in a tree-less landscape to which sage-grouse are not habituated and may associate with increased levels of predation. Avoidance of tall structures would essentially create an area around such structures that are not functionally used by sage-grouse or less frequented, resulting in the loss or partial loss of habitat and fragmentation of the landscape for sage-grouse. Walters et al. (2014) reviewed the effect of tall structures on birds, primarily functional habitat loss due to avoidance. They did not detect any consistent response to tall structures and concluded that a structure's "tallness" could not be isolated from other factors associated with the development such as human activity. More seriously, Walters et al. (2014) found that ideas presented in the reviewed refereed articles and offered as hypotheses to explain an observed pattern were assumed by other researchers to represent an empirically-tested causal mechanism. Avoidance behavior of sage-grouse in relation to tall structures has not been published in peer- reviewed literature (Messmer et al. 2013).

Comment Number: OR-GRSG-0281 (FrmLtr11)-57

Comment Excerpt Text:

Comment Vol 2, page 4-64: We are familiar with livestock levels and utilization levels, which are already set at a managed level. Missing in this sentence is recognition of how weather events impact invasive species along stream riparian areas as well as uplands. "….limiting OHV use to existing routes, limiting allowable stocking levels and utilization levels for grazing, setting surface occupancy limitations for mining, and restricting the locations of new infrastructure.

Solution: Eastern Oregon streams and upland sites are impacted from year to year by ice floes in streams, heavy runoff during the snow melt periods, and often have summer time thunderstorms that contribute to "ground disturbances". These events are greater than most anthropogenic impacts and natural climate events need to be added to the narrative.

Comment Number: OR-GRSG-0312-5

Comment Excerpt Text:

The threat from power transmission and pipe lines is undocumented. The Plan does not document the numerical losses but assumes that negative effects would occur from the maintenance of existing lines or the construction of additional lines.

Comment Number: OR-GRSG-0356 (FrmLtr07)-15

Comment Excerpt Text:

"Grouse are tolerant of automobiles and may be watched from fairly close range if the observers do not leave their vehicle" (Call and Maser 1986). Signage near a lek can be used to warn visitors to remain in their vehicles and not create disturbances that cause sage-grouse to leave the lek.

The Oregon Dept. of Fish and wildlife concluded in their March 2011 study that "Road density nor distance to nearest roads were significant factors in the long-term persistence of sagegrouse across the range (Aldridge et al, 2008)" [emphasis added1. Road closures are not required

Comment Number: OR-GRSG-0378-1

Comment Excerpt Text:

Section 4.2.2. of the DEIS states "golden eagles interactions alone increased 47 percent in an area where a transmission line had been constructed (Ellis 1984)." This reference is inaccurate; Ellis 1984 "described the anti-predator behavior of lekking Sage Grouse to an approaching Golden Eagle. No accounts exist of the behavioral responses of Sage Grouse to a perched Golden Eagle, largely because most Sage Grouse leks are on open sagebrush plains void of trees" (Ellis 1984). It is unclear why the DEIS only includes some of these findings (e.g. where these are negative impacts reported) versus including a more complete review of the literature. The Avian Power Line Interaction Committee (APLIC) recommends that the BLM consider current literature regardless of the results

Comment Number: OR-GRSG-0427-1

Comment Excerpt Text:

The BLM has failed to analyze within this draft RMPA the primary threats to GRSG habitat in the project area which are invasive species (annual grasses and other noxious weeds), wildfire, and conifer encroachment. (RMPA Vol.1, p. 2-11: COT Report (USFWS 2c13a). By this failure, the BLM has not met the purpose and need for this action: In more specific detail:

a) The GRSG Wildland Fire and Invasive Species Assessment (RMPA Vol. I D-WFM32: p. 2-7s & 2-76), the outline for which is provided in Vol. III, Appendix H, will not be completed until December, 2014. This is the basic assessment that would provide the information to develop conservation measures to be incorporated by the agency that will conserve, enhance and /or restore GRSG habitat by reducing, eliminating, or minimizing threats to the habitat. The draft provides generic conservation measures that would be applied if and when the threats are analyzed by the BLM. Tables 4-3 & 4-4 (RMPA Vol. II, Chapter 4 - Environmental Consequences) clearly display,

given the current analysis and the implementation of the identified regulatory mechanisms and conservation measures that the BLM has analyzed in all alternatives (including the preferred) will indeed provide little to no improvement to preferred habitat condition in the Oregon sub-region for 10 and so years in the future following application. This is because the analysis of the primary threats (wildfire, invasive species, and conifer encroachment) has not been attempted in the Draft RMPA. Furthermore, p. 5-30 (Chapter 5 -Cumulative Impacts, Vol. II) explains, "Nevertheless, VDDT forecasting shows that overall trends toward habitat loss and fragmentation are likely to continue from the spread of invasive weeds, isolation, wildfire and conifer encroachment." The agency continues with its explanation that these threats can be limited only by vegetation management, "These programs are limited to certain areas and is unlikely to approach the scope of the threats or prevent catastrophes such as large-scale wildfire. Thus, the major threats are likely to continue in management zones 4 & 5 under all alternatives."

Comment Number: OR-GRSG-0433-25

Comment Excerpt Text:

Wilderness and Wilderness Study Areas

Wilderness and WSA management benefit sage-grouse. Additional opportunities for appropriate, small-scale management actions in Wilderness and WSAs can further benefit sage-grouse and need to be considered. BLM expressly identified the presence of sage-grouse strutting grounds and habitat for numerous WSAs in its 1989 Final Oregon Wilderness EIS. Since that time the Steens Mountain Wilderness and Oregon Badlands Wilderness have been designated by Congress. Sage-grouse and their habitat are a key wilderness characteristic present in the two Wilderness Areas and 68 WSAs in the planning area. DEIS at 3-119. Despite the nearly 2.4 million acres of sage-grouse habitat found in these protected areas the DEIS fails to adequately acknowledge benefits to sage-grouse from Wilderness or WSA management. Since BLM is required to ensure that these areas and the habitat within them is not impaired it seems obvious and relevant for the DEIS to describe potential habitat protections from these designations in the description of the affected environment and to consider benefits to sage-grouse in the analysis of impacts. As mentioned at the outset, sage-grouse require sagebrush-dominated landscapes containing minimal levels of human land use. Wilderness, WSAs, Lands with Wilderness Characteristics and other areas with identified wilderness characteristics all contain expanses of sagebrush and are, by definition, without the permanent presence of man. These areas are therefore critical contributors to core and connectivity habitat and legally preclude many of the forms of surface disturbance that the DEIS is attempting to prevent. The DEIS states that Wilderness and WSA management will continue in accordance with existing laws, regulations, and policies, yet fails to acknowledge that a suite of management actions beneficial to sage-grouse can and do take place in Wilderness and WSAs. Nevertheless, efforts including treatment of invasive species, grazing management, horse and burro management, wildfire suppression and recreation management all take place in these areas and actions can be taken above and beyond minimum legal and policy requirements to benefit wilderness resource values like sage-grouse. The absence of reasonable proposed actions within Wilderness and WSAs to benefit sage-grouse is a missed opportunity. BLM should consider and include actions within Wilderness and WSAs such as, but not limited to, native seed planting, removal of structures or changes to recreation management in the proposed action.

Comment Number: OR-GRSG-0434-9

Comment Excerpt Text:

BLM expressly identified the presence of sage-grouse strutting grounds and habitat for numerous WSAs in its 1989 Final Oregon Wilderness EIS. Since that time the Steens Mountain Wilderness and Oregon Badlands Wilderness have been designated by Congress. Sage-grouse and their habitat are a key wilderness characteristic present in the two Wilderness Areas and 68 WSAs in the planning area. DEIS at 3-119. Despite the nearly 2.4 million acres of sage-grouse habitat found in these protected areas

the DEIS fails to adequately acknowledge benefits to sage-grouse from Wilderness or WSA management.

Since BLM is required to ensure that these areas and the habitat within them is not impaired it seems obvious and relevant for the DEIS to describe potential habitat protections from these designations in the description of the affected environment and to consider benefits to sage-grouse in the analysis of impacts.

Comment Number: OR-GRSG-0456-2

Comment Excerpt Text:

The RMPA has failed to acknowledge and analyze the impact West Nile Virus has on sage grouse populations. As part of that analysis, BLM must acknowledge ranching practices that help reduce that threat. For example, many ranchers have implemented changes on their private lands to stop ponding, thereby helping eliminate mosquitoes that are known to carry WNV. In our valley all ranchers are taxed for vector control. Therefore, removal of grazing and working ranches will increase West Nile threats to sage-grouse

Comment Number: OR-GRSG-0475-1

Comment Excerpt Text:

limiting OHV use among other regulations, is not addressing the primary threats, and will have little effect on sage-grouse.

The DEIS goes on to propose OHV regulations in ACECs and RNAs that are unnecessary. Is there a scientific basis for closing all ACECs to public OHV use from March 1 to June 30? The DEIS correctly states that "no apparent relationship has been found between lek count trends and the presence of secondary roads (Aldridge et al. 2008)" (pg 3-11 – 3-12).

Comment Number: OR-GRSG-0497-1

Comment Excerpt Text:

Comment 7. The role of grazing in the maintenance of the biome is complex (Davies et al. 2010b: Didham et al. 2007; Hayes and Holl, 2003; Svejcar, et al. 2014) and the Plan fails to deal adequately with the complexity. Cattle and sage grouse in general eat different foods (Martin and Szuter 1999; Miller and Eddleman. 2001). Grazing can be a key tool to manage the accumulation of combustible biomass and help control the frequency and intensity of wildfires (Davies et al. 2009, 2010a; Diamond et al. 2009; Launchbaugh and Walker, 2006). The presence of exotic annual grass in the ecosystem creates a situation where the absence of grazing followed by fire can accelerate the transformation of the biome to one dominated by exotic grasses (Davies et al. 2009; Diamond et al. 2009; Launchbaugh and Walker, 2006).

Comment Number: OR-GRSG-0517-1

Comment Excerpt Text:

A flaw within the entire document is the failure to quantify the relative significance of the identified threats to sage grouse. These threats (table 2-8) must be evaluated and responded to within the context of significance.

Comment Number: OR-GRSG-0531-1

Comment Excerpt Text:

Eliminating some of the sage grouse predators would do more for sage grouse populations than would reducing the numbers of cattle sharing the area. In fact, in all of this discussion no studies have been cited which indicate that reducing cattle populations in shared spaces or reducing grazing improves the sage grouse's survival or its flourishing. It would seem that before a decision of this magnitude is to be enacted, studies should be formulated and hypotheses proven that this truly is the best action to take. The only studies I am aware of show that there is no marked improvement in the habitat or in the numbers of species in areas where cattle have been removed for many years over areas where cattle have continuously grazed. Interestingly, the removal of cattle from forest or range lands also marks a slowly destroyed habitat for elk, deer, antelope, etc.

Comment Number: OR-GRSG-0532-108

Comment Excerpt Text:

Pg. 4-60 - "Low Density would cover fewer acres than PGMA and thus would provide less protection than Alternative B." This statement would only be

true if less protective management actions were being proposed for GRSG habitat outside of Low Density areas, but this is not the case. All GRSG habitat outside of Core Areas (e.g., Low Density and any undesignated GRSG habitat) would be treated equally under Alterative E. This is acknowledged in other parts of the DEIS, e.g., pg 5-19

Comment Number: OR-GRSG-0557-1

Comment Excerpt Text:

Also, under Assumptions, on page 4-198, the document states, "New information may lead to changes in delineated GRSG habitat". One big problem here, is that there is absolutely no mechanism available to private land owner to stop BLM from changing the habitat designation from general habitat, to priority habitat (page 4-198 states "modifications to GRSG habitat would be updated in the data inventory through plan maintenance"). In Three Valleys mining operations, we are already subject to many stringent mitigation measures and restrictions. If BLM can simply change the designation of areas from "general" to "priority", a high degree of uncertainty has been imposed on the economic impacts on each operation.

Comment Number: OR-GRSG-0567-1

Comment Excerpt Text:

the draft EIS does not provide sufficient detail for us to fully evaluate the adequacy of several key components of the plan, including: habitat and disturbance monitoring, adaptive management, fire and invasive species management, and mitigation. We are participating on national interagency teams associated with these plan components and will continue to provide inpnt on these components through our membership on these teams. It will be critical that the final EIS provide additional specificity in each of these areas. Specific areas of uncertainty inclnde, but are not limited to:

- Details on how habitat and disturhance will be measured and monitored;
- Triggers and responses for adaptive management:
- Methods of landscape-scale prioritization and implementation of step-down assessments for addressing threats from fire and invasive species;
- Methodologies that will be used to assess impacts and associated mitigation; and;
- The relationship between BLM methods, direction, and actions considered in the draft EIS and those that will be applied to nonfederallands under a plan developed by the state; in particular, BLM's vision for how the remainder of the NEPA process and long-term RMP implementation will attain consistency and coordination with measures that emerge from the Oregon state plan.

Comment Number: OR-GRSG-0567-19

Comment Excerpt Text:

The draft EIS does not provide sufficient information for us to fully understand the impacts on sage-grouse populations or their habitats. Chapters 4 and 5 primarily focus on how BLM activities (e.g. management actions, direction, and planning) will change and vary among the alternatives. Those changes are reasonably well-described in light of the associated complexity. However, the anticipated impacts to sage grouse - the potential outcome for sage grouse populations and impacts to habitat, quality and distribution, and the relation of these impacts to the changes described for the various BLM activities - are given very minimal attention and detail.

Comment Number: OR-GRSG-0567-28

Comment Excerpt Text:

BLM's draft EIS Alternative D fails to ameliorate mining as a threat due to the reliance on discretionary actions for avoiding impacts to sage-grouse from mining activities. It does not 1) close PPMA to fluid mineral mining (allowing disturbance of breeding/nesting sage-grouse and further fragmentation of sage-grouse habitat); 2) recommend PPMA for withdrawal for locatable mineral mining; 3) maintain current stipulations for PPMA (allowing disturbance of breeding/nesting sage-grouse and further fragmentation of sage-grouse habitat); and 4)

disallow new disturbance as long as within 3 percent cap. However, scale (which is very important) at which this percentage cap will be established and measured is not discussed.

Comment Number: OR-GRSG-0567-33

Comment Excerpt Text:

Infrastructure (Chapter 4, page 17-18) ._. "Sage-grouse have been observed avoiding broodrearing habitats within three miles of power lines (LeBeau 2(12). Higher densities o/jJower lines withinjaur miles of a lek negatively influence lek attendance (Walker et al. 2007). ROW exclusion areas would prohibit all development of ROWs, in ROW avoidance areas, ROWs would be considered on a case-by-case basis. Thisflexibility may be advantageous where federal and private landownership areas are mixed and where exclusion areas may result in more widespread development on private lands. The 3 percent disturbance cap under certain action alternatives would protect sage-grouse habitat from excessive disturbance in ROW avoidance areas. " Please explain how, exactly, this would be achieved, and what methodology would be used to achieve this. Further, please explain what this means for the birds in that PAC. Also, please describe what criteria (e.g." lek attendance, existing disturbance) is used to determine whether a ROW avoidance area is warranted.

Comment Number: OR-GRSG-0567-39

Comment Excerpt Text:

The scale at which avoidance standards and any disturbance thresholds will be applied should be more clearly described. Limits should apply to multiple scales such that the overall integrity of sage-grouse populations, including those which may overlap areas outside the geographic scope of the draft EIS, is sound. BLM should consider provisions that limit additional (above baseline or threshold) disturbance to sage-grouse habitat or leks resulting from any individual project and that prevent impacts from multiple projects from accruing rapidly on the same landscape, See specific comments on Disturbance Threshold.

Comment Number: OR-GRSG-0591-10

Comment Excerpt Text:

We are concerned that the agency's examination of impacts to sage grouse is rudimentary in Priority Habitats and in many cases absent outside them in the DEIS. BLM also must take the legally required 'hard look' at direct or cumulative impacts to sage grouse wintering habitat under the various alternatives; since the impact of development approved under the RMP Amendment on breeding and nesting sage grouse matters little if sage grouse populations do not survive the winter.

Comment Number: OR-GRSG-0591-12

Comment Excerpt Text:

In the Oregon RMP Amendment EIS, BLM has failed to apply in its Preferred Alternative the recommended sage grouse protections presented to it by its own experts (the BLM National Technical Team), and as a result development approved under several of the alternatives analyzed (and particularly Alternatives A, D, and E) will result in both unnecessary and undue degradation of sage grouse Core Area habitats and result in sage grouse population declines in these Core Areas, undermining the effectiveness of the Core Area strategy as an adequate regulatory mechanism in the context of the decision.

Comment Number: OR-GRSG-0591-20

Comment Excerpt Text:

We are concerned that Alternative D will not uphold BLM's obligation to manage Sensitive Species to "minimize or eliminate threats," either within or outside of Core Area habitats. As detailed elsewhere in these comments, mitigation measures applied under Alternative D will inevitably lead to serious impacts to sage grouse populations within Priority Habitats. This result represents an unnecessary and undue degradation of key sage grouse habitats.

Comment Number: OR-GRSG-0591-26

Comment Excerpt Text:

We appreciate the application of a 4-mile NSO buffer in Priority Habitat for both leased and unleased mineral estates, but in General Habitat there appears

to be a lek buffer of only one mile, which can be waived if off-site mitigation measures are applied. This is an inadequate level of protection for breeding and nesting habitat in General Habitats areas

Comment Number: OR-GRSG-0591-29

Comment Excerpt Text:

In Oregon, noise from military overflights can create noise in excess of 100 dBA. Sage grouse Priority and General Habitats should thus be closed to low-level military overflights during the breeding and nesting season for sage grouse. We recommend that noise limits be imposed in the RMP, allowing no greater than 32 dBA noise levels in sage grouse nesting and breeding habitats.

Comment Number: OR-GRSG-0591-3

Comment Excerpt Text:

The Preferred Alternative would apply a 3% limit on anthropogenic disturbance over an undisclosed area, but this disturbance limit would exclude human-caused fire. Relevant to the issue of the 3% disturbance cap, we ask the responsible official to make a formal determination concerning which of the available scientific information is the most accurate, reliable, and relevant in determining what percentage of land area, and at what spatial scale, should be allowed to be disturbed in order to achieve the stated goal of the RMP Amendment. BLM should consider the findings of Knick et al. (2013), which concluded in relevant part that 99% of the active leks in the study area (encompassing the entire western range of the greater sage grouse) were surround by habitat with 3% surface disturbance or less. See Attachment 1. We would ask the responsible official to consider the findings of Kirol (2012), which found for his study area immediately north of the planning area that surface disturbance greater than or equal to 4% of the land area had a significant negative impact on greater sage grouse brood rearing habitat. See Attachment 2. We would ask the responsible official to consider the findings of Copeland et al. (2013), which found that if all of the State of Wyoming sage grouse policy provisions (which include a 5% disturbance cap calculated using a Disturbance Density Calculation Tool) were implemented fully and to the letter, that a 9 to 15% decline in greater sage grouse populations would still occur statewide, including a 6 to 9% decline within designated Core Areas (where the 5% disturbance cap would be applied). We would ask the responsible official also to render the same determination regarding the accuracy, reliability, and relevance of science supporting the 3% disturbance cap proposed for implementation under Alternative B.

Comment Number: OR-GRSG-0591-34

Comment Excerpt Text:

New research (Copeland et al. 2013) projects continued sage grouse population declines at 14-29 percent in Wyoming if its Core Area standards are fully enforced; the Oregon preferred alternative does not even meet this bar in some respects. The same study estimates that, even when bolstered by $250 million in targeted conservation easements on private property (a very unlikely assumption), the Core Area policies would only cut anticipated sage grouse population declines by half in Wyoming, and by two-thirds within high abundance areas. We are concerned that sage grouse in Oregon may fare even worse given that BLM's preferred alternative is less protective in some respects than the State of Wyoming Core Area policy

Comment Number: OR-GRSG-0591-35

Comment Excerpt Text:

We are concerned that many, if not most, of these "habitat improvement" projects are actually harming sage grouse habitat in the long term and that the remainder will cause short-term impacts to sage grouse populations that contribute to the multiple serious threats to their existence. The scientific basis for many such projects (which include prescribed burns and mechanical or herbicidal thinning or removal of sagebrush) is extremely shaky, and given the lack of familiarity of the project proponents with basic sage grouse habitat requirements, such projects may unintentionally cause additional damage to sage grouse habitats. The impacts (positive and/or negative) of such projects have not been rigorously tested, and thus their results for improving (or

harming) sagebrush habitats remain open to speculation.

Comment Number: OR-GRSG-0591-4

Comment Excerpt Text:

We would next ask the responsible official to examine the best available science and render a determination regarding whether it is more appropriate to calculate the proportion of disturbance according to a designated Priority Habitat unit, or simply on a section-by-section, per-square mile basis. Please consider the scientific studies listed above in this section, as well as any and all other relevant scientific studies that explore disturbance percentage by section, or disturbance percentage as calculated using a Preliminary Priority Management Area ("PPMA") or any other similar geographic scale. In your response to comments (or the FEIS itself), please list the scientific studies that calculate disturbance percentage as it relates to sage grouse habitat use and/or impacts, both on a per-square-mile-section basis and as calculated on a larger area such as a Priority Habitat area.

Comment Number: OR-GRSG-0591-53

Comment Excerpt Text:

Holloran (1999) documented that livestock disturbance caused a sage grouse hen to abandon her nest in one case. Call and Maser (1985: 17) noted that nest desertion is most prevalent in the vicinity of sheep bedgrounds, and reached the following conclusion: "There is no indication that livestock are a serious factor in the destruction of nests, although desertion of nests because of livestock activities is frequent under certain conditions." In addition, the presence of livestock in nesting habitats can cause problems for sage grouse. Livestock drives could also negatively impact sage grouse populations during the nesting season. According to Call and Maser (1985:18), "Hens abandon their nests with little provocation during the egg-laying period (mid-April through early May). Yearling hens are prone to abandon their nests even when disturbed during incubation. The impact of a livestock drive could, therefore, be great because yearling hens are usually the largest reproductive age class." For allotments where sage grouse nesting is known to occur, shifting on-off dates (if necessary) could minimize the chances of impacts to nesting sage grouse, and livestock drives should be routed to avoid sage grouse leks during the strutting and nesting seasons.

Comment Number: OR-GRSG-0591-70

Comment Excerpt Text:

Another 'hard look' problem with the BLM's impacts analysis regarding grazing is best illustrated in Tables 4-3 and 4-4. DEIS at 4-22. This analysis concludes that Alternative C, which removes livestock grazing from Priority Habitats, would result in the poorest habitat conditions in virtually all geographic areas at the 10- and 50-year timescales, and indeed would result in poorer vegetation condition for sage grouse than simply continuing existing management (Alternative A). Id. BLM asserts that removal of livestock grazing under Alternative C will accelerate the spread of cheatgrass (DEIS at 5-21), even though grazing removal would "restrict the spread of weeds" (DEIS at 5-22). Elsewhere in the EIS, BLM suggests that livestock removal will result alleviate cheatgrass spread, reduced water infiltration, soil compaction, and decreased water quality, and allow understory vegetation to recover. DEIS at 4-89. And in another NEPA analysis, in a region (western Wyoming) where livestock grazing is recognized as a lesser threat to sage grouse than it is in Oregon, the BLM offered a candid analysis of how removal of livestock grazing results in major improvements to sage grouse habitat versus the present program of livestock grazing:

Comment Number: OR-GRSG-0591-81

Comment Excerpt Text:

The DEIS does not provide sufficient detail in its analysis to determine the impacts of permitted activities on sage grouse under any alternative. Will either alternative maintain or recover current sage grouse populations inside Priority Habitats, and if not, how steep will be the declines? Similarly, what will be the impact of permitted activities on sage grouse populations outside Priority Habitats? And how do these two population trend series interact to affect the overall viability of sage grouse in Oregon? Will loss of sage grouse populations outside Priority

Habitats affect population trends inside Priority Habitats? Will sage grouse be displaced from lands outside Priority Habitats and into Priority Habitats by development, and what will be the survival rate of these displaced birds? Would the resulting competition with resident sage grouse decrease their ability to survive inside Priority Habitats? These questions need to be addressed so that BLM can make an informed choice among alternatives.

Comment Number: OR-GRSG-0643-1

Comment Excerpt Text:

Section 4.2.2. of the DEIS states "golden eagles interactions alone increased 47 percent in an area where a transmission line had been constructed (Ellis 1984)". This citation is inaccurate; Ellis 1984 states "Other investigators have described the anti-predator behavior of lekking Sage Grouse to an approaching Golden Eagle. No accounts exist of the behavioral responses of Sage Grouse to a perched Golden Eagle, largely because most Sage Grouse leks are on open sagebrush plains void of trees that might serve as perches" (Ellis 1984). It is unclear why the DEIS only includes some of these findings (e.g. where there are negative impacts reported) versus including a more complete review of the literature. APLIC recommends that the BLM consider current literature regardless of the results.

Comment Number: OR-GRSG-0643-2

Comment Excerpt Text:

Section 4.2.2. of the DEIS states "fences are often associated with power lines". This statement is inaccurate. Power lines typically do not have associated fencing; fencing would typically be limited to substation boundaries.

SECTION 7.8 - CUMULATIVE IMPACT ANALYSIS

Comment Number: OR-GRSG-0007-15

Comment Excerpt Text:

Mormon Basin Mining Operation has been left out of the EISA

On page 5-14, I see the Mormon Basin Fuels Treatment Project, however the Mormon Basin Mining project has been left out. This project was approved in 2010 and is a current, ongoing mining operation. The wildlife biological assessment for this project, on page 5 of the Mormon Basin TES Clearance Survey 2008, states for Mormon Basin, "The survey showed little habitat with potential to support sage grouse leks which typically use open areas within sage brush. No sage grouse or grouse pellets were found within the project area ". The EISA has designated Mormon Basin as PPMA. This area should be deleted from PPMA habitat. Also, the adverse effects to this mining operation are not discussed in the EISA, nor is it included in the cumulative effects section as NEPA requires.

Comment Number: OR-GRSG-0206-17

Comment Excerpt Text:

While BLM and USFS often propose chaining, chemical and burning treatments that may benefit domestic livestock grazing (Bishop RMP, 1993) there is no evidence these treatments benefit sage-grouse. To the contrary, these treatments have negative direct, indirect, and cumulative effects on sage-grouse. The proposed EIS must include an analysis of the cumulative effects of the existing fences, prescribed burning and other proposed treatments and the effects of domestic livestock grazing on greater sage-grouse.

Comment Number: OR-GRSG-0360-2

Comment Excerpt Text:

Chapter 5 presents the "Cumulative Impacts" resulting from the implementation of each alternative. Continued habitat loss and increased threats from wildfire, invasive plant species and juniper encroachment are predicted under each alternative (Draft RMP A Vol. II, Table 4-4, pg. 4-22). The "Purpose and Need" statement described is therefore nullified by failing to "conserve, enhance and/or restore Greater sage-grouse habitat by reducing, eliminating or minimizing threats to that habitat" (Draft RMPVol. I, pg.E-6, paragraph 2)

SECTION 7.9 - MITIGATION MEASURES

Comment Number: OR-GRSG-0068-7

Comment Excerpt Text:

The scientific foundations and approach to the 3% cap are unclear. This cap needs defining. What is the size/scale to be measured; is it accumulative over time and/or space? Based on existing science, it is unclear whether 3% is appropriate in Oregon. Where the cap has not been applied, sage grouse populations are strong. This seems to indicate that 3% or any other percentage cap may not be appropriate.

Recommendation: The BLM should clarify its intent with regard to the disturbance cap. It should be clear how it intends to apply it. Further, it should not be applied without careful consideration of local conditions, including local populations and habitat

Comment Number: OR-GRSG-0107-1

Comment Excerpt Text:

The document lists the primary threats to the bird's survival as wildfire, invasives and juniper encroachment. (RMPA Vol. I pg. 2-11; COT Report USFWS 2013a; Greater Sage-Grouse Conservation Assessment & Strategy for Oregon: ODFW, 2011). Why are these primary threats not thoroughly addressed? Where are the funded plans listed within the RMPA that will identify and control the wildfire, invasives, and juniper that threaten rangeland health and the sage grouse?

Comment Number: OR-GRSG-0254-2

Comment Excerpt Text:

1) Disturbance Cap (RMPA Vol. I p. 2-14; Table 2-6, D-sss2 pp. 2-58: RMPA Vol. III Appendix G, Habitat Disturbance monitoring pp. G6 & G7). BLM's preferred alternative states a limit of 3% on all existing and future human disturbance within PPMA as measured on private and public lands.

- There is no analysis of what the current disturbance level is. Does BLM plan to gather any data or information to analyze?
- Why would BLM use disturbance levels on private land to regulate public land use?
- BLM cannot control what happens on private land, but if private land disturbance is included in the amount of disturbance level, wouldn't the 3% limit be reached prematurely?
- What specifically qualifies as a disturbance?
- At what scale will BLM enforce this cap (allotment, county, district)?
- The three primary threats as identified by USFWS in Oregon are wildfire, invasive plants and juniper encroachment (RMPA Vol. I, pp.2-11; COT Report-USFWS 2013a; Greater Sage Grouse Conservation Assessment and Strategy for Oregon: ODFW, 2011). Human caused disturbance in not a primary threat in Oregon so why has BLM included this as an alternative to address?
- Does BLM realize the impacts these restrictions would cause on rural communities? Shouldn't there be a cost-benefit analysis completed? To me, the cost is way too high for any minimal benefit gained.

Comment Number: OR-GRSG-0276-54

Comment Excerpt Text:

Text: Pg. C-3. Appendix C. Required Design Features

For Alternatives B, C, D, E, F

- Fit transmission towers with anti-perch devices (Lammers and Collopy 2007).

Comment: Mesmer et al. (2013) reviewed available information on the effectiveness of perch deterrents and concluded that these devices had not proven effective in eliminating raptor or corvid perching on transmission and distribution lines (APLIC 2006, Lammers and Collopy 2007). In fact, perch deterrents may encourage raptors and corvids to nest on structures and may increase the level of risk of electrocution for raptors. IPC encourage the BLM to evaluate the effectiveness and suitability of perch deterrents for powerline structures.

Comment Number: OR-GRSG-0381-3

Comment Excerpt Text:

My final concern is BLM's unproven assumption that its mitigation measures will necessarily suffice to compensate for anthropogenic habitat loss. In some situations, this simply is not possible. For example, if habitat is destroyed and cuts off an important connectivity corridor, there is no mitigation that can compensate for the loss. Similarly, if a lek is abandoned because of habitat loss due to a new power line, no amount of mitigation will bring it back. And yet, proposed caps on habitat destruction (e.g. 3% for core habitat) can be eternally renewed, whether or not the mitigation has proven to provide equally valuable habitat. At the very least, a cap should be held absolute unless and until any specific mitigation proves to have provided equal or greater population numbers for the specific situation than pre-mitigation.

Comment Number: OR-GRSG-0433-20

Comment Excerpt Text:

MITIGATION AND BEST MANAGEMENT PRACTICES

BLM should comply with its guidance on regional mitigation to avoid, minimize and mitigate impacts to sage-grouse and other resources through planning and management decisions. BLM's regional mitigation guidance, as well as the recent secretarial order, provides a framework for accomplishing these goals. Compensatory mitigation is an important tool, which should be used in accordance with the recommendations below.

Prioritizing mitigation on sites where mitigation is most likely to succeed, benefit multiple resources, improve degraded sites and insure against long-term effects like climate change is both desirable and consistent with agency policy. The focal area approach described in the DEIS as well as the potential connectivity corridors discussed above are both areas where mitigation investments should be focused. The mitigation approach described for the preferred alternative (DEIS at 2-23) provides many of the most critical measures for successful mitigation efforts.

Comment Number: OR-GRSG-0532-39

Comment Excerpt Text:

In many instances, Alternative D indicates an absolute prohibition or exclusion on certain activities in GRSG habitat. These aspects of Alternative D need to be realigned with a disturbance framework. For instance, rather than proposing an absolute exclusion or prohibition of aggregate operations needed for road maintenance in PPH , or similar limits on renewable energy development and transmission, Alternative D should be revised to reflect a disturbance framework that:

(a) Requires concentrated human activities that disturb GRSG habitat (both direct and indirect impacts) to be located to avoid PPH or other agreed-upon spatial measures of key habitat (such as the groupings of core areas currently proposed in the state framework);

(b) Requires such activities that must located in key habitat areas to minimize their direct and indirect impacts;

(c) Requires mitigation for remaining direct and indirect impacts to both PPH and PGH, to achieve a net conservation benefit; and

(d) Establishes an overall limit, or threshold, on the direct impacts in PPH (or other agreed upon units of key habitat).

Comment Number: OR-GRSG-0532-46

Comment Excerpt Text:

1. Net conservation benefit. The Oregon BLM Resource Management Plan Amendments set a goal of no net loss with net benefit for PPH but requires only no net loss for PGH. Oregon supports the no net loss with net benefit goal for activities impacting either PPH or PGH.

The amendments also should clarify the scale or scales at which a no net loss or net benefit requirement will be applied. The State's mitigation

framework will identify service areas at a scale that is biologically relevant as defined by PACs, limited to within the state, within which net benefit should be demonstrated. The State program's unit of measure for impacts and benefits and for demonstrating net conservation benefit is anticipated to be a functional habitat acre.

Comment Number: OR-GRSG-0532-47

Comment Excerpt Text:

2. Clarification of the mitigation hierarchy. BLM's definition of and approach to "on-site mitigation" in both the RMP amendments and the Regional Mitigation manual differ somewhat from common usage and the definitions used by the USFWS. The result is that the intended application of the mitigation hierarchy is unclear and appears to express a preference for compensatory mitigation projects to be at or near the site of development impact. BLM should clarify the use of the term.

Rather than an automatic preference for onsite mitigation, the decision to conduct on or offsite mitigation should follow criteria tied to the ecological functions being impacted. In general, compensatory mitigation projects should be targeted to where the greatest habitat benefit can be provided. This is generally expected to be off-site, except where greater conservation benefits can be achieved adjacent to the site of impacts and activities there would not negatively impact the mitigation site.

The State is proposing a mitigation approach (including avoidance, minimization, and compensatory mitigation components) that would cover development actions which:

- Negatively impact GRSG habitat;
- Are identified as threats in the Conservation Objectives Team (COT) report;
- Create spatially discrete, measurable impacts; and
- Are implemented, funded, or permitted by federal, state, and local agencies.

These development activities include, but are not limited to:

- Energy Development
- Agricultural Conversion
- Mining
- Concentrated Recreation Facilities (e.g., OHV Parks, developed campsites)
- Ex-Urban Development
- Infrastructure (e.g., roads, pipelines, powerlines, and cellular towers)

Ranching/grazing and dispersed recreational uses are too diffuse, and are not proposed to be included in the State's mitigation framework.

The process for complying with the State's avoidance, minimization, and compensatory mitigation requirements will be applied to covered activities within all GRSG habitat. However, not every action will necessarily require compensatory mitigation.

The State requests that the BLM continue to coordinate with the State and other interests in aligning this mitigation hierarchy. Consistent application across all lands is necessary to create an equitable, predictable, and effective system for conserving GRSG habitat.

Comment Number: OR-GRSG-0532-48

Comment Excerpt Text:

Compensatory mitigation projects on BLM-administered lands must consider additionality and durability. The DEIS should more clearly define the BLM's approach to: (a) defining baseline; (b) ensuring that credits are issued only for the portions of conservation projects that surpass that baseline; and (c) ensuring that the benefits of compensatory mitigation projects last at least as long as the negative impacts of the associated development actions.

Comment Number: OR-GRSG-0532-49

Comment Excerpt Text:

5. In-lieu fee program. The BLM's draft Regional Mitigation Manual, included by reference in the RMPA

and DEIS, raises the possibility of BLM accepting monetary contributions to fund compensatory mitigation project. If this sort of in-lieu fee structure is visualized for GRSG mitigation in Oregon, either the manual or the RMPA should include clearer guidelines on collecting and using cost-recovery funds. For example, prior to any funds being collected, there should be plans for a maximum time funds can be held before they are spent, ways to track and account for the benefits generated by those funds, and guidelines for avoiding potential conflicts of interest between collecting funds, spending funds, and being responsible for performance of mitigation projects. If further guidance on these issues is not provided in the final manual, BLM's approach to this kind of program at the state level should be closely coordinated with the State's mitigation program to ensure that mitigation projects on public and private lands are treated equitably.

Comment Number: OR-GRSG-0567-45

Comment Excerpt Text:

All of the alternatives state that full reclamation oflands to the condition it was found in prior to disturbance is required for all future actions. The reclamation criteria do not appear to be specific to sage-grouse. We recommend that a minimum threshold of reclamation success based on functional sage-grouse habitat be identified in the Final EIS to clearly define reclamation successful specific to sage-grouse.

Success criteria for restoration or mitigation sites should include a requirement that sage-grouse populations occupy the area. This criterion is particularly important when the reclaimed area is being considered in disturbance cap calculations, and would be a mechanism to ensure the retention of the species redundancy and representation across the landscape.

Comment Number: OR-GRSG-0567-47

Comment Excerpt Text:

Alternative D states that priority will be given to mitigation at sites near impact areas, that BLM will collaborate with Oregon Department of Fish and Wildlife and the Service in selecting off-site mitigation measures, and that off-site mitigation will be directed to sagegrouse focal areas (which will be assessed every 1O years).

- Clearly describe the process by which this collaboration will occur and which entity has the final say in the location and type of mitigation actions, Priority should not be given to mitigation sites "near" the impact area due to indirect and cumulative effects and potential issues with durability (see below). Sites chosen far outside the impacted population may also not be adequate.
- Clearly describe the geographic and population-based limits (i.e. service area) for location of compensatory mitigation.
- The final EIS should also describe how durability will be supported consistent with the use of focal areas identified by BLM in alternative D. The suggestion that mitigation will be concentrated in these areas and that these areas might be subject to boundary revisions or movement/replacement over time leads to substantial uncertainty as to the durability of associated mitigation actions. As described in the draft EIS, it seems possible that the mitigation site/action itself might be removed along with changes to focal area boundaries, or that such boundary changes--even if the mitigation site itself is left intact - might then allow for management on surrounding lands that reduce the value and effectiveness of the mitigation site.
- The mitigation program should yield a net conservation benefit. The total outcome of any project when viewed in consideration of its compensatory mitigation actions should result in "no net loss and with a net benefit" to sage-grouse. This should be measured directly in terms of sage-grouse habitat quality and quantity, and indirectly in terms of the overall net conservation status of the species following the project. Compensatory mitigation goals should be clearly stated for

each habitat type (e.g. PPMA, PGMA). Mechanisms to measure these goals should be clear.

Comment Number: OR-GRSG-0567-48

Comment Excerpt Text:

Alternative D: The offsite mitigation goal is stated as no net loss plus a net gain for impacts to PPMA. The mechanism for how to measure whether something is a no net loss is not described. It is unclear if mitigation is required for impacts to leks that are not within PPMA or PGMA.

Comment Number: OR-GRSG-0591-22

Comment Excerpt Text:

Like the Preferred Alternative, the NTT report recommends managing priority sage grouse habitat so that discrete anthropogenic disturbances cover less than three percent of any single square-mile section regardless of ownership (NTT 2011 at 7). This is supported by the science; Knick et al. (2013) found that 99% of the active sage grouse leks in the western half of the species' range were surrounded by habitat with 3% or less anthropogenic surface disturbance. Furthermore, once the three percent limit is reached, additional surface-disturbing projects are precluded, and in cases where the three percent limit is already exceeded, restoration must occur to meet this threshold under the NTT recommendations. Alternative D includes a 3% disturbance cap, within the range recommended by the NTT, but excludes human-caused fires (an important form of disturbance in Oregon) from these calculations, and fails to specify that it will follow the one-square-mile unit of calculation recommended by the NTT (2011). This use of areas larger than one square mile results in an inaccurate disturbance calculation that allows more than 3% per square mile on a section-by-section basis, the threshold at which negative impacts to sage grouse occur. BLM should manage Core Area habitats to prevent significant impacts to sage grouse, including from surface disturbance in excess of 3% per square mile, within Priority and General Habitats under the new RMP.

Comment Number: OR-GRSG-0591-25

Comment Excerpt Text:

Coates et al. (2013) determined that an 8-km (5-mile) buffer around the lek encompassed almost all sage grouse activity for the Mono Basin sage grouse population, and that setting buffers beyond 8 km for that population made no sense as 8 km was the point of diminishing returns. The Coates et al. results are conservative relative to activity patterns found for other sage grouse populations across the West (see, e.g., Fedy et al. 2012). Doherty et al. (2011: 509) started from a 4-mile lek buffer to build Core Areas on the assumption that 79% of females nested within 4 miles of a lek, but later extended this to 8.5 km (5.3 miles) to encompass an adequate area to provide for sage grouse persistence:

We extended the radius from 6.4 to 8.5 km for leks in 75% and 100% core regions (Holloran and Anderson 2005), because a post-hoc analysis indicated that 6.4 km was too small an area to contain simulated nest densities in lower population density areas and fragmented habitats where a few leks were far apart (e.g., North and South Dakota; Table 21.1). Increasing the radius in 75% and 100% core regions provided more realistic estimates of the area needed to support breeding populations in low-abundance or fragmented populations.

Aldridge and Boyce (2007) suggested that even larger buffers (10 km) are warranted. While California and Nevada are not part of the Wyoming Basins Ecoregion entered into the Doherty et al. (2011) model, this planning area is typified by low-abundance or fragmented populations, and therefore the recommendations of Doherty et al. (2011) apply

Comment Number: OR-GRSG-0591-28

Comment Excerpt Text:

The Preferred Alternative would apply limits of no more than 10 dB above ambient, which is the appropriate level, but it fails to define 'ambient' and also only applies the limitations to the hours around sunrise or sunset. We are concerned that by failing to properly define 'ambient,' ambient levels could include existing human-caused noise that already

exceeds the sage grouse's thresholds of tolerance as outlined below. We are further concerned that noises exceeding these thresholds during hours when limitations do not apply will cause sage grouse to abandon leks. BLM should require a maximum allowable noise level of 32 dBA throughout the breeding season, in accordance with the science listed below.

Comment Number: OR-GRSG-0591-4

Comment Excerpt Text:

We would next ask the responsible official to examine the best available science and render a determination regarding whether it is more appropriate to calculate the proportion of disturbance according to a designated Priority Habitat unit, or simply on a section-by-section, per-square mile basis. Please consider the scientific studies listed above in this section, as well as any and all other relevant scientific studies that explore disturbance percentage by section, or disturbance percentage as calculated using a Preliminary Priority Management Area ("PPMA") or any other similar geographic scale. In your response to comments (or the FEIS itself), please list the scientific studies that calculate disturbance percentage as it relates to sage grouse habitat use and/or impacts, both on a per-square-mile-section basis and as calculated on a larger area such as a Priority Habitat area.

Comment Number: OR-GRSG-0591-52

Comment Excerpt Text:

The potential conflict between livestock grazing and sage grouse is intensified near water sources due to the importance of these areas to sage grouse. Heavy cattle grazing near springs, seeps, and riparian areas can remove grasses used for cover by grouse (Klebenow 1982). According to Call and Maser (1985: 17), "rapid removal of forbs by livestock on spring or summer ranges may have a substantial adverse impact on young grouse, especially where forbs are already scarce." In addition, water features can become breeding grounds for the Culex tarsalis mosquito, facilitating the spread of West Nile virus which is deadly to grouse. We are concerned that the Preferred Alternative does not sufficiently address this threat to sage grouse population persistence, laying the groundwork for West Nile virus to act in concert with habitat degradation and result in the extirpation of sage grouse populations. BLM should fence off natural springs and place livestock water sources outside the fences rather than at the spring itself. If past actions have dried up natural springs or wetlands to create stock tanks, then remedial action should be required return some water to ground for sage grouse and vegetation, in an area protected from livestock.

Comment Number: OR-GRSG-0591-7

Comment Excerpt Text:

BLM proposes that its mitigation efforts be managed in a manner that results in "no net loss" of sage grouse habitat. DEIS at ES-17. It is not feasible to accurately measure gain or loss of sage grouse habitat in order to determine what threshold a "net loss" would represent; often, the birds respond to disturbances nearby by abandoning habitats, rendering the effectiveness of otherwise suitable habitats null and void. BLM should instead manage for "no net loss" of sage grouse populations, which is an independently measurable index of habitat effectiveness. This avoids the fallacy of the effectiveness of compensating for an oil and gas field, for example, that results in 3% surface disturbance over 10,000 acres (thus, 300 acres directly disturbed) by requiring 1,200 acres of habitat restoration if a four-times multiplier were selected, by way of example. In this example, the oil and gas field (in the absence of wellpad density standards) may have nullified sage grouse habitat effectiveness on 100% of the project area, plus lands within 2 miles of the project boundary, if facilities and roads are constructed right up to the boundary; in this case, the habitat effectiveness loss would be substantially greater than 10,000 acres. If, on the other hand, the BLM were to measure the population trend of sage grouse in the affected area versus an undeveloped control area, and found that project-related impacts reduced grouse populations by 114 birds, then the appropriate level of "no net loss" could be set at sufficient habitat restoration to increase sage grouse populations by 114 birds (again, as measured against

population trends in a control area where restoration activities are not taking place). Please address this recommendation directly in your response to comments

SECTION 8 - ACECS

SECTION 8.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0065-2

Comment Excerpt Text:

A large portion of the RNA land that lies in the Lakeview District is near the Hart Wildlife Refuge. The BLM eliminated cattle grazing in the Hart Refuge 30 years ago. Since then, we have not seen an increase in the sage grouse population on the Hart Refuge. There is no rational reason, no scientifically defensible position, in expanding this failed natural resource experiment to more land near the Hart Refuge. This action will devastate the Adel and Plush ranchers, as well as the tax base they provide for the Lakeview community as a whole. To what end?

Comment Number: OR-GRSG-0068-6

Comment Excerpt Text:

Fencing of ACECs where grazing has been prohibited poses a problem. The amendment does not specify how BLM will separate ACEC from the rest of allotment. The change in management of an ACEC could also disrupt carefully balanced grazing rotation systems and have unintended consequences for other species and resource values. The RMPA does not note or consider these effects.

Comment Number: OR-GRSG-0093-53

Comment Excerpt Text:

The BLM represents that the 22 priority RNAs are intended to be undisturbed and managed for inimum human disturbance, however, in Appendix I and Table 2-6, the RNAs are described as having fuels treatments, page I-7, and as being areas where the BLM will treat noxious and invasive species using manual and herbicide methods, page 2-107 (Table 2-6). In addition, BLM staff will continue to have access on OHVs for administrative and other permitted uses, page I-7. In other words, it really is not accurate to describe the RNAs as areas without human disturbance, and the question of "minimum" human disturbance is open to interpretation.

The BLM also represents that the purpose for the 22 priority RNAs is to serve as reference undisturbed areas. The federal government already has significant areas that are closed to human activities, including grazing, near and adjacent to a number of proposed RNAs. The BLM has not explained why additional "no touch" areas are needed within the same area and plant communities

Comment Number: OR-GRSG-0093-54

Comment Excerpt Text:

BLM is improperly seeking to add an ACEC purpose to existing ACECs without engaging in the proper analysis. With regards to the priority ACECs (including 42 RNAs), the BLM has explained that the RMPA's intent is to add a purpose to "manage for GRSG" and for GRSG habitat. Table 2-6, Page 2-105, Page I-1.

The ACEC designations proposed in Appendix I are more properly characterized as reconsideration of existing ACEC purposes. However, the RMPA/DEIS does not evaluate whether the added ACEC purposes are fully compatible with existing uses and management prescriptions, though the management goal is described as "maintaining or improvement the all [sic] values for which the ACECs/RNAs were designated." Page I-1. A number of the ACECs proposed for reconsidered purposes have existing purposes that are directly or likely opposed to the GRSG purpose proposed in the DEIS. For example, eleven of the ACECs appear to be directly incompatible with sage-grouse management, being for purposes such as wild horses, grand fir forests, and old growth juniper. This information was obtained from existing planning documents and was therefore readily available for evaluation by the BLM.

In other instances, the ACEC areas already have compatible GRSG and livestock activities. The DEIS does not evaluate or explain why special management

actions are needed in light of this fact for those ACECs.

Comment Number: OR-GRSG-0093-55

Comment Excerpt Text:

The proposal then provides the names of the proposed ACECs for Alternative F, largely finding that the proposed ACECs "contain suitable habitat at higher elevation." Appendix J, Pages J-5 to J-7. The proposal does not set forth special management prescriptions for the proposed ACECs, and it is unclear whether the management prescriptions from Appendix I would apply.

The BLM's designation of the proposed ACECs is insufficient. In its analysis of the relevance and importance criteria, the BLM fails to provide any scientific support for its conclusions that these areas are uniquely necessary for GRSG. Further, the BLM fails to analyze whether these areas required special management attention to prevent "irreparable damage" to GRSG habitat. To do this, BLM would need to demonstrate that these areas required special management attention that is unique to the area, and include terms and conditions specifically to protect the relevant and important values for GRSG habitat—a task which is likely impossible with regards to grazing because it can occur without impacts to GRSG habitat. Id. To the extent that the BLM proposes to eliminate grazing from the proposed ACECs, it also must include an evaluation whether measures can be taken to protect the potential ACEC values without restricting other resource uses, and how existing rights will affect management of the resources. H-1613.22(A). It has not done so, or at least it has not articulated how it did so as to give the public the opportunity to understand, review and evaluate, and comment on the DEIS

Comment Number: OR-GRSG-0093-56

Comment Excerpt Text:

To the extent that the proposed ACECs only "contain[] suitable habitat at higher elevation," the BLM must explain why it is necessary to designate the entire area as an ACEC when only a portion of it may provide the requisite habitat values.

Comment Number: OR-GRSG-0093-58

Comment Excerpt Text:

the DEIS fails to give the notice required to designate the priority ACECs and the priority RNAs. In addition to the above deficiencies in describing the proposed, redesignated ACECs and RNAs, the BLM did not publish a notice in the Federal Register listing each ACEC proposed and specifying the resource use limitations that would occur if the ACEC were formally designated (or redesignated). 43 CFR § 1610.7-2(b). The BLM cannot designate or redesignate the priority ACECs or RNAs without publishing the required Federal Register notice.

Comment Number: OR-GRSG-0093-92

Comment Excerpt Text:

Page 2-49 and 2-50 Objective D-SD 1: This section does not state a goal so it is unclear what the objective is intended to accomplish. Further, as explained in Section XII, the DEIS/RMPA has not provided a clear factual or legal rationale for removing grazing in the "priority" RNAs.

Comment Number: OR-GRSG-0164-4

Comment Excerpt Text:

Areas of Critical Environmental Concern

We do not believe the Draft RMPA/EIS sufficiently presents the BLM's reasons for preferring the designation of priority and general habitat, and identification of focal areas over the establishment of ACECs. To address this concern, we recommend that the Final RMPA/EIS include additional information describing why the BLM decided not to include ACECs in the preferred alternative.

Comment Number: OR-GRSG-0276-36

Comment Excerpt Text:

Text: Pg. 205, Table 2-6, Alternative D; Special Designations – Areas of Critical Environmental Concern

The Draft RMP/EIS states "In addition to the resource values for which they were originally designated, identify and manage for GRSG all existing ACECs and RNAs occurring in over 20% PPMA acres and/or 50% PGMA of GRSG habitat."

Comment: The document should provide support for the selection of 20% and 50% thresholds. Also, a blanket conversion of ACECs to include GRSG is inappropriate. At a minimum, the BLM should evaluate habitat within each ACEC and determine if it is occupied, suitable, or potential GRSG habitat; the level of anthropogenic disturbance already present in the ACEC; and the portion of the ACEC that could be managed to support GRSG. Just because an ACEC that was designated to protect a portion of the Oregon Trail includes 20% of PPMA does not mean it supports GRSG or even has the potential to support GRSG.

The blanket prohibition on new ROWs in ACECs and RNAs could have a significant economic impact on Oregon. Rather than have a blanket prohibition, the BLM should consider an exclusion process similar to that developed by the State of Idaho. (State of Idaho Governor's Alternative 2012)

Comment Number: OR-GRSG-0281 (FrmLtr11)-13

Comment Excerpt Text:

Vol 1, page 2-49 and 2-50 Manage Research Natural Areas, a special type of ACEC, as undisturbed vegetative reference areas for the plant community cells they represent that are important for GRSG.

Change to state: Manage Research Natural Areas, a special type of ACEC, as vegetative reference areas for the plant community cells they represent that are important for GRSG. RNAs may be good reference areas and may have been designated to protect unique characteristics at a site-specific location. Undisturbed RNAs goes too far. Some are grazed to maintain the status of the plant community and as long as the AMP and annual grazing instructions are provided for these areas, they should continue to be used if the annual instructions are followed. It is BLMs mission to manage vegetation with multiple uses and the agency is not tasked with preventing disturbance, because that is an impossible task. The differences between "disturbance" and "impacts" should be clarified and explained in a way to separate the two concepts

Comment Number: OR-GRSG-0357 (FrmLtr08)-3

Comment Excerpt Text:

Fencing of ACECs where grazing has been prohibited poses a problem. The amendment does not specify how BLM will separate ACEC from the rest of allotment. The change in management of an ACEC could also disrupt carefully balanced grazing rotation systems and have unintended consequences for other species and resource values. The RMPA does not note or consider these effects.

Comment Number: OR-GRSG-0433-24

Comment Excerpt Text:

New ACECs: Alternative F

The DEIS should include designation of new ACECs in the proposed plan. The preferred alternative recognizes the value of a "network" of Areas of Critical Environmental Concern (ACECs) "to serve as conservation areas to manage sage grouse and sage brush habitat within Eastern Oregon," but inappropriately limits this network to existing ACECs. ACEC designation, with appropriate prescriptions, can prioritize conservation management in targeted areas and clarify where other land uses will be permitted. We support the application of BLM's relevance and importance criteria to the ACEC nominations in Alternatives C and F. Based on those analyses, BLM should designate new ACECs proposed under Alternative F as part of the proposed action. The ACECs identified under Alternative F encompass a significant amount of PPMA, PGMA and connectivity sage-grouse habitat throughout southeastern Oregon and BLM has found they meet the relevance and importance criteria. Many of these ACECs would overlap some of the state's most well attended sage-grouse leks and high-quality sage-grouse habitat. Designation of these ACECs is an opportunity to make targeted investments in sage-grouse habitat protection and to demonstrate to USFWS the type of regulatory certainty needed to help prevent a listing.

New ACECs: Climate Change Consideration Areas

The plan's identification of climate change consideration areas is an important strategy for the long-term viability of sage grouse. As defined in the plan, climate change consideration areas are generally high elevation areas (typically above 5,000 feet) with limited habitat disturbance. [emphasis added] The BLM has identified these areas as likely to provide the best habitat for the GRSG over the long term, according to recent climate change modeling. DEIS at 2-21. CCCAs contain 738,075 acres of PPMA and 1,484,514 acres of PGMA and additional 249,019 acres. Under the preferred alternative, the Climate Change Consideration Areas are identified as focal areas, which "represent the best options for restoration activities related to projects or potential locations for off-site mitigation. The boundaries of these focal areas will change over time as habitat shifts and GRSG populations move across the landscape. These boundaries will be updated as new information becomes available. DEIS at 2-19. Focal areas are NOT land use allocations, but rather areas for which priorities for only certain types of BLM administrative actions are established and do not restrict or prohibit activities." And the management direction for CCCAs, and particularly the PPMA and PGMA within them, are relatively limited, applying mostly to PPMA.

As noted in the plan, special designations, such as ACECs and WSAs, would protect GRSG habitats. This is because they include special management prescriptions, often restrictions on resource uses, to protect areas from habitat fragmentation, loss, and human disturbance.. These prescriptions would be more likely to protect intact GRSG habitats or populations. DEIS at 5-22 9 (emphasis added) In addition, the plan lists identification and designation of ACECs as the only Applicable BLM RMP Programs to address the threat of climate change to GSG habitat. DEIS at Table 2-1.

Given that Climate Change Consideration Areas are areas "with limited habitat disturbance," and they are areas "likely to provide the best habitat for the GRSG over the long term," the most important consideration is prevention of degradation. To prevent degradation, from wildfire, invasive species, loss of cryptobiotic crusts and human-caused fragmentation and habitat loss is to designate these areas as ACECs and provide more robust management prescriptions, including:

Management Prescriptions for Existing and Potential ACECs

For potential ACECs (those that BLM has identified as meeting relevance and importance), management prescriptions are to be "fully developed" in the RMP. Manual 1613, Section .22 (Develop Management Prescriptions for Potential ACECs). BLM must go beyond the identification of values for potential ACECs in Appendix J and exceedingly slow timeline for the development of ACEC management plans within the 5 years described in Chapter 2 and fully develop management prescriptions for potential ACECs. The Management Actions for ACECs found under Alternative D (more completely described in Appendix I) are a good starting point, but should be strengthened as described below and that same level of specificity is lacking for Alternatives C and F. This lack of detail and incomplete description of management actions in Alternatives C and F makes a true comparison of alternatives impossible. BLM must identify specific management goals, standards and objectives for each proposed ACEC under every alternative (BLM 2005A).

The DEIS fails to adhere to BLM policy for ACEC designation and management by failing to provide the required level of detailed prescriptions. This lack of specificity renders a comparison of the alternatives difficult and limits the analysis of impacts. Alternative D fails to specify which of the ACECs and RNAs are the "identified" areas to which certain management actions would apply.

Compounding this confusion is the fact that not all management actions identified in Appendix I are applicable to all ACECs/RNAs. To improve clarity of the DEIS, management prescriptions need to be tied

to each ACEC and specific prescriptions must be developed for all potential new ACECs. The management direction developed for each ACEC should be specific enough to minimize the need for subsequent ACEC management planning (BLM 1988).

Given BLM's finding of relevance and importance of these potential ACECs, BLM should develop management prescriptions for each of these potential ACECs as required in the BLM Land Use Planning Handbook (BLM 2005A) and the BLM ACEC Handbook (BLM 1988). BLM must develop specific management direction for each ACEC and in doing so should modify the proposed actions under Alternative D (including Appendix I) and Alternative F to add additional management prescriptions.

Comment Number: OR-GRSG-0434-5

Comment Excerpt Text:

As discussed above, the sage-grouse habitat requirement for large protected areas means that such areas are critical components of meaningful, durable sage-grouse conservation in Oregon. ACECs are one mechanism that can be used to achieve such conservation. The EIS recognizes this need by proposing new sage-grouse conservation ACECs under Alternatives C and F and by prioritizing sagegrouse habitat management in existing ACECs under Alternative D. Nevertheless, the range of alternatives for ACEC designation and management is arbitrary and fails to propose specific ACEC management to benefit sage-grouse under any alternative. Further, the preferred alternative fails to include any new ACECs that would be managed to benefit sage-grouse.

Comment Number: OR-GRSG-0517-6

Comment Excerpt Text:

D-LG/RM 1: the preferred alternative proposes closing RNAs to "serve as a baseline for understanding the impacts of grazing and not grazing sage-grouse habitat" (p.2-79). There is no need to eliminate grazing in RNA to accomplish this goal, as current wilderness and areas of livestock exclusion already exist. Current scientific documentation does not warrant additional livestock free study areas

Comment Number: OR-GRSG-0517-8

Comment Excerpt Text:

Also, fencing of ACECs where grazing has been prohibited poses a problem. The amendment does not specify how BLM will separate ACEC from the rest of allotment. The change in management of an ACEC could also disrupt carefully balanced grazing rotation systems and have unintended consequences for other species and resource values. The RMPA does not note or consider these effects

Comment Number: OR-GRSG-0532-130

Comment Excerpt Text:

Although not clearly stated it appears the purpose for removal of grazing (other text states "all human influence") in GRSG ACEC/RNA's is to provide a control area for comparison of habitat assessment data, and that the EIS team assumed that all of the ACEC/RNA's are currently fenced. There are several issues with this topic and request a more critical review of the concept:

- The text states that grazing will be removed from ACEC/RNA's when 20% of the area is in PPH or 50% in PGH, "if monitoring indicates the areas are not meeting vegetation standards". In Appendix I and J the statement is grazing will be removed within 5 years.
- Statements regarding travel management within the ACEC/RNA's also conflict. In the text there are statements that a.) Motorized travel would be restricted to designated roads and trails; b.) Motorized travel would be closed from 1 March through 30 June and restricted to designated roads/trails the rest of the year. In Appendix I the statement is motorized travel within PPHPGH ACEC/RNA's will be closed. This is somewhat problematic because at least for the Lakeview Resource Area, many of the roads going through these ACEC/RNA's are the only access roads available to get to other parts of the Resource Area. Depending on which travel management standards are

applied there is potential for negative impacts to hunter/angler access.

- Most, if not all, of ACEC/RNA's in the Lakeview Resource Area are not fenced. If the intent is to fence these areas, BLM should present how much additional fence will be required in PPH and PGH and the expected impact to GRSG.
- Appear to adding restrictions on top of restrictions that have been, or with adoption will be implemented in PPH or PGH. The DEIS is set up to identify standards to ensure maintenance of habitat quality for GRSG and although not clearly stated some form of monitoring protocol to measure compliance. Is an additional level of restrictions in specific locations needed, and if so they need to explain why.

Comment Number: OR-GRSG-0532-38

Comment Excerpt Text:

Pg. 4-42 – the DEIS states, "In addition, no-grazing areas on BLM-administered land could require additional miles of fencing to separate these areas from adjacent grazing lands. Additional fencing would increase the adverse effects of fencing on GRSG." Please clarify why there would be a net increase in fences under Alternative C if grazing were eliminated, since interior pasture fences, gather areas, etc. could be removed as they would no longer be needed. For example, Hart Mountain NAR has fewer total miles of fencing now than when grazing was allowed.

Comment Number: OR-GRSG-0567-15

Comment Excerpt Text:

In BLM's Manual Supplement 1623 (October 1, 1987) Supplemental Program Guidance for Land Resources, section .37.C.1. notes that livestock grazing should be managed within RNAs to promote maintenance of key characteristics for which the area is recognized. We recommend using this guidance to further clarify the rationale for closing RNAs, closing and then re-opening RNAs, or allowing some level of grazing to continue.

SECTION 8.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0003-5

Comment Excerpt Text:

It should also be noted that, contrary to the RMPA, a significant percentage of these RNAs are not classified as GRSG habitat according to the Lakeview District's application of the HAF inventory standards in recent NEPA documents.2 For example, while Table 1-2, p. 1-5 of the RMPA states that the Rahilly-Gravelly RNA is 99% GRSG habitat, the Lakeview District identified fully 56% of this RNA as being either unsuitable for GRSG or providing marginal habitat. The Spanish Lakes RNA fared even worse; although the RMPA states that 97% is in GRSG habitat, Lakeview District BLM determined that fully 76% of the Burro Springs allotment (which is nearly concurrent with the Spanish Lakes RNA) is unsuitable for nesting, summer, and winter habitat. These disparities between the RMPA's loose estimates and the Lakeview District's on the- ground determinations make it all the more apparent that the rationale for terminating grazing on these RNAs is deeply flawed.

2 Cahill Grazing Permit Renewal. NEPA # DOI-BLM-OR-L050-2013-0030-EA. 2013, p. 110.

Comment Number: OR-GRSG-0081-1

Comment Excerpt Text:

that the experience on Hart Mountain National Antelope Refuge should be heavily considered and relied upon. The refuge is located near a proposed RNA of a comparable elevation and topography. Livestock grazing has not existed on Hart Mountain since 1995 yet sage-grouse numbers have fluctuated similarly as they have elsewhere in Oregon.1 These fluctuations included a population decline that occurred at the same rate from 2007-2009 as other high elevation populations in Oregon over that time period. I understand experience has been similar on the Sheldon Wildlife Refuge.

1 Hagen C., Greater Sage Grouse Conservation Assessment & Strategy for Oregon, 43 (2011).

Comment Number: OR-GRSG-0082-1
Comment Excerpt Text:
Appendix 1, Table 1-2 shows 97% of this RNA as being in PPH, this is inaccurate. This area was designated RNA, due to its being "An example of a salt brush desert." According to the Lakeview District BLM Office approximately 80% of the RNA is of these plant communities and not beneficial to GRSG.

We would therefore request any proposal to terminate grazing from this RNA, be removed from the RMPA and not appear in the record of decision.

Comment Number: OR-GRSG-0083-5
Comment Excerpt Text:
assigning the Burro Springs/Spanish Lake allotment to RNA is an inaccurate assessment. The majority of the native vegetation is greasewood and salt brush, with minimum sagebrush density that is conducive to proper sage grouse habitat.

It should also be noted that contrary to the RMPA, a significant percentage of the RNA's proposed for closure to livestock are not classified GRSG habitat according to the Lakeview District's application of the HAF inventory standards in recent NEPA documents. For example, while Table I-2, p I-5 of the RMPA states that Rahilly-Gravelly RNA is 99% GRSG habitat, the Lakeview District defined fully 56% of this RNA as being either unsuitable for sage grouse, or providing marginal habitat.

The Spanish Lake-Burro Springs fared even worse, although the RMPA states that 97% is in GRSG habitat, Lakeview District BLM determined that fully 75% of the Burro Springs allotment (which is concurrent with the Spanish Lake RNA) is unsuitable for nesting, summer and winter habitat. These disparities between the RMPA's loose estimates and the Lakeview District's on-the-ground determinations make it all the more apparent that the rationale for terminating grazing on these RNAs unsound and lacking true merit.

SECTION 10 - CLIMATE CHANGE

SECTION 10.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0007-14
Comment Excerpt Text:
Climate Change

I understand that climate change must be addressed in the EIS, but BLM goes too far in using a model that BLM admits on page 3—146, under the heading Uncertainty, has the inability to project climate change to a scale relevant for land management decisions. This hasn't appeared to slow BLM down. Based on the model, BLM has decided that global warming will occur and within the next 30 years, the birds will move into the mountains. On page 3-145, in the third paragraph, BLM discusses "chilling requirements" for plants, and attempts to make the case that grouse food sources will only grow at high elevations. However, as usual, BLM really doesn't havs any science to base this on. "Whether any species important for sagegrouse food and cover has a chilling requirement is not known".

Even though BLM admits they know nothing about whether the chilling effect will occur, and whether temperatures will. get warmer, and whether sage grouse will begin to move up to higher elevation sites, based on this alleged "science", BLM has included important mining areas such as Mormon Basin in PPMA. On page 5, the EISA states, "Based on current climate models, over the long term (i. e. 30 years), changing climate conditions are expected to generally limit the area in which GRSG habitat could survive to above 5,000 feet in Eastern Oregon".

The wildlife biologist who did the surveys for the Mormon Basin Mining Operation (Vision Air Research, INC), a biologist who was approved by BLM in 2010, reported no sage grouse use of this high elevation site; no leks, no nesting, no winter foraging. She did not use a model, she actually conducted her survey on the ground. The Baker Resource RMP will be revised within 10~20 years,

and at that time, if grouse are moving into high elevation sites, areas like Mormon Basin can de designated PPMA. Until then, the EISA needs to change the area of PPMA by deleting Mormon Basin and other high elevation lands.

Comment Number: OR-GRSG-0026-15

Comment Excerpt Text:

In the case of the GRSG PLAN, even though on page 3-146, under the heading Uncertainty, there is a discussion about the inability to project climate change to a scale relevant for land management decisions, the authors have decided that global warming will occur. This whole section is full of inconsistencies. On page 3-144, the EIS has an extensive discussion about how temperatures are rising, and precipitation is increasing. Then on page 3-145, in the third paragraph, another writer states that the area is drier.

Comment Number: OR-GRSG-0093-67

Comment Excerpt Text:

Page 3-143 states: "These include increased potential for further expansion of invasive plant species and conifers into sage-grouse habitat; changes in fire frequency, size, and severity; and potential for expansion of West Nile Virus into areas that are currently too cold for the vector." The statement related to the expansion of invasive species is speculation and not factual. There is no body of research to support the concept or statement. It should be identified as being speculative and non-scientific or should be deleted.

Comment Number: OR-GRSG-0153-5

Comment Excerpt Text:

On page 2-15, the EISA states, "Based on current climate models, over the long term (i.e. 30 years), changing climate conditions are expected to generally limit the area in which GRSG habitat could survive to above 5,000 feet in Eastern Oregon". This prediction is based on a model never meant to direct land management decisions. Because of this, areas such as Monnon Basin will be subject to all the restrictions in PPMA, even though there are no sage grouse. The wildlife biologist who did the surveys for the Monnon Basin Mining Operation (Vision Air Research, INC), a biologist who was approved by BLM in 2010, reported no sage grouse use of this high elevation site; no leks, no nesting, no winter foraging. She did not use a model, she actually conducted her survey on the ground. The Baker Resource RMP will be revised within 10-20 years, and at that time, if grouse are moving into high elevation sites, areas like Monnon Basin can be designated PPMA. Until then, the EISA needs to change the area of PPMA by deleting Mormon Basin and other high elevation lands

Comment Number: OR-GRSG-0281 (FrmLtr11)-54

Comment Excerpt Text:

Comment: Vol 1, page 3-143: These include increased potential for further expansion of invasive plant species and conifers into sage-grouse habitat; changes in fire frequency, size, and severity; and potential for expansion of West Nile Virus into areas that are currently too cold for the vector.

Solution: We understand the BLM has been directed to address climate change, but the statements related to invasive species are speculation and not factual. There is no body of research to support the concept or statement. It should be identified as being speculative or it should be deleted.

Comment Number: OR-GRSG-0547-7

Comment Excerpt Text:

The discussion of climate change in the DEIS is confusing. On. Page 2-15 and elsewhere, the following statement is presented:

"Furthermore, the current RMPs do not address climate change. Based on current climate models, over the long term, changing conditions are expected to generally limit the area in which GRSG habitat could survive to above 5,000 feet in eastern Oregon.

The "current climate models" are not identified, so the conclusion is unsupported, and should not be relevant. However, if the climate change conclusion is assumed to be correct then the entire EIS process is flawed and pointless. If the only suitable Sage-Grouse habitat will exist above 5,000 feet elevation, all PPH

and PGH habitat should be filtered to exclude all areas lower than 5,000 feet elevation. Or, the management process should include some provision to modify or rescind the proposed draconian restrictions as Sage-Grouse habitat is lost naturally over time through climate change. But since predictive climate change is a political concept and not scientifically supported, the entire reference to "climate change should be deleted from the DEIS.

SECTION 10.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0433-22
Comment Excerpt Text:
CLIMATE CHANGE

Climate change will lead to increased drought and fire and will result in impacts to sage-grouse habitat. BLM must make changes to management that will benefit sage-grouse and the sagebrush landscape to limit negative effects and changes to vegetation, habitat, wildfire and land uses in the planning area.

In 2007, the United States Government Accountability Office ("GAO") reported that federal land and water resources are vulnerable to climate change, and land management agencies have neglected to plan for the potential future impacts of climate change (USGAO 2007). The GAO highlighted that U.S. public land managers had received limited guidance on how to address climate change and lack specific direction about how to integrate climate change into management actions and planning efforts. Among other things, the GAO report suggests that those who manage and graze livestock on the public lands are not prepared to address the impacts climate change will have—and may already be having—on these lands, nor are they prepared to respond to and take advantage of pending policies and programs that aim to reduce increases in greenhouse gases that underlie climate change (USGAO 2007). It is likely that climate change, as well as the actions that will be taken to limit the change, will increase the cost and reduce the efficiency of grazing on public lands. Moreover, future government responses to climate change will likely require public land managers to become more accountable for the greenhouse gas emissions produced by activities on public lands. As grassland, pasture, and rangelands comprise about 300 million acres, or over 36 percent of all public lands in the United States, they necessarily will become an important focus in the portfolio of potential governmental responses to climate change. Based on the GAO report and the scientific underpinnings of that report and our current knowledge of the potential effects of global climate change, it is clear that climate change will increase drought and fire, and exacerbate the effects of overgrazing on rangelands throughout the western United States. See also DEIS at 3-143 to -146. These changes will have serious implications for rangeland management and for management of the sage-grouse's sagebrush-steppe biome. Scientists predict that climate change will increase average temperatures and decrease precipitation throughout much of the western United States, including in eastern Oregon, where the majority of public land grazing occurs in the United States. See id. These predicted changes in temperature and precipitation will exacerbate natural and human-made disturbances of shrub-steppe ecosystems, including increased intensity and duration of drought, increased intensity and frequency of wildfire, changes in vegetation composition, more rapid spread of invasive plant species, and increased rates of erosion. Id. All of these effects will make grazing more expensive for ranchers, public land managers and the taxpaying public, and will present challenges for resource managers to appropriately manage grazing on public lands (USGAO 2007).

The vast shrub-steppe public rangelands of the interior western United States, including those at issue in the DEIS for Oregon, have the potential to both contribute and sequester greenhouse gases. Ruminant livestock grazing on public rangelands produce methane, a greenhouse gas, through the digestive process. Public rangeland can sequester carbon, both in woody material and in the soil. However, it also can lose carbon to the atmosphere if improperly managed. Because the Department of the Interior manages 187 million acres of rangelands

in the western United States, including about 6.2 million acres of grazed public land within the scope of the Oregon RMP amendments (DEIS at 3-77) this presents an opportunity for the Department to undertake a meaningful evaluations of these effects and to make meaningful changes to management that will benefit sage-grouse and the sagebrush landscape—particularly when and if those changes are made in concert (i.e., cumulatively) with one another throughout the other regional RMP amendments occurring simultaneously with these amendments.

I. Effects of Climate Change on Sagebrush Landscapes.

Climate change has transformed, and will continue to transform, the shrub-steppe rangelands of the western United States. This requires resource managers and ranchers to modify and adapt to increasingly dry and unpredictable conditions. These conditions include longer and more frequent periods of drought, vegetation changes, and, of particular concern to the Department of the Interior, increasingly intense wildfire regimes. In areas where grazing occurs, these changes will interact with livestock management practices, exacerbating common problems associated with overgrazing and deeply stressing the basic rules that have guided management decisions for decades.

Climate change is driven by increasing emissions of greenhouse gases, including carbon dioxide (CO2) and methane (CH4). Scientists predict that these emissions will cause widespread changes in earth's climate, affecting average global temperatures and precipitation patterns. Leading climate change models predict that carbon dioxide and other gases will affect precipitation across North America. The amount of water available for the region's ecosystems and human populations would be reduced even more, insofar as emissions of greenhouse gases also would contribute to predicted rises in temperatures, so that the precipitation that does occur would evaporate more quickly. These general changes in temperature and precipitation will manifest in more specific changes to rangeland ecosystems throughout the West including Oregon. While it is still impossible to predict with certainty the specific changes in a particular place, several general trends will affect—and indeed already are affecting—western rangelands.

Climate change will change the composition of rangeland vegetation.

Rangeland in the western United States is characterized not by one single ecosystem classification, but a gradient of ecosystems, from the grasslands of the Great Plains to the water-limited grassland and deserts of the interior West, to the forest-grass ecosystems of the mountains (Sobecki et al. 2001). As greenhouse-gas levels in the atmosphere increase, temperatures rise, and precipitation patterns change, these ecosystems will begin to change as well. Scientists suggest that increasing atmospheric levels of greenhouse gases will increase aboveground biomass production in rangeland ecosystems, leading to an increase in food supplies for foraging livestock and a boon to ranchers. Indeed, some research has concluded that, with a doubling of CO2, primary production in desert ecosystems could increase by 50 percent which exceeds the predictions for any other ecosystem on earth. Other research has shown, however, that this increase in productivity would occur only in areas where there is sufficient water; experiments demonstrate that, under drought conditions, CO2 has little effect on plant productivity, but in wet years, productivity increases, in some cases exceeding the predicted 50 percent increase (Smith et al. 2000). Not all plants respond equally to increases in CO2. In some areas, elevated CO2 is predicted to transform rangelands into annual grasslands dominated by non-native invasive weeds that have little forage value. Empirical research in the Mojave Desert, for example, found that elevated CO2 levels increased the growth rate and seed production of invasive grasses, such as red brome and cheatgrass, while little increase in productivity was observed in native shrubs and grasses (Smith et al. 2000). In other parts of the West, researchers have found that elevated CO2 may force the conversion of native grasslands to shrublands, again diminishing the supply of forage for livestock. For example, one

recent study has demonstrated that on the Colorado shortgrass steppe, as carbon dioxide levels in the atmosphere rise, the composition of grassland vegetation becomes more woody and less grassy (Morgan et al. 2007). This trend lends support to field observations over the last two decades in which researchers have documented an incursion of woody plants, such as sage and mesquite, into grasslands around the world.

Whether climate change causes native shrubland to succumb to invasive grassland, or native grassland to woody shrubland, these changes will pose increasing challenges for rangeland managers and ranchers as CO2 levels continue to rise over the next decades.

Climate change will increase the frequency and intensity of wildfires.

Climate change is expected to accelerate—perhaps greatly accelerate—the wildfire cycle in rangelands across the arid West including Oregon. While wildfire has always been a natural part of most western ecosystems, changes in vegetation composition, rising temperatures, declining humidity, and earlier spring snowmelt are making many regions more susceptible to frequent and intense wildfires. In years with higher precipitation, elevated CO2 levels spur greater vegetation productivity, producing a higher density of plants with more biomass per acre. When these plants dry out during an arid summer, conditions are ripe for catastrophic wildfire events. Unprecedented fires like the massive 2012 wildfires in eastern Oregon are expected to become more common.

Recent studies have confirmed that global warming is partly responsible for an increase in numbers of large wildfires across the western United States since the late 1980s with longer wildfire seasons and an increased number and more potent wildfires (Westerling et al. 2006). The length of the active wildfire season (when fires are actually burning) in the western United States has increased by 78 days, and the average burn duration of large fires has increased from 7.5 to 37.1 days. Factors resulting from global warming such as earlier snowmelt, higher summer temp, and longer fire season increase fire intensity. Drought triggered insect infestation, and increased mortality of trees also contribute to increased fire intensity in the southern California forests and adjacent communities. There is evidence that temperature increases contributed to increased tree mortality in the Southwest in 2002–2003 from drought and herbivores like bark beetles (Breshears et al. 2005). Model projections predict rising temperatures will further increase the number of days of high fire danger in the western United States (Brown et al. 2002) and the frequency of and number of acres burned in global wildfires (Price and Rind 1994).

The increased risk of wildfire brought about by changes in climate is compounded by the incursion of more non-native invasive weeds in rangelands throughout the West. This incursion is facilitated when elevated levels of CO2 stimulate plant productivity more in invasive grasses than in native grasses. Researchers have found that Bromus species, including cheatgrass, showed higher plant density, biomass, and seed production at elevated levels of CO2 (Smith et al. 2000). As these plants spread, they change the fire regime of rangeland, fueling the rapid spread of wildfire earlier in the season and at more frequent intervals. Moreover, these plants can respond more competitively after fire than other native grasses, proliferating during fire recovery before native grasses can gain a foothold.

In addition to disrupting ecosystems, destroying valuable forage, and threatening wildlife, livestock, and human life, more frequent and intense wildfire has a positive feedback relationship with climate change. Wildfires release CO2 stored in above-ground vegetation, root stocks, and in the soil, releasing greenhouse gases to the atmosphere. Any management strategy that attempts to sequester carbon in rangelands must also recognize that such gains can quickly be wiped out by wildfire, especially as climate change conditions increase the risk of wildfire occurrence.

Climate change will exacerbate the effects of overgrazing.

As temperature increases and precipitation declines, the livestock-carrying capacity of western rangelands will decline. If resource managers and ranchers do not respond to these changes, overgrazing is likely to accelerate. Overgrazing is characterized by soil disturbance and a loss of vegetative cover, which results in accelerated soil erosion by both wind and water. With climate change, rangelands are likely to become overgrazed more rapidly, and at lower stocking rates, and will recover from grazing pressures more slowly.

Research on grazing in Utah's arid lands has found the land's responses to grazing are closely linked to climate. Periods of drought may cause rapid changes in vegetation composition and productivity, and greater sensitivity to grazing pressures (Neff et al. 2005). Arid lands are much more susceptible to erosion from grazing when vegetation is limited and soils are instead held together with biological soil crusts. Researchers found that these crusts are easily disturbed by grazing, and may take decades to recover. Once they are disturbed, there is little to prevent greater wind erosion of soils and soil organic carbon.

Overgrazing is also linked to the spread of invasive weeds, such as cheatgrass (USFWS 2010). See also 75 Fed. Reg. at 13939–41, 13942. As soils are disturbed, invasive weeds gain a foothold more quickly than native grasses are able to regenerate (Gelbard and Belnap 2003). As reported above, conditions under climate change are more amenable to these non-native invasive weeds, suggesting that they will spread even more rapidly into disturbed areas in the future.

Grazing on soils made more arid by climate change can further exacerbate the effects of climate change on water supplies. Researchers have found that dust originating in the disturbed deserts of the Colorado Plateau appear to accelerate Rocky Mountain snowmelt in the spring, shortening snow cover duration by 18 to 35 days (Painter et al. 2007). The researchers point to expansion and intensification of grazing, along with recreational use and agriculture, as being the primary sources of the dust emissions. Mountain snowpack is a critical resource, providing the majority of the fresh water to the populations of the arid West. Changes in snowpack impact the quantity and timing of water availability, consequently impacting the operation of reservoirs, power generation, agricultural production, and fire regimes. These impacts will magnify if, as predicted, drought conditions intensify in the intermountain West including Oregon with climate change, and grazing continues on upwind arid soils.

Climate change will have major implications for resource managers and ranchers.

As climate change progresses, resource managers and ranchers will face increasing challenges to grazing on public rangelands. Both public management costs and private production costs are likely to increase, stretching federal budgets and threatening the economic viability of livestock production on public lands. If resource managers do not respond to the changing ecological conditions, adapting stocking rates and recovery plans to appropriate levels given increasing natural pressures, public lands are likely to suffer ecological and economic harm. Where drought conditions increase, public lands will become more fragile and easily disrupted, and will take longer to recover from grazing pressures. These changes will adversely affect species that rely on public lands, including the Greater sage-grouse, which will itself be facing increasing struggles from climate change.

II. Effects of Livestock Grazing on Climate Change.

Livestock produce greenhouse gases which contribute to global climate change. Improvements in rangeland health, including by the removal of livestock from the public lands, can sequester excess carbon from the atmosphere and thereby contribute to the Department of the Interior's obligation to consider and reduce the impacts of activities authorized on the public lands, on global climate change.

Livestock produce methane, a greenhouse gas, through digestion.

During digestion, ruminant livestock, including cattle and sheep, produce methane, a greenhouse gas whose impact on climate is more than 20 times more powerful than the impact of carbon dioxide. While all animals produce some methane as a byproduct of the digestive process, ruminant animals produce it in higher quantities through a process called enteric fermentation, during which microbes in a ruminant's first stomach break down the feed consumed by the animal. This fermentation process allows the animal to consume tough plant matter that other animals cannot digest, but it also creates a copious amount of methane gas, which is expelled from the animal via exhalation and belching. Livestock methane emissions from enteric fermentation released 31.3 million metric tons of carbon equivalent in 2001. This represents 19% of U.S. total methane emissions (Lewandrowski et al. 2004). If limits on greenhouse gas are established, resource managers will find themselves under pressure to avoid new methane emissions from grazing activities on public lands, and to reduce current emissions.15 The first challenge for resource managers under new emissions limits may simply be measuring and reporting the amount of methane actually emitted by livestock grazed on public rangelands. While researchers have been measuring methane emissions from livestock in laboratory conditions for many years, measuring the emissions from free-range livestock is more challenging. Some researchers suggest that emissions measurements made in the laboratory may not accurately predict actual emissions in the field (Lassey 2007). Actual emissions per animal in rangeland conditions can vary widely depending on the animal's overall health, activity level, and the quality of forage it consumes—details which are difficult to track in open range situations. The Intergovernmental Panel on 15 Current greenhouse gas control measures in place throughout the world, including the Kyoto Protocol, do not address emissions from livestock production activities. However, it is possible that, given new evidence regarding their overall impact on and contribution to global warming, emissions from livestock production would be addressed in future greenhouse gas control policies (Steinfeld et al. 2007).

Climate Change (IPCC) suggests a method to calculate the emissions from livestock when direct measurement is impossible, for the purpose of determining national greenhouse gas emissions inventories (IPCC 2000). While not exact, this calculation approximates emissions from enteric fermentation using a series of equations, which require specific data inputs, such as the number of livestock and their life stage (e.g., breeding cow, calf, yearling, etc.), activity level, and the energy density of available forage. To this end, BLM should establish new reporting requirements for ranchers to enable the best possible estimates of methane emissions, and emissions reductions, from livestock grazed on public lands.

New greenhouse gas limits may require resource managers to make decisions that reduce overall livestock production on public lands. This is because the surest way for a land management agency to reduce enteric fermentation emissions from the lands it controls is to reduce the number of animals emitting methane. Reducing stocking rates and retiring grazing leases is the most certain method available to resource managers to control methane emission contributions from public lands. Making this possible via a permit relinquishment, cap-and-trade mechanism is a market-based approach to achieve any goal involving greenhouse gas limits.

Ranchers, too, will face pressure to reduce the amount of methane produced by their livestock. In addition to reducing the overall number of animals they produce, one of the main tools ranchers have to reduce methane emissions is to control the diet of their livestock, which can improve animal productivity, reducing the ratio of methane emitted per animal-unit-weight. Researchers have shown that implementing grazing practices that improve the quality of forage increases animal productivity and reduces methane emissions from enteric fermentation (DeRamus et al. 2003). These grazing practices require intensive herd and forage

management, including fencing, frequent movement, and watering, which are more costly than conventional grazing practices—and some of which carry with them adverse effects to sage-grouse, such as collision mortality and predator perches facilitated by fences. Moreover, climate change may make reducing methane emissions from livestock more difficult, as rangelands will likely become more marginal in the future—drier and more concentrated with woody forage and invasive weeds. If improvements are not made to rangelands, climate change-driven changes in rangeland quality may in fact further reduce the productivity of livestock, increasing methane emissions per unit of animal weight over today's levels.

Improvements in rangeland health can sequester excess carbon from the atmosphere.

Should mandatory limits on greenhouse gas emissions be established in the United States, carbon sequestration will become a major strategy for controlling net emissions of carbon into the atmosphere. If a market-based approach, such as cap-and-trade, were to be implemented, changing management practices to sequester carbon in rangelands may become an attractive strategy for resource managers to mitigate climate change, and generate additional revenue from public lands. Scientists and policy makers are looking to terrestrial carbon sequestration—in soils, forests, rangelands, and croplands—as a primary strategy in reducing atmospheric levels of CO2 (Lewandrowski et al. 2004, Unkefer et al. 2001). Soils represent the third largest carbon reserve on earth, after oceanic and geologic reserves. The soils that support grazing in the United States cover approximately 30 percent of the nation (Sobecki et al. 2001). Globally, grazing lands contain 10 to 30 percent of the world's soil organic carbon, although due to poor management and overgrazing over the last century, much of this has been lost. For these reasons, researchers have focused considerable attention on raising rangeland's ability to sequester carbon and mitigate climate change (Follett et al. 2001). Because many grazing land soils are degraded or poorly managed, and also receive low levels of inputs, they have a high potential to sequester Carbon if properly managed and/or inputs are increased (e.g., via reduced or no grazing allowing for retention and absorption of organic material into the soil) (Kimble et al. 2001). The potential for carbon sequestration is not equal across all rangelands. Although data is scarce on the health of federally managed rangelands, a GAO report from the early 1990s found that for those lands under the management authority of BLM, around 60 percent are in fair to poor condition, while only around 30 percent of BLM lands were classified as being in good condition (USGAO 1991). Rangelands that are already in good condition must be kept in good condition if they are to sustain their current stores of carbon.

On rangeland that has been overgrazed or otherwise poorly managed, gains in carbon sequestration can come from eliminating grazing or from implementing management techniques that reduce soil erosion and vegetation degradation and increase the fertility and productivity of rangeland. The specific potential for any particular parcel of poor-quality rangeland to sequester carbon will vary, depending on climate, soil properties, plant community composition, grazing management practices, current soil organic matter content, and other characteristics of the soil (Haferkamp and MacNeil 2004). Overall, researchers estimate that changes in grazing management that enhance soil organic matter and improve rangeland productivity might sequester 0.07 to 1.90 metric tons of CO2 per acre per year, for the next 25 to 50 years, or until grazing lands reach their maximum carbon sequestration potential (USEPA 2005).

Limited information is available to determine the actual area of federal grazing lands on which improved grazing practices could enhance carbon sequestration. Table 1 shows the public land area allocated for grazing in the United States by the Bureau of Land Management, the Forest Service, and states. Assuming that 60 percent of these lands are in fair to poor condition, the third column in the table shows the acres of land that could be available for increased carbon sequestration. The last column in

the table shows the potential metric tons of CO2 that could be sequestered, presuming that each acre of land that is currently in fair to poor condition could sequester 0.07 to 1.90 metric tons of CO2 per acre per year. There is a considerable amount of uncertainty in these numbers, but they provide an idea of the magnitude of carbon sequestration potential available in state and federal grazing lands.

Table 1. Carbon sequestration potential in federal lands used for grazing.

Total Acres

Available for

Grazing

Acres in Fair to Poor

Condition

Carbon

sequestration

potential (million

metric tons/yr)

Bureau of Land

Management

137,702,000 a 82,621,200 5.7 – 157

a (USGAO 2005).

For these reasons, reducing emissions and other impacts of livestock grazing is an incremental, but critically important, step in addressing climate change and in turn its effects on the survival and recovery of the Greater sage-grouse. Recent research recommends removing or reducing livestock grazing across large areas of public lands in order to eliminate this long-term stressor and make the lands less susceptible to the effects of climate change (Beschta et al. 2012). BLM should through these land use plan amendments consider targeted, meaningful reductions in grazing, and concrete, quantifiable, mandatory prescriptions whereby poorly managed grazing is reduced or eliminated.

SECTION 11 - CULTURAL RESOURCES

SECTION 11.2 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0606-5

Comment Excerpt Text:

The BLM must consider the impacts of proposed livestock grazing throughout the planning area on the important cultural and historic resources found on these public lands. Trampling, displacement, desecration, and degradation are all possible impacts of livestock grazing; the RMP/EIS must provide specific tolerance parameters, monitoring, and other requirements to ensure for the protection and preservation of these areas

SECTION 12 - FIRE AND FUELS

Comment Number: OR-GRSG-0074-16

Comment Excerpt Text:

In the Wildfire and Invasive Species in the West: Challenges That Hinder Current and Future Management and Protection of the Sagebrush-steppe Ecosystem A Gap Report by Western Association of Fish and Wildlife Agencies 2013 which was commissioned by the USFWS the following recommendation was made: BLM must develop fire management plans to address threats to sage-grouse habitat including cultural, administrative, logistical, and programmatic barriers and limitations. This report directs BLM to review current internal and external direction to determine barriers to dealing with wildfire threats to sage-grouse habitat which BLM has failed to consider in this RMPA Draft. How does the BLM intend to address these concerns (with specific actions) brought forward in this report? Please provide a specific response to each of the 12 recommendations on how BLM will encompass it in the RMPA analysis or if not why?

Comment Number: OR-GRSG-0078-2

Comment Excerpt Text:

The RMPA/DEIS does not analyze wildfire management in a way that fulfills the PURPOSE AND NEED of the document. The preferred alternative states that the GRSG Wildland Fire and Invasive Species analysis will be completed by December of 2014 (RMPA Vol. I, Table 2-6 pp. 2-76). This analysis must be completed and included within the RMPA/DEIS to provide adequate documentation of regulatory mechanisms to assist the USFWS in their determination, meet the purpose and need of the document, and provide an avenue of public comment on proposed fuel management. The RMPA/DEIS identifies some specific management activities, but does not provide a cohesive plan or analysis in any alternative on how the BLM would lessen the primary threat of wildland fire. References: RMPA Vol. I, D-WFM 32, pp 2-75 & 2-76; Vol III, Appendix H; Vol II chapter 4, Tables 4-3 & 4-4, p. 4-22 and Vol. II p. 5-30 par. 6.

b. The use of Rangeland Fire Protection Districts was not analyzed as an action in the preferred alternative. As this is the only legal means that private landowners can apply fire suppression on public lands it must be analyzed and included in the selected action items. Fire suppression practices by private landowners are a valuable tool in the suppression of wildland fires and an identified need by the Western Association of Wildlife Agencies Gap Report commissioned by the USFWS December 2013.

Comment Number: OR-GRSG-0080-1

Comment Excerpt Text:

Cattle utilizing forage in grazing allotments, be it BLM or Forest Service, was always a tool to help maintain forage at levels that would help suppress wildfire spread. This plan does not elaborate on the use of that tool.

Comment Number: OR-GRSG-0093-102

Comment Excerpt Text:

Wildland Fire Management

Pages 2-71 to 2-79: The BLM should develop an action that seeks to improve coordination with and support of Rangeland Fire Protection Associations. See Section X. The BLM should also provide direction not to close or restrict construction of new roads where doing so would negatively impact the BLM or other firefighters' ability to respond quickly to the threat of fire.

The DEIS/RMPA should also evaluate a wildfire risk assessment based on current vegetation conditions and the potential consequences of fire to GRSG habitat, which will vary strongly according to ecological setting and current plant community condition. This process should result in landscape scale risk reduction and employ fuels management and other techniques appropriate for the ecological sites.

Comment Number: OR-GRSG-0093-49

Comment Excerpt Text:

The DEIS should explain and evaluate the benefits of better coordination and support of Rangeland Fire Protection Associations in order to achieve the Wildland Fire Management Goal. Coordination and support of Rangeland Fire Protection Associations should be stated as an objective on Table 2-4 and it should be included as an action item on Table 2-6. It should also be discussed and analyzed in the Environmental Consequences.

As it stands now, the DEIS fails to account for the benefits of Rangeland Fire Protection Associations and fails to evaluate the impact to GRSG habitat if there is a loss of working ranches that provide the manpower for these Associations.

Working ranches and grazing reduce the risk of catastrophic fires which directly contribute to GRSG conservation. Fire is one of the primary factors linked to population declines of GRSG and the primary cause of recent large-scale losses of sage-grouse habitat. Fighting these fires has become increasingly

problematic due to federal budget constraints and an increasingly burdensome regulatory environment. For decades ranchers have stepped up to help fill this gap and are doing it well.

Comment Number: OR-GRSG-0095-12

Comment Excerpt Text:

In addition, the DEIS notes that Alternative D "lacks clear desired conditions for juniper and crested wheatgrass seedings to guide use of fire and other fuel treatments."143 We urge the BLM to adopt clear desired conditions for juniper and crested wheatgrass as well as other invasive species as part of its region-wide fuel treatment/fire management plan.

143 DEIS, at 4-48.

Comment Number: OR-GRSG-0095-20

Comment Excerpt Text:

At higher and cooler elevations, changes in fire frequency and intensity have come at the expense of sagebrush ecosystems in a different manner. Under pre-European settlement conditions, wildfires and indigenous planned fires kept western junipers confined to areas where fires would not typically reach – mainly rocky terrain where the fuels needed to carry the fire were patchy and disjunct. Once modern settlers arrived in the mid-1860s, with their domestic livestock, this pattern changed. Heavy livestock grazing initially greatly reduced the fine fuels needed to carry fires that kept western juniper in check, and later active human intervention suppressed fires. As a result, western juniper were able to establish seedlings in grass and shrubland areas where formerly fires would have eliminated them. This then was the beginning of the woodland expansion into sage-grouse habitat that continues today.237 238 Prior to 1860 two-thirds of the landscape was treeless and occupied by sagebrush-steppe communities. Today, less than one-third of the landscape remains treeless and more than 90 percent of the trees have established since the 1860s. These data support the need for active management in tree removal. In the absence of disturbance, woodlands will continue to expand, mature, and close.239

237 Miller And Taush 2001.

238 Miller et al. 2008.

239 Ibid.

Management Prescriptions:

i. Management inside of SGCAs in sage-grouse habitat

Restoring sage-grouse habitat that is degraded or fragmented might be useful tool for the benefitting the species. However, these programs are likely to be both difficult and expensive, and may take centuries to achieve a complete restoration of a functioning system of sagebrush habitats within a landscape mosaic.240 The obvious and best way to provide for the species at least in the short to intermediate term is to protect the remaining existing habitat, which is the intent of the Center's proposed conservation reserve system.

240 Miller et al. 2011.

§? Where it will achieve sage-grouse habitat objectives, passive restoration approaches should be favored over active methods.

§? Any vegetation treatment plan must include pretreatment data on wildlife and habitat condition, establish non-grazing exclosures, and include long-term monitoring of treated areas.

§? Ensure that vegetation treatments create landscape patterns which most benefit sage---grouse. Only allow treatments that are demonstrated to benefit sage-grouse and retain sagebrush height and cover consistent with sage-grouse habitat objectives (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve sage---grouse habitat).

§? Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.241 Prioritize restoration in seasonal habitats that are thought to be limiting sage---grouse distribution

and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

§? Restrict activities in SGCAs that facilitate the spread of invasive species, including recreational and commercial use by off-road vehicles.

§? Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.

§? Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage---grouse habitat and conserve habitat quality for the species.

§? Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.

§? In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed "fire condition class", where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types, but are places where trees have been an important stand component for several hundred years.242

§? In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

§? Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.

241 Meinke et al. 2009.

242 Romme, et al. 2011.

ii. Management outside SGCAs in sage-grouse habitat

§? Where it will achieve sage-grouse habitat objectives, passive restoration approaches should be favored over active methods.

§? Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.243 Prioritize restoration in seasonal habitats that are thought to be limiting sage---grouse distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

§? Restrict activities in SGCAs that facilitate the spread of invasive species.

§? Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.

§? Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage---grouse habitat and conserve habitat quality for the species.

§? Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.

§? In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed "fire condition class", where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types,

but are places where trees have been an important stand component for several hundred years.244

§? In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

§? Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.

243 Meinke et al.2009.

244 Romme et al. 2008.

Comment Number: OR-GRSG-0149-1

Comment Excerpt Text:

Wildfire and invasives are the top two threats for sage-grouse in Oregon; if these threats are not analyzed the RMPA does not meet its purpose and need. The RCA addresses these threats by suggesting a process to thoroughly review wildfire risk, associated consequences, and operational barriers and recommends localized decision-making related to fuels management and fire suppression regardless of administrative land designations. Communication with Rangeland Fire Associations is encouraged. RMPA should direct BLM to conduct a wildfire/invasive risk analysis incorporating vegetation models already being used on private lands (Harney County CCAA) to promote consistency of approach.

Comment Number: OR-GRSG-0175-12

Comment Excerpt Text:

On page 2-67, the EIS talks about means to limit spread of invasive weed seeds. This is in a document that considers fire to be a greater threat to habitat and the greatest threat to facilitating the spread of invasive species, but this is what they recommend: Action D-VG 38 under Alternative D: "On Type 111 through 1 wildfires, (NOT DEFINED) provide and require the use of weed washing stations and acceptable disposal of subsequent waste water and material that minimizes the risk of further spread. All vehicles and equipment arriving from outside the local area should be washed before initial use in the fire area and during post-fire emergency stabilization and rehabilitation operations. All vehicles and equipment should be washed prior to release from the incident to reduce the probability of transporting invasive plants to other locations." Consider this scenario: A lightning caused fire in Baker county is currently at 20 acres and several BLM tenders and trucks are available to put it out, but the washing station is in Twin Falls, Idaho and will not be released until day after tomorrow. Then it has to be transported and set up. Meanwhile the 20 acre fire is 200,000 acres, and would require 100 times the crew to put it out, and it has now burned into inaccessible territory. Damage to sage grouse is immense. Damage to grazing and grouse habitat is astronomical. Cost of fighting fire is many millions! And it is still growing. Why not just require that all BLM fire fighting equipment be pressure washed at the end of any fire fighting event when it returns to base, so it is ready to go when the siren goes off?

Comment Number: OR-GRSG-0175-15

Comment Excerpt Text:

This EIS has concluded that fire and the frequently experienced invasive annual grasses that are more prone to fire are the greatest threats to both the Grouse and the habitat. One of the primary means to reduce this habitat and wildlife loss is being done by the ranchers in the vicinity. The rangeland owners and operators have long been the primary initial attack on rangeland fires in Baker County. In the last three years, four Rangeland Protection Associations have been formed. This year, the ranchers east of Baker city are forming the Lookout-Glasgow Butte Rangeland Protection Association. These are non profit associations that do not compensate any of us for protecting our rangelands. Reducing the ability of ranchers in this area to make a living on the land will reduce the effective fire fighting force available. As an example, during anticipated dry lightning events, this association anticipates having five or six members parked on strategic locations within the association, with radios and pickups with slide in tanks already full, and hand tools, ready for action. Normally these dry lightning thunderstorm events start to the south of us and move north. When they get a fire starting south of us, all the BLM forces available mobilize to

that first fire, so when we need help, the forces are already committed. Our association's goal is to nail it quick and to be able to tell BLM that thanks but don't bother, we got it out. It seems that the EIS has made no consideration of the value to the sage grouse of the ranchers who share the territory. Traditionally lightning fires in this area would burn until snow fall. The Rangeland Protection Associations are your first line of defense against your acknowledged primary threat, fire!

Comment Number: OR-GRSG-0230-9

Comment Excerpt Text:

Harney SWCD has identified and recommends the following specific issues on wildfire suppression and invasive species treatment to protect and enhance GRSG habitat. The following specific issues were identified through our outreach, which was limited by stringent time constraints for the review process of this RMPA Draft. Please provide a specific response to each recommendation. How will BLM encompass the recommendation in the RMPA analysis, or if not, why?

i) Determine fuels management and fire suppression priorities to protect sage-grouse habitat without consideration of administrative land designations.

ii) Delegate authority to the Incident Commander for the purpose of the most immediate suppression of wildfire (regardless of administrative land designation) using the best tactics, methods, and tools available, applied in a safe manner.

iii) Further develop working relationships, which would result in more coordination of efforts with Rangeland Protection Associations and other cooperating agencies, with the outcome of more efficient and effective wildfire management.

iv) BLM should share results from wildfire risk assessments and prioritization process with Rangeland Protection Associations and other cooperating agencies.

v) During wildfire activities allow access to utility companies for wildfire suppression within ROWs and removal of vegetation around their structures.

vi) Develop additional planning, coordination and pooling of funding between fire and noxious weed programs.

vii) In the RMPA, analyze wildfire and invasive species/juniper encroachment in a single assessment. This assessment wilt incorporate livestock grazing as a tool for wildfire control and invasive species management on all GRSG and potential GRSG habitat. (Diamond et al.

2009, 2010; Davies et al. 2009).

viii) Treat wildfire, invasives (including noxious weeds) and juniper encroachment cohesively as threats to GRSG habitat.

ix) BLM will provide practical application methods to control invasives and noxious weeds on all GRSG habitats regardless of special designations (i.e. mechanical/aerial in WSA and wilderness).

x) BLM needs to provide methods of funding and treating cheatgrass as a dominant fire prone invasive and address this in the RMPA.

xi) BLM needs to address in the RMPA, with comparison to action alternatives that herbicide use for annual invasives was not available until 2010 and severely restricted for other species. The BLM is currently preparing site-specific NEPA to use these tools. Because of this recent availability, Alt. A does not provide adequate comparisons for past results.

xii) BLM must provide in this RMPA methods to enable the agency to keep up with current technology to treat invasives for GRSG habitat restoration and enhancement. The EPA is releasing more effective herbicides and bio agents yet the agency will not be able to apply new technologies without additional EISs and step down NEPA. How can it provide current technology to habitat improvement/restoration?

Comment Number: OR-GRSG-0231-3

Comment Excerpt Text:

Wildland fire is also listed as a primary threat within Harney County. Currently there are many policy restrictions which inhibit safe, yet aggressive, fire suppression and this RMPA was analyzed with no change in current policy for fire suppression. Current policy and preferred alternative lack a delegation of authority to a wildfire incident Commander in sage grouse habitat for the purpose of the most immediate suppression of wildfire to use all available tools, tactics and methods to suppress wildfire in a safe manner. Local BLM employees and landowners know the terrain the best and should have input into suppression efforts. The use of Rangeland Fire Protection Associations was identified as a need in the Western Association of Wildlife Agencies Gap Report, but is not analyzed as an action in the preferred alternative. Currently this is the only legal means that private landowners can apply fire suppression on public lands.

Grazing is listed as a tool for fuels reduction, but there is no coherent analysis of how, when and where grazing should/could be used and is under emphasized as a practical tool within the document.

Comment Number: OR-GRSG-0258-1

Comment Excerpt Text:

I am certain BLM could do much in helping to reduce the loss of primary (core) habitat by improving their response time to fire. BLM has the log book history from dispatch of when fire was reported to when the fire crew arrived on the fire location. In addition firefighting methods could also improve the loss of fire to habitat.

Recommendations to reducing fire response time.

- Reduce response time by 40% (time from first report to putting the first crew at the fire location)
- Utilize the Rural Fire Protection Associations as first responders. Enter into cooperative/collaborative contract with them to help provide training and equipment
- Rural RFPA's have equipment at each home rather than stored at a central location making response almost immediate for the one closest to the fire
- Rather than have large report areas with equipment for BLM, have drivers of light fire engines (the most efficient for small startup fires) take the engine home. (selection of those units utilizes as a take home rig should be based on location of the driver seeking for a large diverse area to be covered).

Comment Number: OR-GRSG-0263-2

Comment Excerpt Text:

Since 1990 Harney County has experienced four catastrophic fires which is one of the primary factors linked to population declines of Greater Sage Grouse and the primary cause of recent large scale losses of sage grouse habitat (Davis, K. et all 2010; Diamond, J.M. 2009.) These fires have contributed to over 750,000 acres of sage grouse habitat destruction. My ranch is part of the Silver Creek Rangeland Fire Protection Association and helps supply equipment to help with initial attack. In your Preferred Alternative, you need to recognize these associations as an action and the need to have better coordination between the BLM and RFPA, including a mutual aid memorandum. The ODFW supports this valuable service as well.

Comment Number: OR-GRSG-0316-1

Comment Excerpt Text:

There is no proposal for dealing with fuel loads which increase tremendously in areas that don't get grazed. If you have a few wet years in a row, the grass grows and falls over if nothing grazes on it, then pretty soon all of the grass dies out because it can't grow up through all of that matted, dead grass. This also increases the danger of fires like the ones that burned in 2012 destroying hundreds of thousands of acres of sage country.

Comment Number: OR-GRSG-0333-7

Comment Excerpt Text:

D. The BLM Has Not Adequately Coordinated With Local Rural Fire Protection Districts in Developing

the Statement of Purpose and Need and in Developing Alternatives Addressing Fire Management and Vegetation Management, in Violation of FLPMA.

The Malheur County Court supports habitat restoration, fuels treatments and other vegetation and fire management prescriptions that are compatible with both forage production for livestock and sage-grouse conservation, as well as other multiple-use purposes. However, the County is concerned by the fact that the BLM does not appear to have consulted with local rural fire districts, such as the Vale Rural Fire Protection District in evaluating the purpose and need and developing alternatives aimed at addressing appropriate conservation measures and standards and guidelines for fire management and vegetation management. Malheur County interprets FLPMA to require the BLM to coordinate with such local rural fire districts, in addition to counties, because ORS, Chapter 478 recognizes rural fire protection districts as local governmental entities.

While the County appreciates that the BLM notes in the RMPA/EIS that it coordinated with the Oregon Department of Forestry, rural fire protection districts are often the first-responders to wildland fires with a rural urban interface component and, therefore, possess unique knowledge and understanding of the local on-the-ground fire risks. As a result, in order for the BLM to develop credible RMPAs for fire and vegetation management, it is imperative that the BLM coordinate with rural fire protection districts to identify the primary risk factors and potential management strategies to reduce the risk of fire causing the additional loss of sagebrush habitats in Oregon.

Comment Number: OR-GRSG-0356 (FrmLtr07)-10

Comment Excerpt Text:

Designation of Authority letters provide suppression incident commanders with information on what level of line officer can make the decision for tools and tactics to use for suppression on special designation areas. The program provides only general direction; specifics are lacking on applications for GRSG habitat for most Resource Management Plans. The Plan needs to include decision-making priorities for fires that extend across BLM districts and jurisdictions.

Comment Number: OR-GRSG-0356 (FrmLtr07)-11

Comment Excerpt Text:

Rangeland Fire Protection Associations. Ranchers are often the first responders when wildfire breaks out on the range. Many volunteer in Rangeland Fire Protection Associations (RFPAs). Roughly 500 Oregonians, many of them ranchers, cun-ently volunteer to protect at least 4.5 million acres in the state--much of it sage grouse habitat. The BLM should explore the successes of RFPAs, and include in any fire management plans this role of rural citizens in making them successful

Comment Number: OR-GRSG-0356 (FrmLtr07)-9

Comment Excerpt Text:

It is unclear how the agency will reduce the size, scope, and frequency of wild fires. Analysis fails to clearly address direct methods to lessen frequency and intensity through treatment of invasives, effects of suppression priorities on other public lands, and response time for initial attack. There are no changes in the use of tools, tactics or methods, and changes to designation of authority to suppression incident commanders. There is no mention of any use of Rural Fire Protection Associations or changes in suppression methods on special designation lands

Comment Number: OR-GRSG-0360-3

Comment Excerpt Text:

In the Draft RMP A, Vol. III, Appendix H explains that analysis of fire and invasives will be presented in an internal "step-down document" scheduled for completion in December of 2014. This analysis needs to be included in the RMPA to address the impacts and cumulative effects of these threats on sagegrouse to provide useful information to the USFWS. It also needs to be addressed in a NEP A document such as this to allow for public comments on the alternatives and actions being considered.

Comment Number: OR-GRSG-0409-8

Comment Excerpt Text:

Recommendation: The FEIS should more clearly define the conditions under which prescribed grazing would be applied to reduce the threat of wildland fire.

Alternative D, Action D-WFM 38, authorizes numerous fuel reduction techniques, including prescribed grazing. We recognize that targeted livestock grazing may be a valuable tool to achieve a number of fuel management objectives but recommend that the conditions under which it would be applied be more clearly defined. In particular, application should be differentiated between pastures with homogenous stands of invasive annual grasses and those that are pre-dominantly native bunchgrass. There is evidence that targeted grazing at a small scale in nearly homogeneous stands of invasive annual grass can reduce fire behavior (Diamond et al. 2009) and prompt desirable changes in plant community dynamics (Diamond et al. 2012). However, the efficacy of prescribed grazing to reduce landscape fire risk in a shrub-steppe ecosystem is less clear (Ruiz-Mirazo et al. 2011) and comes with some spatially-discrete risk (Reisner et al. 2013). As with other fire-risk reduction tactics, we contend that the risk and cost-benefit tradeoffs should be evaluated using a data-driven process and weighed by a stakeholder-driven collaborative process as outlined in our broad comments on fire and fire-specific comments above

Comment Number: OR-GRSG-0433-5

Comment Excerpt Text:

Fuel treatments

The efficacy of fuel treatments in sage-grouse habitat in reducing wildfire effects, limiting juniper encroachment, and controlling invasive species is unproven and must be limited to small treatments in already-degraded habitat areas accompanied by strict protocols to promote scientific research regarding such treatments. Fuel treatments should be linked to elevation profiles with treatments focused in areas above 4200 feet where the original understory had little to minor presence of invasive species. BLM should improve, clarify and modify Actions D-WFM 1and D-WFM 29 describing the design and location of fuel breaks. Fuel breaks proposed in PPMA, PGMA or connectivity habitat should be located exclusively along existing rights-of-way (ROW) and existing, designated roads identified in BLM's GTRN database. BLM should specify the type and extent of treatments that will take place in these areas by selecting and modifying Action B-WFM 1 to emphasize the protection of existing sagebrush ecosystems in both PPMA and priority connectivity habitat. The DEIS should explicitly identify additional areas where fuel breaks will be prohibited including Wilderness, Wilderness Study Areas (WSA), ACECs and Lands with Wilderness Characteristics (LWC) units. Use of livestock to reduce fine fuels should be prohibited within PPMA and priority connectivity habitat areas and discouraged in all other habitat areas. Large-scale application of grazing as a management tool should not be included in the DEIS because this practice does not accomplish the desired strategic reduction in fine fuels. Increased cattle grazing intensity indirectly promotes an increase in the magnitude of cheatgrass dominance. Cattle herbivory was found to be associated with reduced native bunchgrass abundance, shifts in bunchgrass composition to only the most grazing-tolerant species and aggregated bunchgrasses beneath protective sagebrush canopies (Reisner 2010). The DEIS acknowledges these difficulties in requiring a consultation with ecologists to minimize impacts on native perennial grasses from the use of grazing to reduce fuels. It is counterproductive to prescribe grazing that increases fuel loads from invasive grasses and negatively impacts native bunchgrasses. Recent studies involving the impacts of fire in sagebrush habitat are more concerning. Prescribed fire at Hart Mountain National Antelope Refuge in southeast Oregon reduced sagebrush cover, "making habitat less suitable for nesting." 75 Fed. Reg. at 13,931. One study (Beck et al. 2009) cited by USFWS reported "nesting habitat loss from fire, creating a long-term negative impact that will require 25 to 150 years of sagebrush regrowth before sufficient canopy cover becomes available for nesting birds." Id. Other studies document severe local sage-grouse population

declines following fire on the landscape, habitat fragmentation from fire influencing distribution and migratory patterns, and direct loss of leks from fire. Id. The most recent studies demonstrate that the occurrence of fire within 33.5 miles of a lek is one of the "primary factors in predicting lek extirpation." Id. "Small increases in the amount of burned habitat surrounding a lek [have] a large influence on the probability of lek abandonment." Id. Prior to recovery from fire, which can take decades, burned sagebrush areas "are of limited to no use to sagegrouse." Id. In short, "fire results in direct, long-term habitat loss." Id. Fire as a sagebrush treatment option should be discouraged. In any habitat grown over with a high density of exotics, fire should not be used in an effort to increase native herbaceous cover (Johnson 2000). In many cases, without proper post-fire rehabilitation, annual exotics, forbs, and grasses increase, while shrub cover decreases (Johnson 2000). Sage grouse avoid burned areas in sagebrush landscapes because habitat characteristics important for nesting, brood concealment, and food are destroyed by fire and have slow recovery rates (Connelly et al. 2000). Fire also facilitates invasion by cheatgrass and other nonnative plant species (Brooks et al. 2004). Fires, prescribed and natural, have long-term effects (>10 years), and sage-grouse may continue to avoid burned areas even after sagebrush has recovered (Nelle et al. 2000)." BLM should adopt science-based prescriptions generally discouraging the use of fire for vegetation treatment. Those decisions should be applied to all activities within priority sage-grouse habitat, including existing, ongoing projects that include fire as a treatment option.

Suppression

PPMA and priority connectivity habitat areas should be considered top suppression priorities after life and property. PGMA and potential connectivity habitat areas should be suppression priorities when fire threatens PPMA and priority connectivity habitat. Management of wildfires to achieve resource objectives should be limited to specific, identified portions of the planning area based on presence of invasive annual grasses, precipitation zones, soil surveys, and elevation. BLM should identify and use habitat mapping in determining suppression tactics, including emphasis on aerial tactics and the use of designated roads, routes and trails as fire breaks. Within Wilderness, WSA and LWC units containing PPMA and connectivity habitat, suppression tactics should be subject to non-impairment of wilderness values and subject to minimum tool analysis.

Rehabilitation

Rehabilitation efforts should focus on rehabilitation potential as determined by precipitation zones, soil surveys, and elevation. Sagebrush steppe ecosystems have greater resiliency to cheatgrass and other invasive species based on elevation. BLM should use appropriate mixtures of sagebrush, native grasses and forbs in re-seeding burned areas. We strongly support the use of native plant materials for restoration and other purposes and urge BLM to strictly limit the use of non-native vegetative materials in any application. Action D-VG 9 requires natives in all restoration actions; fire actions should be made consistent with this approach. Non-native plants can simply exacerbate longterm issues such as severe impacts from fire in monoculture vegetation which will, in turn, decrease plant diversity and related natural resilience. We also strongly support and encourage BLM to select and rapidly implement Action E-WFM 25: Land managers should encourage development of native seed banks (both in the private and government sectors). NTT guidance on the use of non-native seeds, included in the DEIS in Action B-VG 5 and Action WFM-17, should be incorporated into any decision to allow the use of non-native vegetative materials. Any decision to use non-native plant materials in sage-grouse habitat must be clearly tied to sage-grouse habitat objectives. BLM should also select Action B-WFM 24: Consider potential changes in climate when proposing post-fire seedings using native plants. Consider seed collections from the warmer component within a species' current range for selection of native seed as well as Action BWFM 23: Design post ES&R management to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long- term

changes in livestock grazing, wild horse and burro, and travel management, etc., to achieve and maintain the desired condition of ES&R projects to benefit sagegrouse.

Comment Number: OR-GRSG-0434-14

Comment Excerpt Text:

BLM should improve, clarify and modify Actions D-WFM 1and D-WFM 29 describing the design and location of fuel breaks. Fuel breaks proposed in PPMA, PGMA or connectivity habitat should be located exclusively along existing rights-of-way (ROW) and existing, designated roads identified in BLM's GTRN database. BLM should specify the type and extent of treatments that will take place in these areas by selecting and modifying Action B-WFM 1 to emphasize the protection of existing sagebrush ecosystems in both PPMA and priority connectivity habitat. The DEIS should explicitly identify additional areas where fuel breaks will be prohibited including Wilderness, Wilderness Study Areas (WSA), ACECs and Lands with Wilderness Characteristics (LWC) units.

Comment Number: OR-GRSG-0434-15

Comment Excerpt Text:

Use of livestock to reduce fine fuels should be prohibited within PPMA and priority connectivity habitat areas and discouraged in all other habitat areas. Large-scale application of grazing as a management tool should not be included in the DEIS because this practice does not accomplish the desired strategic reduction in fine fuels. Increased cattle grazing intensity indirectly promotes an increase in the magnitude of cheatgrass dominance. Cattle herbivory was found to be associated with reduced native bunchgrass abundance, shifts in bunchgrass composition to only the most grazingtolerant species and aggregated bunchgrasses beneath protective sagebrush canopies (Reisner 2010). The DEIS acknowledges these difficulties in requiring a consultation with ecologists to minimize impacts on native perennial grasses from the use of grazing to reduce fuels. It is counterproductive to prescribe grazing that increases fuel loads from invasive grasses and negatively impacts native bunchgrasses.

Comment Number: OR-GRSG-0434-16

Comment Excerpt Text:

Action D-VG 9 requires natives in all restoration actions; fire actions should be made consistent with this approach. Non-native plants can simply exacerbate longterm issues such as severe impacts from fire in monoculture vegetation which will, in turn, decrease plant diversity and related natural resilience.

Comment Number: OR-GRSG-0489-8

Comment Excerpt Text:

BLM should identify inventory and mapping of invasive species as a specific action (likely in Table 2-6) to be completed under the proposed alternative. Priority should be given to mapping exotic annual grasses, since these play the largest role in accelerating the fire cycle and since fire and invasive species are the greatest threat to sage-grouse in Oregon. The inventory of invasive species (especially exotic annual grasses) mentioned above should be an integral piece of the BLM's fire management planning as proposed in Alternative D, When completing an interagency, landscape scale assessment to prioritize at-risk habitat and identify fuels management, preparedness, suppression, and restoration priorities (Action D-WFM 1), the location of annual grass infestations is an important consideration.

The NRCS Sage Grouse Initiative Oregon Implementation Strategy (2013) has estimates of acres where annual grasses are dominant or subdominant, broken out by private and public lands and by ODFW sage-grouse Action Area. This may serve as a good resource for the BLM in further quantifying the extent of this threat.

Comment Number: OR-GRSG-0521-2

Comment Excerpt Text:

The assessment planned for December of 2014 must include the risk of wildfire based on current vegetation conditions and the potential consequences of fire to the Sage Grouse habitat. This will depend on the ecological site and current plant community condition. BLM fire management plans should also include delegating authority to the Incident

Commander in order to make the most efficient on the ground decisions. Without this delegation of power, much Sage Grouse habitat has been lost in the past. I would also suggest that any move to close roads may inhibit the abilities of BLM and local fire departments to successfully fight wildfires in the Sage Grouse habitat; therefore, road closures should be an absolute last resort in maintaining or restoring sage grouse habitat.

Comment Number: OR-GRSG-0532-18

Comment Excerpt Text:

The DEIS does not provide a cohesive, strategic approach to organize actions designed to abate the threat fire poses to GRSG habitat. Although the DEIS identifies actions and conservation measures to deal with fire impacts to GRSG habitat, these tactics remain relatively disjunct. In addition, the tactics are not arranged in a cohesive manner to demonstrate prioritized efforts or build an effective approach needed to deal with the considerable challenge that fire poses.

Comment Number: OR-GRSG-0532-19

Comment Excerpt Text:

The State recommends that a broader collaborative strategy be incorporated into Alternative D, and the State would like to work directly with BLM on further developing this strategy between now and the FEIS / RMP decision date through conversations already ongoing through the SageCon process.

Comment Number: OR-GRSG-0532-20

Comment Excerpt Text:

This strategy would include opportunities to better coordinate and leverage resources, including the role of Rangeland Fire Protection Associations (RFPAs). Rural community vitality is connected to the ability to the reduce the risk of wildfire to GRSG habitat. Ranches located in the remote areas comprising GRSG habitat are an extremely valuable resource for spotting and responding quickly to wildfires, thereby reducing habitat loss. According to the Oregon Department of Forestry, "there are approximately 520 volunteer firefighters in the 18 Rangeland Fire Protection Associations (RFPAs) and 174 pieces of water handling fire equipment that is listed with the Rangeland Fire Protection Associations." (Foster G., Oregon Department of Forestry: Status of Rangeland Fire Protection Associations, 2, (2014)).

Opportunities exist for building better pre-suppression / prevention and wildfire response partnerships around this local infrastructure. Alternative D provides more explicit guidance for fire suppression policies compared to other alternatives but lacks specific guidance for coordination with RFPAs. Although RFPAs provide protection on private and state lands, the RFPA's also provide rapid response to fires on BLM-administered lands. Alternative D should address the role and economic impacts of RFPAs and partner agencies on BLM-administered lands. The State recommends further development of working relationships, which would result in more coordination of efforts with RFPA's and other cooperating agencies, with the outcome of more efficient and effective wildfire management.

Comment Number: OR-GRSG-0532-21

Comment Excerpt Text:

Finally, the State agrees with conservation actions identified in the Near Term Greater Sage-grouse Conservation Action Plan (2012), and encourages BLM to incorporate these actions into the preferred alternative. The State recognizes that BLM, USFWS, and USFS, in conjunction with state agency representatives, proposed some modifications to the following conservation actions in 2013, but these have yet to be finalized. Please refer to the text box below.

[TEXT BOX]Conservation Actions:

U. Develop and implement a tactical fire suppression attack strategy (U*)

- Need to increase wildfire suppression capacity in Oregon to facilitate a more robust response, because additional suppression resources would help limit the size and extent of wildfires.

- The plan will identify the most critical sagebrush habitats that must be protected.
- The plan will model fire path behavior so suppression responders can rapidly assess fire starts and locations for effective suppression.
- The plan will provide managers with maps that will model fire paths that may be used to create effective fire lines.
- Increase aircraft resources to be able to successfully fight wildfire.
- Restrictions to transportation or travel management should not limit access for wildfire suppression resources or cause response delays, since such restrictions would result in larger fires.

V. Strategically station high capacity, rapid response aerial assets to the theater (U)

- Launch the aircraft during red flag conditions and monitor fire starts. The aircraft should make preemptive strikes on fire starts.

W. Proactively establish defensible fire lines. (U)

- Establish green-stripping, brown stripping or other techniques, at the interface of monotypic cheatgrass landscapes and relatively intact sagebrush communities, which will provide firefighters with geographical, topographical, vegetation, or other features to increase success to reduce fire size and protect sagebrush habitats.

X. Pre-deploy fire fighting resources for rapid and increased suppression efforts. (M)

Y. Increase resource availability to conduct restoration activities that have improved potential for success.(M)

- Increase seed availability and improve storage capabilities;
- Provide support for on-going research for precision restoration and seed coating technologies, such as that being conducted by ARS-EOARC and TNC, in order to improve seeding success rates post-fire.

*Likelihood of action producing desired outcomes based upon best professional judgment and available science. H = High, M = Moderate, L = Low, U = Unknown.

Comment Number: OR-GRSG-0532-22

Comment Excerpt Text:

As part of better developing the above mentioned strategic approach, Alternative D would be improved with the following page-specific changes:

- Pg. 2-22 (Alternative D) -"Restoration opportunity areas provide special consideration during fire suppression to help sustain productive GRSG habitat." As noted above, State Trust Lands are included in the areas defined as "restoration opportunity areas". If these areas are prioritized for fire suppression, this implies that fire suppression will be prioritized on State Trust Lands. The State requests that BLM clarify the implications of such prioritization on the fire suppression agreement between BLM and the State, e.g., DSL.
- Pg. 2-29 (Alternative E) -"Recognizing the need to capture all GRSG habitat in its PPH and PGH map..." The 2012 wildfires (especially the 2012 Long Draw and Holloway wildfires) need to be captured in the habitat mapping process. Keeping these overall maps up-to-date will allow restoration efforts to be prioritized based on recent conditions.
- Pg. 2-58 - Include complete restoration in areas less than 100 acres in size if wildfire did not leave remnant vegetation patches available for seed source and regeneration of native vegetation.
- Pg. 2-69 to 2-79, Wildland Fire Management, Objective D-WFM 2 - The State supports the use of a full range of fire management options

proposed to protect GRSG habitat under Alternative D and requests that properly managed grazing be added as an acknowledged option. Wildfire is named as one of the major causes of GRSG habitat loss and fragmentation. Wildfire can devastate hundreds to thousands of square miles of sagebrush that may take decades to reestablish. Properly managed grazing can play a positive role in in the reduction of fuel loading (e.g., Freese et al. 2013). Grazing can also help suppress invasive annual grasses if areas are grazed at the proper time and intensity. Current research by Sheley (2014) finds that "grazing is becoming increasingly considered in restoration of degraded ecosystems throughout the world." The timing, intensity, and careful management of targeted grazing is critical to success since annual grasses such as medusahead and cheatgrass have high concentrations of silica, and as they mature the palatability to livestock decreases. Research is ongoing related to the role of grazing in reducing wildfire risk and invasive species, and while Oregon is not advocating for generalized application of this tool to achieve those outcomes, the State believes BLM should continue to monitor this research and be flexible enough to avail itself of potential opportunities.

- Pg. 2-69 - Alternative D advocates "treating GRSG habitat to reduce the probability of large homogeneous burn patterns and unacceptable wildfire effects, to limit juniper encroachment, and to control invasive species". How will this be done? What ensures the remaining habitat will be valuable to GRSG? BLM can likely be very effective at reducing the probability of catastrophic fires through habitat treatments, but will the remaining habitat be valuable to GRSG?
- Pg. 3-70 - Table 3-19 states it includes fire acreage for the period 2000-2012. However, based on the acreages listed, it does not appear to include the catastrophic fires from the summer of 2012. Should update table, or include a footnote indicating table does not go through 2012 fire season.
- Pg. 4-11 - For sagebrush steppe habitats the BLM should provide a reference for statement "…and growing evidence suggests that fire suppression may be promoting larger and more severe fires by increasing fuel buildup." The State recommends increasing the pace and scale of fuels reduction, mitigation, and prevention projects, to minimize fire size and intensity on the landscape.
- Pg. 4-20 "The intention of prescribed burning is to improve wildlife habitat and vegetation production." This should be clarified as it seems contrary to the management objective since improving vegetation production could increase fuel loads. If the improved vegetative production for livestock forage the DEIS should state this.
- Pg. 4-54 Alternative E makes no distinction between fire suppression in low density habitat versus GRSG habitat outside of low density habitat. Consequently, the following statement is misleading "…Low Density habitat covers fewer acres than PGMA, thus providing protection to less GRSG habitat". In the same paragraph it is speculated that "Limits on use of fire, either planned or unplanned, in the Warm-Dry Sagebrush Group are likely to be counterproductive where large expanses of high sagebrush density exist, because homogeneous fuel beds typically produce highly damaging burn patterns and promote annual grass invasion." Need to provide references in support of this statement, because one could argue that maintaining Warm-Dry Sagebrush Group through fire suppression is more effective than trying to restore Warm-Dry Sagebrush Group post-fire which has been largely ineffective (whether planned ignition or not). See VDDT analysis on Pg 4-55 which found

"Reducing the probability of fire by 50 percent in the Warm-Dry Sagebrush Group in Alternatives B, D, E, and F to account for fuel breaks had no effect on habitat trends." See also statements on pg. 4-70 "The distribution of suitable sagebrush habitats is limited and the cost of habitat restoration is high." And on pg. 4-71 "Thus, preservation of sagebrush against wildfire and limiting use of prescribed burning is important to preserving GRSG habitat over both the short and long terms."

- Pg. 5-23 - "However, wildfire is generally less of a threat in MZ V compared to MZ IV", possibly true since the 2012 Homestead Fire burned ~180,000 acres, while the 2012 Long Draw fire burned over 550,000 acres. However, the possibility of losing 180,000 acres of prime GRSG habitat in MZ V in just one fire should still be a considered a significant threat. Furthermore, a few pages later (pg. 5-27) there is the following statement about MZ V "Most of the management zone is considered at high risk of fire, and about 44 percent of lands are considered to be at high risk of cheatgrass."

Comment Number: OR-GRSG-0532-23

Comment Excerpt Text:

BLM should amend Alternative D and add specific conservation actions to improve post-fire stabilization and rehabilitation practices in Oregon by incorporating the principles of ecosystem resistance and resilience when deciding appropriate actions, including no actions. Effectiveness of rehabilitation could be improved over time if actions in Alternative D included consistent monitoring, common methods, and cross-project comparisons of outcomes (GAO 2003, Wirth & Pyke 2007). These principals should be added to the vegetation section of Table 2-6 and to the Wildland Fire Management particular actions such as D-WFM 17 on pg. 2-73.

Comment Number: OR-GRSG-0532-24

Comment Excerpt Text:

BLM's preferred Alternative D should be improved by adding a clear method for prioritization of sites for rehabilitation that considers site resilience and resistance.

Comment Number: OR-GRSG-0532-25

Comment Excerpt Text:

Landscape cover of sagebrush dominance has been shown to closely track successful GRSG leks (Aldridge et al. 2008, Wisdom et al. 2011, Knick et al. 2013). Locations where sagebrush cover is greater than 65% landscape cover have high probabilities of supporting successful leks. Locations with landscape cover less than 25% are unlikely to support leks and those in between these two values have increasing likelihood of successful leks as landscape cover increases. The Western Association of Fish and Wildlife Agencies (WAFWA) workgroup on fire and invasive species management has recommended this matrix (e.g., Chambers et al. In review) as a basis for prioritizing lands for conservation of existing habitat, prevention of fire and invasive species encroachment in at-risk habitat, and restoration of disturbed or degraded habitat. Therefore, the State requests that the BLM incorporate the WAFWA GRSG habitat resistance and resilience matrix into the conservation actions of the final EIS and incorporate the concept/tool into the appropriate pre- and post-fire habitat management and restoration actions, such as those identified in the Vegetation and Wildland Fire Management sections of Table 2-6 of the DEIS.

Comment Number: OR-GRSG-0532-26

Comment Excerpt Text:

The State believes the BLM needs to include recommended methods for restoration in the conservation actions such as D-VG 9 of the DEIS (pg. 2-60). Rehabilitation projects involving big sagebrush revegetation are important for re-establishing GRSG habitat, but aerial seeding of big sagebrush without any soil disturbance (e.g., imprinting, harrows or chaining) has been clearly unsuccessful (Pyke et al. In review). Although more expensive than seedings, the cost-to-benefit ratio of transplanting big sagebrush

provides justification for using this approach more in the future (Davies et al. 2013, Dettweiler-Robinson et al. 2013, McAdoo et al. 2013). Hence, the State recommends that the BLM address this reality and modify existing rehabilitation programs to incorporate these more ecologically effective approaches to the establishment of big sagebrush.

Comment Number: OR-GRSG-0532-27

Comment Excerpt Text:

). Locations threatened by invasive species that also have existing native plants might benefit more through using only native species in the rehabilitation project (Peppin et al. 2010, Knutson et al. In review). Thus, the State requests that the BLM re-evaluate their current habitat rehabilitation programs to incorporate this finding into conservations actions such as D-VG 6 (pg. 2-59) and D -VG 23 (pg. 2-64) and include more native species.

Comment Number: OR-GRSG-0532-28

Comment Excerpt Text:

BLM's preferred alternative does not explicitly address soil stabilization as a goal of post-fire rehabilitation. Soils prone to water erosion on hillslopes are better protected in the short-term by ground covers (e.g., mulches) than by barriers or seeding vegetation (Robichaud et al. 2010, Peppin et al. 2010). Post-fire areas prone to wind erosion can be harmed by equipment that is used to seed vegetation or disturbs the soil and accelerates wind erosion. Erosion fences can be used to stabilize small areas, but a better approach to control wind erosion on large areas may be to delay revegetation until soils stabilize through natural means even if this involves undesirable plants (Miller et al. 2012). The State therefore requests that the BLM evaluate their soil stabilization program following fire and incorporate appropriate conservation actions to conserve soil into at least the Wildland Fire Management section of the preferred alternative (e.g., Table 2-6).

Comment Number: OR-GRSG-0532-3

Comment Excerpt Text:

The State supports strategies and treatments to reduce the probability of adverse wildfire impacts, limit juniper encroachment, and control invasive plant species to benefit GRSG habitat. Our recommendation is to better establish clear strategies, goals, and standards that will allow for prioritization of funding and allocation of additional resources to treat more than the 3% of GRSG habitat proposed for annual vegetation management in the DEIS, as well as to increase Early Detection and Rapid Response (EDRR) efforts, as these actions are the most effective ways known to address the primary threats to GRSG habitat (see pg. 2-44, Table 2-6, Vegetation—D-VG 1).

Comment Number: OR-GRSG-0558-3

Comment Excerpt Text:

While wildfire is unpredictable, the BLM is capable of doing things to restore the range to a more historic fire regime and pattern. The BLM can increase grazing to a moderate (but still appropriate) level to remove fine fuel build up, decreasing the number of plants killed, increasing the sites resilience, decreasing areas available to annual grass invasion, and changing the wildfires burn pattern from continuous to mosaic, allowing for seed sources to be present and increasing the sites ability to recover and recover quickly. The BLM could also analyze having additional stations for fire fighters, decreasing response time, or increasing cooperative agreements with Rural Fire Departments and land owners to help fight fire on BLM managed land. These are viable options that should be addressed in this EIS; by ignoring them, the BLM is not analyzing a full range of alternatives. The BLM appears to be taking the easy way out and not thinking outside of the bureaucratic box for solutions.

Comment Number: OR-GRSG-0567-22

Comment Excerpt Text:

The BLM should work with local fire-fighting groups as potential first responders from local communities. Whereas BLM offices are somewhat centralized in their respective districts, the local communities are scattered across eastern Oregon and may be able to more quickly respond to wildfires.

Comment Number: OR-GRSG-0567-25

Comment Excerpt Text:

The use of fire for juniper control is noted in action D-WFM 1 (page 2-69)(fuel management to limit juniper encroachment) and Action D-WFM 14 (page 2-73)(use of naturally ignited wildfires to meet resource management objectives such as reducing juniper encroaclunent). We recommend that an additional action be inserted to describe appropriate methods to treat juniper and emphasizing that mechanical treatment is the preferred method. As noted in the COT report, this technique allows for more selective removal of invading plants, and more importantly allows understory habitats to remain intact. We also recommend the inclusion of Guidelines Jar Juniper Management: Oregon-Washington (Bureau of Land Management 2013) as guidance on treating juniper.

SECTION 12.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0047-3

Comment Excerpt Text:

peer-reviewed studies have clearly demonstrated that grazing livestock reduces the threat of catastrophic wildfire by controlling the fuel load and increasing productivity of grasses that are less fire prone.3 Moreover, peer-reviewed studies have proven that when rangeland is burned, it is much less prone to invasion by annual invasive weeds like cheat grass if it has been grazed.4 Due to reduced fuel loads and cooler burn temperatures, grazed rangeland is more likely to reestablish native bunch grass communities, while burned ground that has not been grazed is more likely to establish cheat grass communities. In light of these findings, appropriate grazing should be recognized in the RMPA as a primary tool in the prevention of wildfire and reduction of invasive weeds——two of the primary threats to sage grouse habitat.

3Davies, K. et at, Saving the sagebrush sea: An ecosystem conservation plan for big sagebrush plant communities. Biological Conservation 144, 2573~2584 (2011}.

4 Davies, K.W., T.J. Svejcar, LD. Bates. 2009. Interaction of historical and non-historical disturbances maintains native plant communities. Ecologicai Appiicatians 19:1536»1545.Aiso Davies, LD. Bates, T.T, Svejcakr, and (2.5. Boyd. 2010. Effects aflong~ term livestock grazing on fuel characteristics in rangelands: an example from the sagebrush steppe. Rangeland Ecoiogy & Management 63:662~569

Comment Number: OR-GRSG-0068-3

Comment Excerpt Text:

Working ranches and grazing reduce the risk of catastrophic fires which directly contribute to sage-grouse conservation. Fire is one of the primary factors linked to population declines of greater sage-grouse and the primary cause of recent large-scale losses of sage-grouse habitat.9 Fighting these fires has become increasingly problematic due to federal budget constraints and an increasingly burdensome regulatory environment. For decades ranchers have stepped up to help fill this gap and are doing it well. According to the Oregon Department of Forestry, "there are approximately 345 volunteer firefighters in the 14 Rangeland Fire Protection Associations (RFPAs) and 151 pieces of water handling fire equipment that are listed with the RFPAs.10 In addition, there are ranch dozers and other equipment that is used in fighting fire. The amount of time and resources is hard to estimate because firefighting is part of managing these private lands. The ranchers tend to under-estimate the value of their contribution in time and equipment."11

Comment Number: OR-GRSG-0068-4

Comment Excerpt Text:

Peer-reviewed studies have clearly demonstrated that grazing livestock reduces the threat of catastrophic wildfire by controlling the fuel load and increasing productivity of grasses that are less fire prone.12 Peer-reviewed studies have proven that when rangeland is burned, it is much less prone to invasion by annual invasive weeds like cheat grass if it has been grazed.13 Due to reduced fuel loads and cooler burn temperatures, grazed rangeland is more likely to re-establish native bunch grass communities, while burned ground that has not been grazed is more

likely to establish cheat grass communities. In light of these findings, appropriate grazing should be recognized in the RMPA as a primary tool in the prevention of wildfire and reduction of invasive weeds—two of the primary threats to sage grouse habitat.

12Davies, K. et al., Saving the sagebrush sea: An ecosystem conservation plan for big sagebrush plant communities. Biological Conservation 144, 2573–2584 (2011).

13 Davies, K.W., T.J. Svejcar, J.D. Bates. 2009. Interaction of historical and non-historical disturbances maintains native plant communities. Ecological Applications 19:1536-1545. Also Davies, K.W., J.D. Bates, T.T. Svejcakr, and C.S. Boyd. 2010. Effects of longterm livestock grazing on fuel characteristics in rangelands: an example from the sagebrush steppe. Rangeland Ecology & Management 63:662-669.

Comment Number: OR-GRSG-0081-2

Comment Excerpt Text:

peer-reviewed studies have clearly demonstrated that grazing livestock reduces the threat of catastrophic wildfire by controlling the fuel load and increasing productivity of grasses that are less fire prone.5 Moreover, peer-reviewed studies have proven that when rangeland is burned, it is much less prone to invasion by annual invasive weeds like cheat grass if it has been grazed.6 Due to reduced fuel loads and cooler burn temperatures, grazed rangeland is more likely to reestablish native bunch grass communities, while burned ground that has not been grazed is more likely to establish cheat grass communities. In light of these findings, appropriate grazing should be recognized in the RMPA as a primary tool in the prevention of wildfire and reduction of invasive weeds—two of the primary threats to sage grouse habitat.

5 Davies, K. et al., Saving the sagebrush sea: An ecosystem conservation plan for big sagebrush plant communities. Biological Conservation 144, 2573–2584 (2011).

6 Davies, K.W., T.J. Svejcar, J.D. Bates. 2009. Interaction of historical and non-historical disturbances maintains native plant communities. Ecological Applications 19:1536-1545. Also Davies, K.W., J.D. Bates, T.T. Svejcar, and

C.S. Boyd. 2010. Effects of long-term livestock grazing on fuel characteristics in rangelands: an example from the sagebrush steppe. Rangeland Ecology & Management 63:662-669.

Comment Number: OR-GRSG-0093-50

Comment Excerpt Text:

According to the Oregon Department of Forestry, based on data from 2010 to 2012, "[t]here are approximately 345 volunteer firefighters in the 14 [Rangeland Fire Protection Associations] and 151 pieces of water handling fire equipment that is listed with the [Rangeland Fire Protection] Associations. In addition, there are ranch dozers and other equipment that are used in fighting fire. The amount of time and resources the [Rangeland Fire Protection Associations] contribute is hard to estimate because firefighting is part of managing the land. Ranchers therefore tend to underestimate the value of their contribution in time and equipment." http://www.oregon.gov/odf/fire/fpfc/rfawhite.pdf

According to Gordon Foster, Rangeland Fire Protection Coordinator with the Oregon Department of Forestry (personal comm. 2/6/2014), during the fire seasons of 2010-2012 there were 14 Rangeland Fire Protection Associations. Since that time, three additional Rangeland Fire Protection Associations have formed and a fourth is currently in the formation process.

Based on data from the Annual Reports to the Board of Forestry, during the fire seasons of 2010- 2012 the 14 Rangeland Fire Protection Associations provided significant assistance in fighting fires in Eastern Oregon:

- Fires Initial Attacked by Rangeland Fire Protection Associations – 2010-2012; 257 fires (includes federal, State & Private lands).

- Acres of Private land burned – 2010-2012; 23,602 acres (does not include federal lands where the Rangeland Fire Protection Associations assisted with the firefighting effort).
- Rangeland Fire Protection Association volunteer firefighter hours – 2010-2012; 21,192 hours. (Used a rate of $15.00/hr to calculate the "in-kind" value to match grant funding, that equates to a firefighting value of $317,880. This does not include the time spent in administration of the Rangeland Fire Protection Associations or the time spent training or maintaining equipment.)
- Rangeland Fire Protection Association firefighting equipment use hours – 2010-2012; 9,040 hours. (Used an average equipment rate of $75/hour to calculate the value of this time for a cost estimate, which equates to a firefighting value of $678,000.)
- Rangeland Fire Protection Associations assisted with the use of Prescribed Fire – 2010- 2012; 12,023 acres of Prescribed Fire. (Used a cost of $80/ acre to calculate the cost of the value of the time and effort used by the Rangeland Fire Protection Associations contribute with the use of Prescribed Fire, which equates to a value of $961,840.)

This data was extrapolated and averaged from the reporting Rangeland Fire Protection Associations. All these activities are fully funded by the Rangeland Fire Protection Associations and their volunteer efforts; none of this effort is supported by tax dollars. Oregon Department of Forestry does administer two federal programs to get firefighting equipment into their Rangeland Fire Protection Associations, but it is the Rangeland Fire Protection Association's responsibility to maintain and fuel this equipment, which is why the equipment use rate is only figured at $75/hour.

The 2013 data will be reported to the Oregon Board of Forestry in May 2014.

This data reflects the known fact that ranchers are in many cases the best resource for first response and initial attack on wildfires due to their proximity to the fires in sparsely populated areas of Oregon, which notably also contain some of the best GRSG habitat in Oregon. If there are fewer ranchers and fewer resources, as is likely to occur under all the DEIS alternatives, except Alternative A, there will be more fires with more expansive GRSG habitat devastation, leading to a reduction in GRSG.

The key metric to consider is the number of GRSG habitat acres not burned. Members of Rangeland Fire Protection Associations live close, know the roads and terrain, day or night. Any f the one acre fires that the Rangeland Fire Protection Associations get to quickly and put out could be the next Longdraw Fire. This is a significant benefit to GRSG and is, for the most part, not addressed or evaluated in the DEIS/RMPA

Comment Number: OR-GRSG-0170-1

Comment Excerpt Text:

Do you have a plan for quick response of fire units in the areas of sage-grouse concentrations? If we have lightning storms during the fire season and the lightning storms during the fire and lightning would strike and start a fire in sage-grouse habitat. Could we have fire crews close by to minimize damage to the habitat area?

Comment Number: OR-GRSG-0230-3

Comment Excerpt Text:

The GRSG Wildland Fire and Invasive Species Assessment (RMPA Vol. I D-WFM32: p. 2-75 & 2-76), the outline for which is provided in Vol. III, Appendix H, will not be completed until December, 2014. This is the basic assessment that would provide the information to develop conservation measures to be incorporated by the agency that will conserve, enhance and/or restore GRSG habitat by reducing, eliminating, or minimizing threats to the habitat. The draft provides generic conservation measures that would be applied if and when the threats are analyzed by the BLM. Tables 4-3 & 4-4 (RMPA Vol. II, Chapter 4 - Environmental Consequences) dearly display,

given the current analysis and the implementation of the identified regulatory mechanisms and conservation measures that the BLM has analyzed in all alternatives (including the preferred) will indeed provide little to no improvement to preferred habitat condition in the Oregon sub-region for 10 and 50 years in the future following application. This is because the analysis of the primary threats (wildfire, invasive species, and conifer encroachment) has not been attempted in the Draft RMPA.

Comment Number: OR-GRSG-0244-2

Comment Excerpt Text:

Wildfires were mentioned as the greatest destroyer of habitat, yet some plans are to curtail livestock grazing even more than already has been done, which would increase fuel load even more. Should the devasting fires in the last 2-3 years show what results??

Comment Number: OR-GRSG-0281 (FrmLtr11)-62

Comment Excerpt Text:

Appendix G, page G-4, The document relies on the LANDFIRE data set. Five reasons are given to justify the selection of the LANDFIRE data set. The reasons emphasize the inadequacies of other data sets and provide a general statement of accuracy. The DEIS document needs to clarify the accuracy of the LANDFIRE data set and how that accuracy compares to ground level monitoring.

Comment Number: OR-GRSG-0532-88

Comment Excerpt Text:

Pg. 3-37 -The aroga moth is only mentioned in relation to the catastrophic wildfires in 2012. However, it is a sagebrush defoliator with natural cyclic population swings. The State recommends the BLM include information on any proposals to control and monitor these moths that can play a role in increased fire risk

Comment Number: OR-GRSG-0567-27

Comment Excerpt Text:

It is our understanding the conversion of lands to agriculture is not allowed on BLM lands within the planning area. The final EIS should clarify this point and cite to the policies or regulatory mechanisms that prevent such conversions.

Comment Number: OR-GRSG-0591-63

Comment Excerpt Text:

BLM appears to endorse the widespread creation of fire breaks as a means of limiting the spread of fire. See DEIS at 4-12. These fire breaks would negatively impact sage grouse use of these habitats. Creating firebreaks in sagebrush steppe is a practice unsupported by science. BLM assumes a 50% reduction of fire probability in the Warm-Dry Sagebrush Group as a result of implementing fuel breaks. DEIS at 4-48. Please provide peer-reviewed, scientific literature that demonstrates that such fuel breaks in sagebrush steppe habitat have been demonstrated to reduce fire. Our review of the literature uncovered only unpublished white papers and "fact sheets" that cited no actual scientific studies to support the assertion that "green strips" slow or halt the spread of fire. If no such evidence can be provided, such "green strips" should be explicitly forbidden in the RMP amendment. It is obvious that "green strips" will only be green in the spring, when precipitation occurs and the risk of fire is negligible. During the dry periods when fire ignitions occur and spread most readily, "green strips" will be brown and represent a concentrated source of fine fuels that will do nothing to slow the advance of a flame front, and may indeed accelerate it. Anecdotally, according to Vollmer (2005), fuel breaks that are left untended can become hazards in their own right:

By the spring of 2003, annual weedy species (cheatgrass, mustards, filaree) dominated [the] fuel break resulting in shrub fuel being replaced by a highly flammable, continues [sic] fuel. Stands or mats of cheatgrass act as a hazardous fuel that can carry very hot fires, quickly. When cheatgrass dominates a fuel break, it acts as a wick, able to bring fire in to the subdivision or take fire from the subdivision to the wildland. In addition, fire fighter safety is jeopardized due to the fast fire spread and difficulty of getting in front of the fire because blowing embers quickly spread the fire to new areas.

Meanwhile, the negative impacts of "green strips" on sage grouse are proven, as they fragment habitat, create edge environments where increased predation rates occur, and result in direct loss of valuable sagebrush stands that are key to grouse survival in terms of providing food and cover. We are concerned that the widespread implementation of green strips across Priority Habitats will significantly fragment degrade sage grouse habitats, further exacerbating population declines, and in the process will have no net effect on fire frequency or extent.

Comment Number: OR-GRSG-0591-72

Comment Excerpt Text:

BLM's analysis assumes explicitly that fire will be more prevalent over the 50-year span under Alternative C versus current management because there will be less emphasis on constructing fuel breaks, and because less livestock grazing will lead to a buildup of fine fuels that will make fires more frequent. DEIS at 4-66. Yet the agency has failed to provide any scientific support for these assertions. Where are the scientific studies that conclude that reducing livestock grazing levels increases fire risk or extent, or studies that show that increasing livestock grazing can be an effective fire prevention/reduction measure?

Comment Number: OR-GRSG-0591-73

Comment Excerpt Text:

Several alternatives are purported to reduce fire risk through the construction of firebreaks. Where is the science indicating that constructing fuel breaks reduces fire risk or extent?

Comment Number: OR-GRSG-0591-74

Comment Excerpt Text:

BLM alleges that prevention of prescribed fire "can lead to a homogeneous fuel bed where large expanses of high sagebrush exist. Such homogeneous fuel beds typically produce highly damaging fires." DEIS at 4-33, and see 4-64. Please identify scientific studies that correlate large expanses of high sagebrush with wildfire frequency, spatial extent, and/or intensity.We know of no such studies. Our review of the sagebrush/wildfire literature (elsewhere in these comments) reveals that large expanses of sagebrush are the norm in pre-settlement times, and that extensive wildfires were extremely rare during this period. In the absence of any scientific evidence to the contrary, BLM will need to revise its impact analysis (and presumably its VDDT modeling, which appears to incorporate this error).

SECTION 12.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0073-2

Comment Excerpt Text:

many ranches are the best resource for first response and initial attack on wildfires due to their proximity to the fires in sparsely populated corners of Oregon, which notably also contain some of the best sage-grouse habitat in Oregon. If there are fewer ranchers and fewer resources, as is likely to occur under the current RMPA proposed alternative, there will be more fires with more expansive sage-grouse habitat devastation, leading to a reduction in sage grouse numbers. Our operation is part of a local fire protecion district and we are often the first boots and shovels on the scene. BLM must analyze the costs and potential habitat loss that will result from removing public lands grazing, and we don't believe that this has been adequately addressed in the RMPA as it is currently written

Comment Number: OR-GRSG-0078-4

Comment Excerpt Text:

In Vol. III – Appendix H the RMPA/DEIS document outlines how the BLM would analyze fire and invasive species. This analysis must include fire, invasive species, and juniper encroachment. Juniper encroachment is currently omitted from this analysis. This analysis needs to be included in the RMPA/DEIS to address the primary threats to Greater sage-grouse in Oregon

Comment Number: OR-GRSG-0093-147

Comment Excerpt Text:

Wildfire

This section does not evaluate the impact of a 3% disturbance cap on wildfire suppression efforts. The

more difficult it is to access an area, the more difficult it is to put out wildfires. Wildfires are one of the most significant threats to GRSG in Oregon.

The disturbance cap does not seem well thought out, explained, or analyzed in the DEIS/RMPA. Please revise the DEIS to consider this impact and remove the 3% disturbance cap to the extent it hampers the ability to quickly respond to wildfire.

Comment Number: OR-GRSG-0093-153
Comment Excerpt Text:
though wildfire is one of the highest threats to GRSG in Oregon, the DEIS does not evaluate the impact of road closures and restrictions or the prohibition on new roads on wildfire control.

Comment Number: OR-GRSG-0093-49
Comment Excerpt Text:
The DEIS should explain and evaluate the benefits of better coordination and support of Rangeland Fire Protection Associations in order to achieve the Wildland Fire Management Goal. Coordination and support of Rangeland Fire Protection Associations should be stated as an objective on Table 2-4 and it should be included as an action item on Table 2-6. It should also be discussed and analyzed in the Environmental Consequences.

As it stands now, the DEIS fails to account for the benefits of Rangeland Fire Protection Associations and fails to evaluate the impact to GRSG habitat if there is a loss of working ranches that provide the manpower for these Associations.

Working ranches and grazing reduce the risk of catastrophic fires which directly contribute to GRSG conservation. Fire is one of the primary factors linked to population declines of GRSG and the primary cause of recent large-scale losses of sage-grouse habitat. Fighting these fires has become increasingly problematic due to federal budget constraints and an increasingly burdensome regulatory environment. For decades ranchers have stepped up to help fill this gap and are doing it well.

Comment Number: OR-GRSG-0106-1
Comment Excerpt Text:
Fire as a danger to the sage grouse needs to be given a lot more emphasis. Also, the removal or reduction of grazing will increase the probability of larger and significantly hotter fires. This needs to be addressed.

Comment Number: OR-GRSG-0119-2
Comment Excerpt Text:
Cattle are the cheapest, most effective means to prevent catastrophic fires. Local BLM managers should have the flexibility of increasing cattle AUMs or time of use to reduce fuel loads. The livestock grazing limits the fuel that allows fires to spread. Cattle grazing creates a mosaic of fuel that creates natural fire breaks which allows fires to burn themselves out naturally. Cattle should have been considered in Section 3.6 (page 3-68), WILDLAND FIRE MANAGEMENT, cattle grazing should have a dollar use value for preventing wildfires.

Comment Number: OR-GRSG-0210-3
Comment Excerpt Text:
Wildfire is another primary impact identified. Primary wildfire fuels (grasses) are the only tool that the BLM can control, and they can do so through grazing. However, they do not identify grazing as a tool to limit fuels. Rather, grazing is identified as a threat.

Comment Number: OR-GRSG-0282-1
Comment Excerpt Text:
As we have seen in recent years, an explosion of wildfires throughout the western states, mainly due to drought related influences, has decimated some areas of sage grouse habitat. More emphasis needs to be given to the proper control of the buildup of vegetation through managed grazing by livestock. The typical knee-jerk reaction of many analysts is to blame livestock grazing rather than acknowledge the benefits of grazing or to even base conclusions on scientific data. The documents do not adequately address theses benefits based on the long term trends under current management schemes.

Comment Number: OR-GRSG-0288-4

Comment Excerpt Text:

In several of the alternatives, the plan mentions that reduced grazing could increase fuel levels resulting in increased wildfire, yet almost every alternative indicates that the BLM plans to reduce grazing. It sounds like the BLM would prefer prescribed burns to grazing, yet the plan states that "a return to a full pre-burn community cover can take 15 to 100 years (Manier et al. 2013; Evers 2013". The plan seems to be contradictory. It seems it would be more effective to allow livestock to remove the fine fuels through grazing so the habitat doesn't have to be burned.

Comment Number: OR-GRSG-0309-5

Comment Excerpt Text:

On page I-7 there is discussion about the fuels/fire issue. It is stated that fuels treatment and prescribed burning will be used to protect the priority ACECs and priority RNAs. It seems counterintuitive that livestock grazing which could control fine fuels would be eliminated in these areas while at the same time prescribed burning would be used, introducing more carbon dioxide into the atmosphere. While at the same time many of these RNAs are in the focal areas which the BLM has identified as climate change research areas. Meanwhile, climate change is thought to be a result of elevated carbon dioxide levels.

In Addition, grazing generates revenue while prescribed burning depletes funds. Lack of funds is a common complaint mentioned often by the Lakeview BLM of their ability to effectively manage lands within the district

Comment Number: OR-GRSG-0471-3

Comment Excerpt Text:

The devastating fires that have swept the region do more to damage the future of the sage grouse than any other land related event. The final Plan must incorporate a long term approach to fire reduction strategy and must emphasize the relative impact of fire, as compared to all other activities occurring on sage grouse habitat.

Comment Number: OR-GRSG-0591-37

Comment Excerpt Text:

The role of fire in the sagebrush ecosystem, and how (or if) it drives the patch dynamics of the system, is poorly understood at present. A landscape mosaic of burns may not meet the nesting habitat needs of sage grouse (Nelle et al. 2000), and may also fail to meet grouse habitat requirements during other seasons (Wamboldt et al 2002). Large fires of high frequency can extirpate sage grouse populations (Pedersen et al. 2003). In Idaho, reduction of 57% of sagebrush canopy cover resulted in sage grouse population reductions (Connelly et al. 2000b). In the Oregon planning area, PPH has been hit especially hard by fire. DEIS at 3-71. Thus, it is far from clear that projects which reduce sagebrush density or extent actually benefit sage grouse in the short or long term.

Natural fire return intervals in Wyoming big sagebrush average 100-240 years (Baker 2007). Wyoming big sagebrush recovers slowly after fires, which typically result in 100% sagebrush mortality; recovery to pre-fire canopy cover takes over 100 years (Cooper et al. 2007, see DEIS at 3-70). Baker (2007) examined the same issue and projected that Wyoming big sagebrush recovery following fire ranges from 50 – 120 years; for mountain big sagebrush, the recovery period was estimated at 35 – 100 years. Prescribed fire can result in a loss of sagebrush dominance for 25-45 years, and may also result in increased erosion (Sedgwick 2004). Cooper et al. (2007) projected the full recovery of Wyoming big sagebrush canopy cover would take 625 years based on their observed recovery rates following prescribed fire (a biologically improbable outcome), and no recovery at all was recorded following prescribed fire on 17 of 24 sites. Close proximity to seed sources and moister conditions did not accelerate recovery in this study. These researchers concluded, "Wyoming big sagebrush recovery takes so long that managers considering prescriptive burns need to have a long-term view of the landscape before eliminating a sagebrush habitat that will not return for at least a century" (Cooper et al. 2007:12).

Many sagebrush "control" projects are undertaken based on the perception that sagebrush stands that are dense or tall produce less forage for livestock and also are poor sage grouse habitat; these habitats are based on entrenched myths that conflict with the scientific evidence at hand (Welch and Criddle 2003). Cooper et al. (2007) found no increase of desirable forbs for sage grouse following prescribed fire, but did find a significant increase in exotic forb and grass species following burns.

Once sagebrush is eliminated from the landscape through habitat projects, its recovery can be problematic. Re-establishment of big sagebrush is particularly problematic, as drought stress is particularly acute and seedlings may only become established in unusually wet years or microhabitats. (Lysne 2005, Shaw et al. 2005).

While Beck and Mitchell (1997) recommended against sagebrush control projects when canopy cover is less than 20 percent, and recommend against any sagebrush control within 2 miles of leks, projects have been put forward in the name of habitat improvement when canopy cover is less than this threshold, and where the proposed treatment is closer to lek sites.

The recovery of sagebrush "treatment" areas is further complicated by livestock grazing, which can hamper the establishment of native plants and spread the seeds of noxious weeds such as cheatgrass. Lambert (2005) recommended protecting re-seeded areas from livestock grazing for no less than 3 to 5 years. However, this standard is virtually never adhered to in practice in the West, where virtually every acre of public land falls within a grazing allotment.

Because the sage grouse is dependent on sagebrush, sagebrush treatments are likely to have major impacts on sage grouse population viability. Call and Maser (1985) asserted that the spraying of sage grouse nesting habitats is deleterious because it reduces nest cover from avian predators and suppresses forbs that are important in the sage grouse diet. According to Kerley (1994), "shrub stands of 20-40% cover are needed for successful nesting and this shrub coverage should be maintained on identified breeding complexes [within 3.2 km of leks]" (p. 113). Wamboldt et al. (2002) stated:

"Natural or prescribed burning of sagebrush is seldom good for sage grouse. This assessment recommends that fires within sage grouse habitat be avoided in most cases, and should be allowed only after careful study of each local situation. The evidence also indicates that habitat loss due to fire may well be the most serious of all the factors contributing to the decline of sage grouse" (p.24).

Heath et al. (1997:50) went even farther: "Based on our results, we recommend no reduction or control of sagebrush in areas containing between 18-30% live sagebrush canopy coverage within 4.5 km of leks." According to Beck and Braun (1980:563),

"At present we do not know the relative value of a small versus large strutting ground to the population. Therefore we should afford equal merit to all and strive to maintain the adjacent habitats, especially areas with sagebrush (Artemesia) suitable for nesting and brood rearing."

Hess and Beck (2012) found that neither burned nor mowed areas produced suitable sage grouse habitats. Call and Maser (1985) stated that spraying should not occur within the breeding complex (which they defined as within 2 miles of a lek), and should also be forbidden in known grouse winter ranges. Taking into account the negative effects of vegetation treatments on sage grouse nesting and lekking areas, and uncertainty in the overall extent of sage grouse nesting habitat surrounding lek sites in the Great Plains region, the BLM should prohibit vegetation treatments within 5.3 miles of sage grouse lek sites.

BLM proposes to continue to allow the use of prescribed fire in Priority Habitats, which will cause negative impacts to sage grouse populations. BLM measures under Alternative D would limit prescribed fire in ACECs to lands with more than 12 inches of annual precipitation, and allows use only where

cheatgrass invasion is a low potential threat, which is a sound policy. Prescribed fire not only harms sage grouse by eliminating the sagebrush that is their key habitat element, but also promotes the spread of cheatgrass, which are becoming ever more widespread in Oregon. Required measures for prescribed fires reduce the negative effects but do not drop them below the threshold of a significant impact to sage grouse.

Comment Number: OR-GRSG-0606-20

Comment Excerpt Text:

In addition, within any percentage limits on anthropogenic disturbance, fire should be included as was recently recommended by USFWS in its comments on the Northwest Colorado Greater Sage-grouse DLUPA/DEIS. TAILS 06E24100-2014-CPA-0001 at p. 1. The preferred alternative excludes fire from its 3% cap on anthropogenic disturbance. DRMPA/DEIS at 2-58. Fences, small roads, and water developments must also be included in "anthropogenic disturbance." BLM's definition does not explicitly include fences or water developments. DRMPA/DEIS at 8-5.

SECTION 12.4 - CUMULATIVE IMPACT ANALYSIS

Comment Number: OR-GRSG-0074-4

Comment Excerpt Text:

Why did BLM fail to complete the fire and Invasive species assessment for each district as outlined in Vol. 3 of the Draft RMPA, Appendix H

Comment Number: OR-GRSG-0606-24

Comment Excerpt Text:

Also needed but lacking in the cumulative effects analysis was detailed discussion of large fires that occurred within the planning area during 2012. The Holloway and Miller Homestead ES&R are listed as reasonably foreseeable future actions (which are already being implemented), but their potential to affect one of the most important areas to sage-grouse in the Oregon sub-region and in its range, and what might be potential implications are not explored. There is no discussion about what actions are being taken in the Nevada for the 2012 fires that burned across the border there from Oregon. DRMPA/DEIS at 5-8; 5-20.

SECTION 12.5 - MITIGATION MEASURES

Comment Number: OR-GRSG-0095-11

Comment Excerpt Text:

Although the DEIS lists RDFs for fuel management/fire treatment under Alternative D, it is inadequate to conserve and recover sage-grouse. For instance, it would design fuels treatment objectives that most benefit sage grouse "where applicable," and establish fire treatments that promote use by sage-grouse "when appropriate."142 These non-binding prescriptions leave ample room for discretionary management actions. RDFs should instead include specific seasonal restrictions for fuels treatment and require maintaining sagebrush canopy cover at or above what is expected for that ecological site once BLM develops measurable habitat objectives for GRSG conservation best on the best available science.

SECTION 13 - FISH AND WILDLIFE

SECTION 13.3.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0093-89

Comment Excerpt Text:

Special Status Species

Page 2-41 Sub-objective D-SSS 3 and B-SSS 3 both discuss the 3% human disturbance cap. The terminology used in the chart is inconsistent. The chart needs to be clear as to the subobjective intended

Comment Number: OR-GRSG-0093-96

Comment Excerpt Text:

Page 2-58: Action C and E-SSS 2: Application of a 0% surface disturbance cap is not supported by science or the NTT Report. This alternative should be rejected.

Comment Number: OR-GRSG-0100-2

Comment Excerpt Text:

The last paragraph on page 5-28 states "conifers would be removed under all alternatives and would continue to improve GRSG habitat ... " It then goes on to state it would do this by among other things, "reducing predator perches, decreasing fire spread" etc. With regard to predator perches referred to on said page 5-28 and other places-reference is made to ORS 527.676 , which requires when thinning timber on land exceeding 25 acres, two snags or two green trees per acre at last 30 feet in height and 11 inches DBH or larger, at least 50 % are conifers. These are "leave trees," for the benefit of sensitive bird nesting, roosting etc. OAR 669-665-0200 and following chapters relate to resource sites

used by the Northern Spotted Owl and the Bald Eagle, for nesting, roosting and foraging.

OAR 665-210 sets out requirements for Northern Spotted Owl nesting sites.

OAR 629-665-220 addresses Bald Eagle nesting sites and protection requirements.

OAR 629-665- 230 addresses Bald Eagle roosting sites and protection requirements.

OAR 629-665-240 addresses Bald Eagle foraging perches and protection requirements.

ORS 527.990 and ORS 527.992 provide for criminal penalties and civil penalties for violating

ORS 527.676 referred to above, as well as other statutes referred to therein.

How do you resolve the above with requiring that such nesting sites, roosting sites and foraging perches be removed? Again-you must look at the whole picture, not just one part of it. Birds help to keep the ground squirrel and other varmint population somewhat under control-I'm not sure what the ground squirrels eat, but where they are in large numbers the ground is bare, except for the sagebrush. Sage grouse need food, not just sagebrush for cover.

SECTION 13.3.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0093-139

Comment Excerpt Text:

4.4.6 Environmental Consequences –Fish and Wildlife

Page 4-106: Alternative C Impacts from Wild Horse and Burro Management

On Page 4-106, the DEIS states that "Alternative C would result in impacts similar to those described under Alternative A". Alternative A, Page 4-102, states, "There would be no new impacts on special status wildlife species resulting from Wild Horse and Burro Management." Alternative C proposes to remove water developments, and is not the same as Alternative A, which does not. Thus, the statement on Page 4-106 is incorrect. According to Page 4-15, the removal of range water developments will impact the distribution of wild horses, shifting yearlong use to riparian areas. This could result in impacts to GRSG to the extent that they are dependent on riparian communities. Alternative C is not the same as Alternative A.

SECTION 14 - LANDS AND REALTY

SECTION 14.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0006-2

Comment Excerpt Text:

Unlike every other alternative in the plan and the BLM's own National Technical Team report, the preferred alternative suggests that avoidance areas can sufficiently limit the impacts from developing energy infrastructure. Unfortunately, avoidance areas do not offer certainty of habitat protection and could easily lead to development in inappropriate locations. As in every other alternative, BLM's eventual plan should identify areas to be excluded from energy developmentand other surface-disturbing impacts. Exclusion areas do not necessarily lead to displacement of projects onto private land and it is a false assumption that energy development on private

land would be free from similar restrictions and would necessarily lead to sage-grouse impacts. All land ownership types, including public lands, should have some areas of sage-grouse habitat that are off limits to development.

Comment Number: OR-GRSG-0008-2

Comment Excerpt Text:

Even in ROW avoidance areas, as outlined in 4.10.2, Nature and Type of Effects, Page 4-173/4: ROW applications would be subject to additional requirements, such as resource surveys and reports, construction and reclamation engineering, special design features, rerouting, and longterm monitoring. These requirements could resuit in restrictions on location, delay availability, limit access, and certainly increase the cost. These requirements carry heavy financial burdens for private individuals, such as myself. In addition, although allowed "a reasonable degree of access" to their lands, private landowners (and I assume private minerals owners) would be required to take (meaning establish) an alternate route NOT through a PPMA to access their property. Where no such route is "feasible," mitigation would be "considered" to either 1) keep the disturbance under 3% or, 2) return the disturbance levels to those occurring at the time the application was received. This has serious economic effects. For mineral rights owners, such as myself, there would be a high probability of major financial outlay to satisfy the requirements of these regulations, even if Denny Flat is left as general habitat. In addition, when BLM purchased the surface, Lloyd Dinger retained the mineral estate and the right to access "to each part and parcel " as is evidenced in the deed. BLM must recognize this private property right in the minerals, and provide access and the ability to remove the minerals, even if the 3% disturbance cap would be exceeded.

Comment Number: OR-GRSG-0095-16

Comment Excerpt Text:

We recommend the following strengthened management approaches to minimize further degradation of sage-grouse habitats from energy-related development.

Management Prescriptions:

i. Management Inside SGCAs in sage-grouse habitat

§? Exclude these areas from new energy leasing and rights-of-way.

§? Whenever possible, bury existing transmission lines within 10 km from active leks.

§? Institute seasonal restrictions on surface occupancy within 10 km from leks during courtship and early brood-rearing periods.

§? No new road construction within 7.6 km of active leks.

§? If existing disturbed area in the SGRA exceeds 3% of the surface area, institute measures to provide additional mitigation to offset the impacts on the grouse.

ii. Management outside SGCAs in sage-grouse habitat

§? Institute seasonal restrictions on surface occupancy within 5 km from leks during courtship and early brood-rearing periods.

Comment Number: OR-GRSG-0095-3

Comment Excerpt Text:

The Preferred Alternatives fails to incorporate measures that would result in exclusion of activities known to be detrimental to sage-grouse or sage-grouse habitats, relies on discretionary measures such as "avoidance" rather than "exclusion" of activities, and includes numerous exceptions and exemptions where protective measures will only apply on a conditional basis. This is particularly relevant to the BLM objective of initiating "proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA,"47 since the lack of adequate regulatory mechanisms to conserve sage-grouse and their habitats was identified as a primary threat leading to the FWS' warranted but precluded finding for the species.

47 Manual 6840.02(B).

Comment Number: OR-GRSG-0113-2

Comment Excerpt Text:

While portions of the land subject to proposed restrictions are not currently considered first class wind sites, advances in wind turbine technologies are, and will continue to result in generation opportunities in areas that are not now considered first class wind sites. More significantly much of the land subject to regulation under this DEIS is among the best solar resource in the Pacific Northwest. The climate of the Pacific Northwest does not offer plentiful utility scale solar resource. What we have is, based on current and anticipated technology, located primarily in southeast Oregon. Significant restrictions on solar development in southeast Oregon would result in a significant reduction in what would otherwise be a significant component of the region's clean energy portfolio and economy. While less understood, a similar situation may exist for geothermal power. Significant geothermal potential is believed to be present in southeast Oregon in areas currently thought to be more environmentally compatible with development than other areas of the State that have geothermal potential. The BLM needs to understand that land use restrictions that prohibit geothermal exploration and development would take this means of renewable energy development significantly out of Oregon's future clean energy mix

Comment Number: OR-GRSG-0113-3

Comment Excerpt Text:

Under Action D-LR-2, the DEIS states that if it is technically or financially feasible to bury or relocate existing power lines, the ROW holder would be required to do so. While couched with the words "if technically or financially feasible" this discussion reflects a significant lack of understanding of both technical and economic considerations associated with burial of electric transmission and distribution lines. The technical challenges of burying higher voltage (115 kV and above) need to be better understood prior to making this recommendation. While burying lines operating at distribution voltage does not have the same technical challenges there is a significant greater number of miles of such lines, the cost of which to place underground would present a crushing financial burden upon local utility customers. These customers are primarily served by rural electric cooperatives, with few (in some cases less than one) customers per pole mile. These systems are inherently expensive as it is, which is why the Federal government provides them access to relatively low cost financing through the Rural Utility Service. These customers often have incomes somewhat less than that of customers in more urban areas. Requiring a significant amount of undergrounding of these lines would result in significant rateincreases upon customers, many of whom will have difficulty paying, and large increases in the debt load among the rural utilities providing these customers service. These rate increases are in effect a hidden environmental tax associated with these proposed regulations. This tax is levied on a relatively few number of Oregonians imposing on them the cost of environmental regulations that (to the extent that there are benefits) benefit a much, much broader population.

We ask that the BLM modify this action to require a comprehensive evaluation of any proposed relocation or undergrounding of a power line by District staff and provide financial assistance to utilities to mitigate financial impact. Burial or relocation should only be required when it is both technically and financially feasible. Under Action D-LR-5, field evaluations should include a scientist from the Agricultural Research Center, a County government representative, and the permit applicant, in addition to the local BLM Wildlife Biologist and ODFW representative.

Comment Number: OR-GRSG-0161-2

Comment Excerpt Text:

Additionally, power poles in all sage-grouse occupied habitat should be modified with nest deflectors to prevent ravens and other raptors from nesting. Recent research in Idaho indicates that 58% of the raven nests are on power poles and using them as an artificial structure to survive, reproduce and gain entry into sagebrush habitat as stated below. The

study appears in the January issue of the journal The Condor: Ornithological Applications. Authors include Kristy Howe of the Wildlife Conservation Society and Idaho State University, Peter Coates of the U.S. Geological Survey, and David Delehanty of Idaho State University

Comment Number: OR-GRSG-0276-22

Comment Excerpt Text:

B. Colocation of Power Lines

The Draft RMPA/EIS defines colocation as placing structures within an existing right-of-way (ROW). While this may be practical for some facilities (e.g., transmission line with a distribution line underbuild), it may not be feasible for other facilities due to the size of the ROW and/or facilities or other federal requirements.

IPC is required to comply with a variety of federal regulations, and the North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) standards affect our ability to colocate facilities. Transmission lines are rated, and the rating determines the amount of energy that can be carried on the lines. To be an economically viable project, utilities must achieve a certain capacity rating; the rating is typically sufficient if it allows for the utility to meet native load and customer requests for transmission capacity while receiving an appropriate return on their investment. Ratings are affected by a number of factors, including adjacency to other transmission lines that serve the same pathway.

NERC Transmission Planning (TPL) electric reliability standards require that utilities evaluate the simultaneous loss of 2 high-voltage transmission circuits on a common structure when determining the transfer capability of a transmission path. If colocation on common structures is required, a path transfer capability may be jeopardized, which could undermine the purpose and need of a particular project (i.e., colocating a line could result in a de-rating of the existing line and/or a lower rating of the proposed line). This would result in an overall decrease in transfer capability and would require the construction of even more lines.

WECC System Performance Regional Business Practice TPL-001-WECC-RBP-2 outlines the requirements for evaluating system performance of transmission circuits within common corridors. The criteria only applies to adjacent circuits 300 kV and above; however, regardless of the criteria language at any given point in time (language and requirements have been changing frequently in the recent past), WECC reliability practices may require the reduction of path transfer capability if 2 circuits located nearby experience simultaneous outages. Due to reliability impacts and the potential reduction in transfer capability, IPC strongly prefers a 1,500-foot minimum separation between high-voltage circuits.

NERC and WECC standards do not impose any requirements for the colocation of a transmission circuit with a distribution circuit. However, double-circuiting lines or building lines adjacent to each other within an existing ROW may not be feasible. Double-circuit structures are taller than single-circuit structures to accommodate the required clearances between the lines and ground clearance and are typically spaced closer together. The existing ROW may not be wide enough to accommodate an additional line or wider structures that would be necessary to support a double-circuit.

The National Electrical Safety Code (NESC) does not have any specific criteria that restrict colocation, although it does provide structural and clearance criteria meant to maintain the reliable and safe operation of lines. In very confined situations, these clearances could limit the ability to colocate power lines with other power lines or pipelines. IPC tries to keep a minimum separation between lines defined by the maximum height of the tallest structure in either line. This minimizes the chance that one line would be damaged or otherwise impacted by the failure of a structure in an adjacent line that falls toward the intact line.

IPC also tries to minimize colocation so IPC will be able to maintain service to our customers in case of an outage. Areas are typically served by more than one line, and IPC is able to change the path used to deliver power if one line goes out. If lines are colocated, our ability to do this is limited, and areas may experience more frequent and/or longer outages.

There are 2 areas of potential conflict when pipelines are located close to power lines. In both situations, the problems are only a concern when the pipeline and power line are parallel for some distance. Neither issue is generally a major issue for pipeline versus power line crossings. The first area for concern is the potential for the power line to create or enhance corrosion on buried pipelines. This is generally only an issue if the buried pipeline is comprised of metallic pipe. In some situations, power lines can negate existing pipeline cathodic protection systems meant to prevent pipeline corrosion. The cathodic protection impacts of a power line on a pipeline can be studied and mitigated, but this mitigation is generally at the discretion of the buried-pipeline owner since his/her facilities are those negatively impacted. Mitigation could include the installation of additional protection measures, which may require the construction of a distribution power line.

The second point of concern is safety. If power lines and buried pipelines are nearby, a fault on the electric line can cause a dangerous rise in electrical potential in the earth, which can result in an impressed voltage potential on the pipeline. This situation is only a problem for a short amount of time until the protective equipment on the power line senses the fault and trips the line. However, if a pipeline worker is working on any aboveground pipeline equipment (i.e., test stations, valves, etc.) at the time of the fault, the worker can be exposed to high-voltage potentials (both step and touch potentials) that could cause harm to the worker. For this reason, some pipeline companies are hesitant to colocate facilities with power lines and others require special design measures to mitigate the potential threat.

The authorized alternative needs to recognize that colocation is not always practicable or even feasible and should provide for a process to allow additional ROWs where colocation cannot be accommodated. Specifically, IPC suggests that BLM consider developing a broader "energy corridor" concept to encourage location of new power lines parallel or adjacent to existing infrastructure to replace the limited definition of colocation set forth in the Draft RMPA/EIS. Given the importance of the western electric grid to the safety and well-being of those who live in the West, IPC encourages the BLM to coordinate with WECC to accommodate priority pathways that need upgraded or expanded in the final sage-grouse management plan.

Comment Number: OR-GRSG-0276-23

Comment Excerpt Text:

Use of Perch Deterrents

Perch-discourager research has shown limited effectiveness in preventing perching, a potential for increased nesting on discouragers, and an increased electrocution risk associated with perch discouragers (Messmer et al. 2013). To eliminate perching, all potential perching surfaces must have effective deterrents. There are currently no commercially available perch guards designed to keep raptors off an entire structure. The original intent of perch guards was to minimize electrocutions by discouraging birds from perching in electrocution risk areas and encouraging them to perch on other areas of the pole that do not pose an electrocution risk. IPC believes there is a misconception that if a power line is built, high levels of raptor and raven use will ensue. While that may occur in some areas, not all power lines have high raven and raptor use. Predator densities vary regionally due to a variety of factors, including food sources, habitat types, the juxtaposition of habitats, and other factors. Raven and raptor use of power lines in sage-grouse habitat is likely to vary depending on the surrounding land use.

In areas where raven predation on sage-grouse nests is a concern, perch discouragers may aid in the accumulation of nest material (APLIC 2006) and

could potentially increase raven predation pressure due to nest construction on discouragers in sensitive areas. In addition, increased electrocution risk associated with poles modified with perch deterrents has been documented. The negative impacts of perch discouragers must be weighed against the limited benefits they may provide, particularly if they are contributing to mortalities of protected birds and facilitating increases in predator nesting populations. It appears the BLM has not investigated the efficacy of perch deterrents and simply assumes perch deterrents are effective on power line structures.

Comment Number: OR-GRSG-0276-31
Comment Excerpt Text:
Text: Pg. 2-52, Table 2-5

According to Table 2-5, no cross-country travel would be allowed in PPH/PPMA/Core area habitats.

Comment: Idaho Power uses cross country travel within our ROWs and at times, to gain access to our ROWs, when existing roads are not available and are not necessary. We typically access our lines one to two times per year for inspections and as needed for operation and maintenance activities (this can typically be another one to two trips per year). Because we have relatively few trips to our facilities, we do not create roads unless they are needed for safe equipment access and operation. The prohibition on cross country travel would have the unintended consequence of encouraging us to create more roads not fewer roads.

Comment Number: OR-GRSG-0276-35
Comment Excerpt Text:
Text: Pg. 2-93, Table 2-6, Alternative D; Land and Realty – Right-of-Way

The Draft RMP/EIS states " PGMA would be managed the same as under Alternative A, except for all new ROWs proposed in PGMA, the local BLM Wildlife Biologist, in cooperation with ODFW, shall conduct a field evaluation to determine if the proposal would impact occupied, suitable, or potential habitat for GRSG. If the habitat is determined to be occupied, impacts would be avoided. If the habitat is unoccupied but apparently suitable or potential habitat for GRSG, impacts would be minimized to the full extent possible."

Comment: This would create de-facto exclusion areas.

This restriction appears to be inconsistent with the statement on page 2-23 of the Draft RMP/EIS that "In PGMA, it is the BLM's intention that efforts to avoid adverse environmental impacts would be taken before determining that adverse environmental impacts were unavoidable." As currently proposed, PGMA could become exclusion areas if the BLM and ODFW determine that the area is occupied. It is also inconsistent with the statement in Table 2-8, page 2-140, that says "Alternative D would avoid ROWs in PPMA but would not establish exclusion areas."

The Draft RMP/EIS does not provide definitions and criteria that would be used by BLM and ODFW biologists to determine if an area is occupied, suitable, or potential habitat. Moreover, the document does not propose a similar process for PPH/PPMA/Core Area habitat. In other words, why is it acceptable to create exclusion areas in PGMA if there is a chance SAGR could use the area, but not to allow development in PPH/PPMA/Core Area habitats if it is not occupied, suitable, or potential habitat? Also, if there is no evidence that GRSG are using PGMA or that it is suitable or potential habitat, is it correct to assume that a project can proceed without the requirement for mitigation?

For a meaningful analysis, the BLM should consider the effect of exclusion areas combined with state requirements (e.g., Category 1 habitat) and changes from avoidance to exclusion areas.

Comment Number: OR-GRSG-0276-53
Comment Excerpt Text:
Text: Pg. C-2. Appendix C. Required Design Features

For Alternatives B, C, D, E, F

- Restrict the construction of tall facilities and fences to the minimum number and amount needed.
- Site and/or minimize linear ROWs to reduce disturbance to sagebrush habitats.
- Place new utility developments (e.g., power lines and pipelines) and transportation routes in existing utility or transportation corridors.
- Bury distribution power lines.
- Place power, flow, and small pipeline corridors under or immediately adjacent to roads.

Comment: Vertical Structures—NERC reliability standards for transmission lines need to be followed. Therefore, transmission lines may not be placed in existing transmission line ROWs, as recommended by the BLM.

Power poles, towers, and fence posts may provide attractive hunting and roosting perches for common raven and raptors, in addition to natural substrate (e.g., cliffs and rock outcrops). Several studies have shown that predation of sage-grouse, their nests and chicks is not a serious threat when habitat is not limited and of good quality (e.g., Coates and Delehanty 2010, Conover et al. 2009, USFWS 2010). Hagen (2011) reviewing sage-grouse predation literature, concluded that on average predation is not limiting sage-grouse populations, except in fragmented landscapes.

Powerlines and Pipelines--There are two main concerns when pipelines are in close proximity to and parallel power lines for some distance. First is the potential for a power line to create or enhance corrosion if a buried pipeline is comprised of metallic pipe. In some situations, power lines can negate existing pipeline cathodic protection systems meant to prevent pipeline corrosion. The cathodic protections impacts of a power line on a pipeline can be studied and mitigated, but this mitigation is generally at the discretion of the buried pipeline owner since their facilities are the ones negatively impacted. Second is safety. Second is safety. A fault on the electric line can cause a dangerous rise in electrical potential in the earth and this can result in an impressed voltage potential on the pipeline. This situation is only a problem for a short amount of time until the protective equipment on the power line senses the fault and trips the line. However, a pipeline worker can be exposed to high voltage potentials (both step and touch potentials) that could cause harm to the worker. For this reason, some pipeline companies are hesitant to co-locate facilities with power lines and others require special design measures to mitigate the potential threat.

Comment Number: OR-GRSG-0312-2

Comment Excerpt Text:

According to the plan, Research Natural Areas (RNAs) will be closed to grazing for five (5) years. However, private land exists within those RNAs. Access to, and use of, those private lands are an issue that needs resolved in order to eliminate the devaluation of those lands and economic loss to the landowner, this school district, and Lake County.

Landowners with private lands located within areas closed to grazing (RNAs, etc.) or with restricted grazing stipulations in Special Management Areas (SMAs) such as Areas of Critical Environmental Concern (ACECs, etc.) must be allowed access to and from their property, including roads in most cases and trail routes designated for cattle drives.

Comment Number: OR-GRSG-0356 (FrmLtr07)-26

Comment Excerpt Text:

The DEIS contains discrepancies regarding how Alternative C would be managed for new ROW. Alternativc C designates all PPMAs as Areas of Critical Environmental Concern, which would be treated as ROW exclusion areas. Table 2-7 states "Alternative C would establish ROW exclusion areas in PPMA and avoidance areas in PGMA." Impacts analysis of Alternative C in Chapter 4 states the BLM would not authorize new ROWs in PPMA or PGMA unless the infrastructure can be located in existing ROW (page 4-179). The DEIS is very unclear how Alternative C would address new ROW in PPMA and

PGMA. New ROW under Alternative C must be clarified and consistent between all section of the DEIS

Comment Number: OR-GRSG-0356 (FrmLtr07)-29

Comment Excerpt Text:

Alternative D (Action D-MLS 1) identifies seasonal restrictions to be placed on fluid mineral leases, While HEC does not lease or operate any fluid mineral leases, it is reasonable to expect that the seasonal restrictions identified in Action D-MLS 1 would be applied to the construction of a new transmission or distribution line, The seasonal restrictions identified include nesting and early brood rearing (March 1 - June 30), late brood rearing (July 1 - September 30), and wintering (October 1 - February 28), No mapping which identifies where these seasonal habitat are located is provided in the DEIS. If such tinring restrictions are applied to the construction, or operation and maintenance of transmission and distribution infrastructure, the restricted mapped habitats must be identified in Alternative D

Comment Number: OR-GRSG-0356 (FrmLtr07)-32

Comment Excerpt Text:

Required Design Features identified in Appendix C for Alternatives B, C, D, and F (page A-I 0) states" ... bury distribution power lines." The entity required to fund the removal, burial, or modification of power lines is not described in the DEIS. Burial of power lines is typically cost prohibitive and would not likely be supported by the owner of that line. Burial of transmission lines of higher voltage over large distances, as is typical throughout the HEC service territory, is not teclmically feasible in some instances, such as rugged terrain. Additionally, burial of transmission and distribution lines is often cost prohibitive. Additional detail is needed regarding this statement in Appendix C

Comment Number: OR-GRSG-0378-4

Comment Excerpt Text:

A University of California study (Bumby et al. 2009) found that underground power lines have more environmental impacts than overhead power lines for all categories and most scenarios in southern California. For more detailed discussion of environmental and engineering constraints associated with underground power lines, see (APLIC 2012), pages 62-63. MidAmerican encourages the BLM to allow overhead power lines an acceptable alternative in Oregon and requests that requirements for placement of lines underground be removed.

Comment Number: OR-GRSG-0378-6

Comment Excerpt Text:

MidAmerican has agreements in place with FWS regarding our APP and efforts to prevent electrocutions of raptors and other protected migratory birds. The use of perch discouragers is precluded in our APPs and agreements with FWS due to associated electrocution concerns. Therefore, MidAmerican recommends the BLM remove stipulations that require or recommend perch discourager use in the Oregon RMP

Comment Number: OR-GRSG-0378-9

Comment Excerpt Text:

MidAmerican requests that the routes proposed in the Boardman to Hemingway EIS be considered existing/planned actions and exempt from the decisions made in the RMP Amendment.

Comment Number: OR-GRSG-0434-38

Comment Excerpt Text:

Effectively eliminating, avoiding and minimizing the impacts of ROW development must be a primary component of the DEIS. The preferred alternative in the DEIS, however, does not sufficiently address the threat that ROW infrastructure poses to sage-grouse and could instead allow significant impacts in all sage-grouse habitat types. Alternative D does not exclude any areas from new ROW issuance, relying instead on avoidance.

Comment Number: OR-GRSG-0434-40

Comment Excerpt Text:

the DEIS must include the terms and conditions that may apply to ROW corridors or development areas, including best management practices to minimize environmental impacts and limitations on other uses which would be necessary to maintain the corridor and ROW values (BLM 2005). No alternative in the DEIS provides sufficient specificity on the terms and conditions or best management practices that would be employed to minimize impacts to sage-grouse habitat. BLM should include additional detail on the terms and conditions that will be included for any issuance of a ROW in PGMA.

Comment Number: OR-GRSG-0437-1

Comment Excerpt Text:

It is unclear whether utility poles and transmission lines count against the cap. BLM suggests that managing agencies "." However, the agency does not identify the entity required to fund these actions or alternatives in areas where topography renders burial impossible

Comment Number: OR-GRSG-0489-16

Comment Excerpt Text:

Action D-LR 2 (Table 2-6, pg. 2-91) states that Districts will evaluate existing power lines and identify which ones should be buried, modified, or relocated. If it is "technically or financially feasible" the ROW holder would be required to do so. What criteria will be used to determine that a power line should be buried, modified, or relocated? How will BIM determine if it is technically or financially feasible? I recommend that this action be removed, or at least relaxed to state that BLM will discuss these options with the ROW holder rather than require the changes. Existing power lines should be allowed to remain as is, unless the ROW holder voluntarily elects to modify them. On the other hand, new power lines should be sited and constructed to avoid and minimize impacts, including burial when appropriate. Language to this end should be added into the Lands and Realty actions. The current language primarily discusses siting considerations but not design/construction considerations.

Comment Number: OR-GRSG-0532-51

Comment Excerpt Text:

Based on work with local governments and state agencies operating in Eastern Oregon, the State sees little potential for major new infrastructure development in the foreseeable future. Road and highway usage is stable or declining, and other public infrastructure needs are primarily related to maintenance and safety. Given the spatial extent of PPH and PGH, Alternative D should be clarified to provide that the proposed disturbance threshold, and the avoid, minimize, and mitigate hierarchy apply to these activities, rather than exclusions. One example is the suggestion in the DEIS that electrical transmission and distribution lines, including existing lines, be buried. Another example is the suggestion that aggregate operations needed for road maintenance be excluded. Rather than a blunt exclusion, the avoid, minimize, mitigate hierarchy should be used to steer these activities to the areas with least impact on GRSG habitat while maintaining technical and financial feasibility. The siting standards proposed in the attached draft state disturbance framework have been used successfully in Oregon in the energy siting context, and should be extended to include infrastructure.

Comment Number: OR-GRSG-0532-64

Comment Excerpt Text:

The rapid pace of renewable energy development in Central and Eastern Oregon has slowed substantially, and current market and regulatory conditions make it unlikely that there will be substantial additional wind energy development in the next five to ten years. The attached analyses from the Oregon Department of Energy (ODOE), document these conditions. The decrease in near to mid-term potential for renewable energy development means that the threats from such actions are of longer-term concern. The state recommends that current conservation mechanisms focus on the limited near and mid-term, with triggers for review if the long-term potential for renewable energy development, and associated transmission, begins to re-emerge.

Comment Number: OR-GRSG-0532-65

Comment Excerpt Text:

On June 7, 2013, the President issued a Memorandum directing Federal agencies to develop an integrated, interagency pre-application process for significant onshore electric transmission projects requiring Federal approval. Please take into consideration how the details of these plan amendments would be utilized in early collaboration with agencies (federal, state and local), project sponsors and affected stakeholders to ensure a more streamlined review process for transmission projects.

Alternative D would further limit energy generation and transmission development by increasing by 47 percent the acres managed as ROW avoidance areas (pg. 4-194 – 1st Paragraph). The use of avoidance areas can be made compatible with the BLM and state disturbance frameworks that are under development. However, additional clarification and coordination is needed to develop consistent tests for avoidance and minimization.

Comment Number: OR-GRSG-0532-80

Comment Excerpt Text:

Pg. 2-90, Action D-LR 1 - Allow co-location of new projects within existing ROWs throughout PPMA and PGMA.

Pg. 2-91 - Please note that under Action D-LR 2, with respect to rural power lines, the State recommends that existing and new transmission and distribution lines be handled through the disturbance framework, and not through exclusions or through burial.

Comment Number: OR-GRSG-0567-36

Comment Excerpt Text:

Infrastructure (Chapter 4, Alternative D, page 52) - Please explain the following sentence from the first paragraph: "ROWs would be allowed in avoidance areas if the disturbance would be either under the three percent disturbance cap. " It appears that the rest ofthe sentence is missing.

Comment Number: OR-GRSG-0567-58

Comment Excerpt Text:

Infrastructure is mentioned as a threat facing the Northern Great Basin (Orcgon population), Baker, and Central Oregon sage-grouse populations in the COT report. To increase consistency with the COT report, we recommend:

- develop non-discretionary siting criteria and design requirements to avoid impacts to sage-grouse from infrastructure and development;
- The only changes from the current situation on BLM lands proposed in the Preferred Alternative (Alternative D) are:
  - Change from areas in PPMA designated as 'open' to all areas in PPMA designated as 'avoidance.' Avoidance designation allows for ROWs and other development, but also allow for special stipulations (discretionary siting criteria and design requirements).
  - The establishment of a 3 percent disturbance cap in PPMA. This allows development within avoidance areas as long as the new disturbance doesn't exceed the 3 percent disturbance cap. However, the scale at which this percentage cap will be established and measured is not discussed.

Comment Number: OR-GRSG-0591-18

Comment Excerpt Text:

The NTT Report recommends that all electrical distribution lines be buried within Core Areas, period; BLM does not evaluate this under any alternative.

Comment Number: OR-GRSG-0591-43

Comment Excerpt Text:

The Oregon planning area is targeted for several new major transmission lines, including the Boardman to Hemingway line and the North Steens line. DEIS at 5-4, 7. Nonne et al. (2011) found that raven abundance

increased along the Falcon-Gondor powerline corridor in Nevada both during the construction period, and long-term after powerline construction activities had ceased. Braun et al. (2002) reported that 40 leks with a power line within 0.25 mile of the lek site had significantly slower population growth rates than unaffected leks, which was attributed to increased raptor predation. Simply requiring perch inhibitors to be installed on powerlines is not an adequate regulatory mechanism; such perch deterrents reduce, but do not eliminate, raptor perching (Slater and Smith 2010). Notably, it was golden eagles and ravens, two of the most important sage grouse predators and nest predators, respectively, that most effectively circumvented powerline perch inhibitors in this study. Priority Habitats need to be exclusion areas for transmission line rights-of-way in order to provide the regulatory certainty that conservation measures will be applied. Under the Preferred Alternative, the vast majority of sage grouse habitats are managed for avoidance rather than exclusion of transmission lines. Table 4-14, DEIS at 4-30. Under "avoidance," transmission lines can be authorized on a case-by-case basis (DEIS at 4-18), resulting in potentially severe consequences for sage grouse populations. Priority Habitats need to be designated based on the habitats that sage grouse populations need to survive, not on the routing preferences of transmission line operators, and these Priority Habitats must include sufficient protections to keep such transmission lines at least 0.25 miles away from all occupied sage grouse habitats, and at least 4 miles away from active leks.

Comment Number: OR-GRSG-0591-45

Comment Excerpt Text:

Importantly, while only scattered oil and gas development has occurred in the planning area, full-scale geothermal and wind production projects have been undertaken here. So the direct threat of habitat destruction and indirect impacts of sage grouse abandoning surrounding lands that are otherwise important from a habitat perspective are in some ways more serious for wind and geothermal projects than they are for oil and gas development, which is more of a widespread potential than current threat in the planning area. Thus, both these types of industrial development need to be excluded, on no uncertain terms, from Priority Habitats

SECTION 14.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0276-46

Comment Excerpt Text:

Text: Pg. 4-17, 5th para.

In addition, fences are often associated with power lines and communication towers. As discussed above under grazing, fences also pose a hazard to GRSG from collision as well as providing perches for predators and increasing fragmentation risk. Stevens (2011, p. 108) in a study of GRSG and fence interactions in Idaho found several factors contributing to collision risk. Fences within 2 kilometers (approximately 1.25 mile) of leks, fence densities exceeding 1 kilometer of fence (0.6 mile) per square km (0.4 square miles), and flat terrain posed greater risk.

Comment: IPC is not aware that "fences are often associated with power lines." In fact, fences are rarely associated with power lines or with power line right-of ways.

Comment Number: OR-GRSG-0276-48

Comment Excerpt Text:

Text: Pg. 4-18, 1st para.

The 3 percent disturbance cap under certain action alternatives would protect GRSG habitat from excessive disturbance in ROW avoidance areas.

Comment: It is unclear how the BLM is assessing ROW disturbance. Recent NEPA documents define direct impacts as the area of temporary and permanent ground disturbance, not the entire ROW width. In sagebrush ecosystem, utilities do not clear vegetation in ROWs as they would in forested environments.

Comment Number: OR-GRSG-0276-5

Comment Excerpt Text:

Messmer et al. (2013), citing UWIN's stakeholder-based literature and knowledge-based review of tall-structure impacts on sage-grouse, states that "Stakeholders concluded that there were no results in the published, peer-reviewed literature of experimental studies designed to evaluate the potential landscape effects of tall structures on sage-grouse." The article goes on to state the following:

Stakeholders concluded that a major impediment they encountered in reviewing the papers or reports cited regarding the potential effects of tall structures on sage-grouse were largely related to a lack of BACI experimental designs.

Specific stakeholder concerns included: (1) observational studies or observations based on personal communication or unpublished data; (2) inadequate descriptions of control and treatments or pre-existing habitat conditions; (3) inferences to sage-grouse from studies conducted on other species; (4) retrospective studies that did not quantify related environmental conditions; (5) inappropriate or misuse of citations; (6) the use of results from cumulative impact studies of other energy development to make inferences about the effects of tall structures on sage-grouse; and (7) small sample sizes. (Utah Wildlife-in-Need Foundation 2010)

These same limitations plague the BLM's Draft Resource Management Plan Amendment (RMPA)/EIS evaluation of power line impacts. The literature and research findings used by the BLM appear selective, at times appear misrepresentative of the actual research results, use observations as if they are peer reviewed research, and fail to recognize the contradictory findings in studies. Following are examples of literature used in the Draft RMPA/EIS and by Manier et al. (2013), which is relied on heavily in the Draft RMPA/EIS document.

Comment Number: OR-GRSG-0276-50

Comment Excerpt Text:

Text: Section 4.2.4 Alternatives

Tables 4-20, 4-26, 4-31, 4-36: Percent of GRSG Populations Affected by ROW Exclusion or Avoidance Areas

Comment: These tables are at best confusing and at worst incorrect. Based on the associated text IPC has interpreted the tables to read as the percent of populated areas that fall within exclusion or avoidance areas, e.g., the amount of PPMA that fall within exclusion or avoidance area. By the definition how can the vast majority of GRSG habitat be outside of these areas, as is the case with the Baker and Central Oregon populations. IPC does not know how to accurately interpret the purpose or intent of these tables. As IPC has interpreted them, they do not make sense.

Comment Number: OR-GRSG-0276-52

Comment Excerpt Text:

Text: Pg. 4-172. Assumptions

- Power lines and other vertical structures located in areas naturally devoid of perching opportunities provide a perch for raptors and subsequently increase the potential for GRSG to abandon leks (Ellis 1984). Mitigation in the form of burying lines or including nonperching design features on lines would reduce perching opportunities and subsequent impacts on GRSG (Connelly et al. 2000b).

Comment: Vertical Structures--Very limited information is available on the direct behavioral response of sage- grouse to tall structures. The most frequently cited literature supposedly providing evidence of avoidance of tall structures by sage-grouse are either unpublished or non-peer reviewed reports (Ellis 1985, 1987; Braun 1998; Braun et al. 2002). Power lines have been postulated as novel elements in a tree-less landscape to which sage grouse are not habituated and may associate with increased levels of predation. Avoidance of tall

structures would essentially create an area around such structures that are not functionally used by sage grouse or less frequented, resulting in the loss or partial loss of habitat and fragmentation of the landscape for sage grouse. Walters et al. (2014) reviewed the effect of tall structures on birds, primarily functional habitat loss due to avoidance. They did not detect any consistent response to tall structures and concluded that a structure's "tallness" could not be isolated from other factors associated with the development such as human activity. However, avoidance behavior of sage grouse in relation to tall structures has not been published in peer-reviewed literature (Messmer et al. 2013).

Recent studies have shown that sage-grouse responses to tall structures are variable and do not necessarily show avoidance of structures and associated habitat. LeBeau (2012) also found that sage-grouse selected nesting habitat closer to transmission lines that have existed for over 10 years and are within quality habitat at Simpson Ridge. Also, female survival in the study area was greatest at closer proximity to the transmission lines. Nest site selection was higher closer to transmission lines in one study area and not a factor in the other study area. Brood rearing habitat selection in one study area increased with distance to the transmission line up to 4.7 km and then declined, but in the other study area brood rearing habitat selection was highest in the area around the transmission line. The risk of nest failure increased as distance from the transmission line increased. Brood survival was not impacted by distance to transmission lines. The study found female survival was highest near the transmission lines throughout the study area. Long-term studies associated with the Falcon-Gondor transmission line (Nonne et al. 2011, 2013) did not show avoidance behavior of radio-tracked sage-grouse of tall structures (power line corridors)

Ellis (1984) describes the behavioral response of sage grouse to golden eagles at a lek. Some males flushed, others remained ("master cocks") and continued displaying after a while. There is no evidence provided that the lek was abandoned because of the presence of golden eagles. IPC suggest that the BLM carefully evaluates Ellis (1984) document and make changes to the statement in the DEIS accordingly.

Mesmer et al. (2013) reviewed available information on the effectiveness of perch deterrents and concluded that these devices had not proven effective in eliminating raptor or corvid perching on transmission and distribution lines (APLIC 2006, Lammers and Collopy 2007). In fact, perch deterrents may encourage raptors and corvids to nest on structures and may increase the level of risk of electrocution for raptors. IPC encourages the BLM to evaluate the effectiveness and suitability of perch deterrents for powerline structures.

Comment Number: OR-GRSG-0311-1

Comment Excerpt Text:

The Plan (Volume 1, pg. ES-15) stipulates that human-caused disturbance (including current on-the-ground disturbance) will not be allowed to effect or cover more than three percent of a Preliminary Priority Management Area (PPMA), regardless of ownership. The meaning of that statement is of major concern and what consequences it may have on private lands. The Plan, under any alternative and prior to adoption, must clearly define how that will affect private lands.

Comment Number: OR-GRSG-0312-1

Comment Excerpt Text:

The Plan (Volume 1, pg. ES-15) stipulates that human-caused disturbance (including current on-the-ground disturbance) will not be allowed to effect or cover more than three percent of a Preliminary Priority Management Area (PPMA), reg ardless of ownership. The meaning of that statement is of major concern and what consequences it may have on private lands. The Plan , under any alternative and prior to adoption, must clearly define how that will affect private lands.

Comment Number: OR-GRSG-0312-3

Comment Excerpt Text:

The possibility of developing renewable energy resources for the other four (4) school districts in Lake County exists. However, how the proposed

Plan will affect their ability to develop renewable energy is unknown and must be resolved to the benefit of those districts and Lake County.

Comment Number: OR-GRSG-0378-5

Comment Excerpt Text:

Section 4.10 references undergrounding transmission lines. This needs to be addressed in that undergrounding may remove a vertical structure but will introduce other impacts such as vegetation removal for construction and continued through the life of the line, additional infrastructure needs to support underground lines, exponential acreage impacts versus above ground, and does not remove the need for roads

Comment Number: OR-GRSG-0433-13

Comment Excerpt Text:

Lands and Realty – Right-of-Way

Habitat loss and fragmentation from renewable and non-renewable energy infrastructure have negative effects to sage-grouse populations and habitat. Within the planning area, renewable energy development and associated transmission infrastructure are perhaps the most probable large-scale industrial development that could impact sage-grouse habitat. Given the potential for renewable energy and transmission, BLM should put in place requirements that reduce impacts and facilitate responsible development.

As discussed in the NTT report, development of Rights-of-Way (ROW) (such as powerlines, pipelines, and renewable energy projects) and access to various mineral claims or energy development locations have the potential to cause habitat loss and fragmentation that decreases habitat and population connectivity (BLM 2011). Sage-grouse commonly collide with fences, and negative effects of power lines, including collisions resulting in injury and death have been demonstrated (BLM 2011, Christiansen 2009). See also 75 Fed. Reg. at 13929, 13941. Disturbances, such as roads, powerlines, pipelines, and communication towers, modify habitats and landscapes to spread exotic plant species, influence predator movements and distributions, and facilitate human activities while additionally fragmenting the landscape (Connelly et al. 2004). These disturbances are commonly associated with ROW development have been identified as one of the primary threats to sage-grouse habitat (USFWS 2010). Development of infrastructure for any purpose (e.g., roads, pipelines, powerlines, and cellular towers) results in habitat loss, fragmentation, and may cause sage-grouse habitat avoidance. Additionally, infrastructure can provide sources for the introduction of invasive plant species and predators (USFWS 2013).

Effectively eliminating, avoiding and minimizing the impacts of ROW development must be a primary component of the DEIS. The preferred alternative in the DEIS, however, does not sufficiently address the threat that ROW infrastructure poses to sage-grouse and could instead allow significant impacts in all sage-grouse habitat types. Alternative D does not exclude any areas from new ROW issuance, relying instead on avoidance. "PPMA currently managed as exclusion areas for new BLM ROW authorizations would remain exclusion areas. All other PPMA would be designated as avoidance areas for new

ROW authorizations." (DEIS Action D-LR 1 at 2-90) "Alternative D would avoid ROWs in PPMA, and on a case-by-case basis in PGMA but would not establish exclusion areas. Exclusion areas may be ineffective, because existing infrastructure corridors have been sited in locations that minimize impacts, and relocation could merely push ROW development onto adjacent private lands with fewer land use restrictions." (DEIS at 4-67) Alternative D relies on the faulty premise that employing ROW exclusion areas would push development onto adjacent private lands with fewer land use restrictions. This sweeping generalization is inaccurate and an insufficient justification for opting not to exclude any additional areas of public lands from ROW authorizations. In fact, private and other non-federal lands are subject to comprehensive land use standards under the State of Oregon's land use planning program and associated county-level land use requirements. BLM's chief obligation in the DEIS is to make decisions for lands within the planning area for which the BLM has

authority to make land use and management decisions (BLM 2005). BLM has no authority over the private lands alluded to in the justification for not including any new ROW exclusion areas on public lands and cannot a priori determine what restrictions may or may not apply to future ROW development proposals on private lands. The conservative and reasonable assumption is the opposite – if BLM fails to enact strong habitat protections, ROW development will be more likely to occur and could result in impacts to private as well as public lands. So while BLM is right to consider the cumulative effect of its actions, this faulty premise of "pushing" development onto private lands should not dictate a preferred alternative that fails to identify even a single new acre as excluded from new ROW authorizations. BLM must constrain its decisions to lands within its own planning area and authority and it must identify ROW exclusion areas that will provide effective and durable protections for sage-grouse. BLM should select and modify Action B-LR 1 making all PPMA, as well as critical and restoration connectivity habitat, exclusion areas for new ROW authorizations. Excluding priority and connectivity habitat from ROWs would prevent negative habitat fragmentation impacts from ROW development in the most important sage-grouse habitat areas while still allowing ROW development in PGMA and nonhabitat areas.

BLM's preferred alternative for ROW management in PGMA does not adequately protect sagegrouse

habitat. In PGMA BLM should select Action B-LR 5 to manage PGMA as avoidance areas for new ROWs. Designating PGMA as avoidance areas should be combined with provisions for avoidance and mitigation similar to those described in Action D-LR 1. Proposals for ROW development in PGMA should first be directed to non-habitat areas. If non-habitat areas are not found to be feasible, only then should development occur in PGMA. In those cases, development should be accompanied by stringent regulations—strict mitigation, no net loss, and must not exceed the 5% disturbance cap. Additionally, the DEIS must include the terms and conditions that may apply to ROW corridors or development areas, including best management practices to minimize environmental impacts and limitations on other uses which would be necessary to maintain the corridor and ROW values (BLM 2005). No alternative in the DEIS provides sufficient specificity on the terms and conditions or best management practices that would be employed to minimize impacts to sage-grouse habitat. BLM should include additional detail on the terms and conditions that will be included for any issuance of a ROW in PGMA. Sage-grouse also avoid habitat near fence posts and powerlines because of the threat from predators that perch there, thus eliminating otherwise suitable habitat. 75 Fed. Reg. at 13928–29, 13931.

Powerlines effectively influence (direct physical area plus estimated area of effect due to predator movements) at least 39% of the sage-grouse range (Knick et al. 2011). Deaths resulting from collisions with powerlines were an important source of mortality for sage-grouse in southeastern Idaho (Beck et al. 2006). See also 75 Fed. Reg. at 13910. Consistent with these NTT report (2011) findings on sage-grouse impacts from powerlines, Action D LR-2 describes a procedure by which existing power line ROWs would be evaluated for potential modifications that would benefit sage-grouse. This procedure does not, as some have claimed, mandate the burial of power lines and would not necessarily result in financial hardship because of power line burials. The described procedure is consistent with BLM policy requirements to minimize adverse environmental impacts when evaluating the re-issuance of long term right-of-way grants on any area of the public lands. BLM policy is to renew a grant as long as the holder is continuing to use, maintain and operate the facility for the purposes authorized in the original grant, and the use, maintenance and operation are in compliance with the grant terms and applicable laws and regulations (BLM 2008B). It certainly follows then that ROW holders must comply with efforts to protect wildlife habitat and, in the case of sage-grouse, identify reasonable opportunities to minimize negative impacts to habitat at the time of ROW renewal. ROW renewals are

simply issuances of new grants of rights-of-way to existing ROW holders for existing facilities. BLM must, when issuing any ROW grant, identify the terms and conditions that may apply to right-of-way corridors or development areas, including best management practices to minimize environmental impacts (such as sage-grouse habitat impacts) and limitations on other uses which would be necessary to maintain right-of-way values (BLM 2005A). Failure by BLM to consider impacts to sage-grouse from ROW facilities and potential benefits from burial, modification or relocation would be inconsistent with agency requirements for ROW issuance. Action D-LR 2 can and should remain in BLM's proposed action.

Comment Number: OR-GRSG-0434-39

Comment Excerpt Text:

Alternative D relies on the faulty premise that employing ROW exclusion areas would push development onto adjacent private lands with fewer land use restrictions. This sweeping generalization is inaccurate and an insufficient justification for opting not to exclude any additional areas of public lands from ROW authorizations. In fact, private and other non-federal lands are subject to comprehensive land use standards under the State of Oregon's land use planning program and associated county-level land use requirements. BLM's chief obligation in the DEIS is to make decisions for lands within the planning area for which the BLM has authority to make land use and management decisions (BLM 2005). BLM has no authority over the private lands alluded to in the justification for not including any new ROW exclusion areas on public lands and cannot a priori determine what restrictions may or may not apply to future ROW development proposals on private lands. The conservative and reasonable assumption is the opposite – if BLM fails to enact strong habitat protections, ROW development will be more likely to occur and could result in impacts to private as well as public lands. So while BLM is right to consider the cumulative effect of its actions, this faulty premise of "pushing" development onto private lands should not dictate a preferred alternative that fails to identify even a single new acre as excluded from new ROW authorizations.

Comment Number: OR-GRSG-0436-2

Comment Excerpt Text:

Furthermore, ORECA does not believe that the funding sources for required mitigation under all alternatives is sufficiently described in the DEIS. The alternatives described in the DEIS call for various minimization and mitigation measures including the removal, burial, or modification of power lines within specified management areas; the application of perch discouragers on infrastructure; and unspecified requirements at ROW renewal. However, at no point does the DEIS identify the entity required to fund such minimization and mitigation measures

Comment Number: OR-GRSG-0532-109

Comment Excerpt Text:

Pg. 4-67 - Given Oregon's land use planning laws and existing state policies, the EIS should provide references the following statement and conclusion "Exclusion areas may be ineffective, because existing infrastructure corridors have been sited in locations that minimize impacts, and relocation could merely push ROW development onto adjacent private land with fewer land use restrictions. Thus, Alternative Ds flexible approach would be most effective in protecting GRSG habitat."

Comment Number: OR-GRSG-0532-111

Comment Excerpt Text:

The term collocation is used in reference to consolidating new infrastructure. With regards to transmission infrastructure this term has recently been confused with paralleling. Please clarify that collocation either means: a) to collocate on existing poles or b) to allow additional poles and lines within the existing ROW or disturbance corridor. See 4.10.1 Methods and Assumptions (pg. 4-173, 3rd bullet) and 4.10.2 Nature and Type of Effects (pg. 4-174, 3rd Paragraph)

Comment Number: OR-GRSG-0567-37

Comment Excerpt Text:

Infrastructure (Chapter 4, Alternative D, page 52) - The information describes the ROW avoidance areas and the Exclusion areas, and how they are different. It also describes in Table 4-31 the percent of the

populations that would be effected by the avoidance areas. What is not clear is exactly what the "percent of the population" actually represents - is this total actual population based on lek counts, or is this an estimation of the actual population based on the acres of habitat excluded? This same question applies to many other tables, including 4-32.

Comment Number: OR-GRSG-0591-76

Comment Excerpt Text:

BLM assumes that halting mineral and energy development and mining will shift impacts onto private lands, where regulations are less stringent. DEIS at 4-35, 4-62. The same argument is made with raged to transmission lines. DEIS at 4-38. However, this could also decrease impacts to adjacent private lands in cases where projects involving both public and private land are canceled due to infeasibility of development without involving the public lands. Please address this shortcoming in the impacts analysis and make adjustments accordingly.

SECTION 14.5 - MITIGATION MEASURES

Comment Number: OR-GRSG-0095-9

Comment Excerpt Text:

the draft DEIS provides no comprehensive list of required mitigation measures for potential ROW developments. Without a specific discussion, it is not possible to evaluate whether or to what degree the impacts will be on a site specific basis or what the cumulative impacts of disturbance will be. We think mitigation measures, if implemented, must be mandatory, concrete, and transparent—which the EIS has failed to provide.

Comment Number: OR-GRSG-0276-33

Comment Excerpt Text:

Text: Pg. 2-90 and 2-91, Table 2-6, Alternative D; Land and Realty – Right-of-Way

Lands and Realty (LR) – Right-of-Way Applicant must apply restoration mitigation to a nearby area prior to causing new disturbance to ensure 3% threshold is not exceeded. Examples of mitigation would be burying a power line, decommissioning and revegetating a road, or restoring a mined area.

Comment: To what habitat quality level would mitigation actions have to achieve to meet an apriori requirement? Ecological function of a mitigation project may take years to achieve. If this is the threshold that must be met, this is a pointless opportunity to make available to project developers.

Comment Number: OR-GRSG-0276-34

Comment Excerpt Text:

Action D-LR 2: Evaluate power lines in PPMA by District and identify which power lines would provide the most benefit to the species by being buried, modified, or relocated. At renewal or amendment discuss with the ROW holder the technical and financial feasibility of burying or relocating the existing power lines. If it is technically or financially feasible to bury or relocate the existing power lines require the ROW holder to do so.

Comment: Undergrounding power lines is often raised as possible permit stipulations or mitigation options. However, undergrounding has significant efficacy, cost, and unintended environmental concerns that should be carefully evaluated. Often, risks may outweigh the intended benefits. Electric utilities install power lines either overhead or underground depending upon numerous considerations. Terrain, habitat type, existing infrastructure or natural features, maintenance access, reliability and construction constraints or other factors are considerations that need to be evaluated prior to proposing to construct an underground line. Undergrounding can contribute to longer outages and more expensive service that will affect customers. Underground power lines can be difficult to repair and are susceptible to flooding and are still vulnerable to lightning damage to equipment. The effective longevity of an underground power line is about half that of an overhead power line. Underground transmission lines require a continuous excavation through all habitat types. This is in contrast to overhead lines, which result in a disturbance only at the structure locations. The

ground disturbance is greater for underground lines than overhead lines of the same voltage. Construction of underground power lines can take three to six times longer than overhead line construction. Finally, cost is a major concern as electric utilities have mandates to serve customers with high quality, eliable electric service at the lowest cost possible. Idaho Power's typical construction costs for overhead distribution lines range from $80,000 per mile to $150,000 per mile and typical costs for underground distribution lines of comparable service ranges from $500,000 thousand to $1.5 million per mile for an all conduit system (which is Idaho Power's standard). Underground lines also require aboveground facilities for terminating, switching, and transforming equipment. The BLM should take into account all environmental, economical, and social impacts of undergrounding powerlines as a seemingly simple proposed mitigation measure in the RMPA/DEIS

Comment Number: OR-GRSG-0276-53

Comment Excerpt Text:

Text: Pg. C-2. Appendix C. Required Design Features

For Alternatives B, C, D, E, F

- Restrict the construction of tall facilities and fences to the minimum number and amount needed.
- Site and/or minimize linear ROWs to reduce disturbance to sagebrush habitats.
- Place new utility developments (e.g., power lines and pipelines) and transportation routes in existing utility or transportation corridors.
- Bury distribution power lines.
- Place power, flow, and small pipeline corridors under or immediately adjacent to roads.

Comment: Vertical Structures—NERC reliability standards for transmission lines need to be followed. Therefore, transmission lines may not be placed in existing transmission line ROWs, as recommended by the BLM.

Power poles, towers, and fence posts may provide attractive hunting and roosting perches for common raven and raptors, in addition to natural substrate (e.g., cliffs and rock outcrops). Several studies have shown that predation of sage-grouse, their nests and chicks is not a serious threat when habitat is not limited and of good quality (e.g., Coates and Delehanty 2010, Conover et al. 2009, USFWS 2010). Hagen (2011) reviewing sage-grouse predation literature, concluded that on average predation is not limiting sage-grouse populations, except in fragmented landscapes.

Powerlines and Pipelines--There are two main concerns when pipelines are in close proximity to and parallel power lines for some distance. First is the potential for a power line to create or enhance corrosion if a buried pipeline is comprised of metallic pipe. In some situations, power lines can negate existing pipeline cathodic protection systems meant to prevent pipeline corrosion. The cathodic protections impacts of a power line on a pipeline can be studied and mitigated, but this mitigation is generally at the discretion of the buried pipeline owner since their facilities are the ones negatively impacted. Second is safety. Second is safety. A fault on the electric line can cause a dangerous rise in electrical potential in the earth and this can result in an impressed voltage potential on the pipeline. This situation is only a problem for a short amount of time until the protective equipment on the power line senses the fault and trips the line. However, a pipeline worker can be exposed to high voltage potentials (both step and touch potentials) that could cause harm to the worker. For this reason, some pipeline companies are hesitant to co-locate facilities with power lines and others require special design measures to mitigate the potential threat.

Comment Number: OR-GRSG-0378-3

Comment Excerpt Text:

MidAmerican is also working with APLIC and resource agencies (including the BLM, FWS, and state agencies) in the development of Best Management Practices for electric utilities in sage-grouse areas (see discussion below). MidAmerican encourages the

BLM to reference these BMPs in the Oregon RMP EIS.

Comment Number: OR-GRSG-0378-7
Comment Excerpt Text:
The APLIC model of collaborative, voluntary efforts - such as the Avian Protection Plan Guidelines, short courses, and guidance documents developed in partnership with the FWS - is serving as a framework for the sage-grouse BMPs. These BMPs are intended to be a living document that is updated and refined as new research is available. Consequently, these BMPs would be easier to update (compared to a RMP) to reflect new science and technology. MidAmerican and its peers in APLIC are interested in working with the BLM, FWS, and other agencies to develop measures that are practical, effective, science-based, and justifiable to customers and public service commissions

Comment Number: OR-GRSG-0378-8
Comment Excerpt Text:
For unknown impacts of power lines, MidAmerican recommends that the BLM provide opportunities and incentives to conduct additional research using the research protocols developed by Utah Wildlife in Need (UWIN) in 2012 and endorsed by the Western Association of Fish and Wildlife Agencies (WAFWA). As indicated by WAFWA, such research should be acceptable as a component of a mitigation package for unknown project impacts. In addition, MidAmerican encourages the BLM to continue to work with APLIC to identify potential sage-grouse conservation partnership opportunities with the electric utility industry

SECTION 15 - LEASABLE MINERALS

SECTION 15.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0095-23
Comment Excerpt Text:
Management Prescriptions:

i. Management inside SGCAs in sage-grouse habitat

§? Close/find unsuitable/withdraw all unleased or available areas to fluid, solid, locatable or salable mineral leasing.256

§? Upon expiration or termination of existing leases, do not re-lease the area.

§? Only allow geophysical exploration activities by helicopter portable drilling methods in accordance with appropriate seasonal and timing restrictions.

§? In existing leased and permitted areas, apply a 10 km non-surface occupancy around active leks and limit permitted disturbance to 1 per section and no more than 3% surface disturbance per section.

§? Apply best management practices to minimize surface disturbing activities.

§? Implement courtship, nesting, early-brood rearing and winter seasonal and timing restrictions for all human activities.

§? Avoid the surface disposal of produced water257 unless it can be proven to be beneficial to sage-grouse and includes measures to preclude the spread of West Nile virus.

256 Here after, "leasing" or "leases."

257 Produced water is water that comes about from drilling or extraction activities.

ii. Management outside SGCAs in sage-grouse habitat

§? Apply a 10 km non-surface occupancy around active leks and limit permitted disturbance to 1 per section and no more than 3% surface disturbance per section.

§? Apply best management practices to minimize surface disturbing activities.

§? Implement courtship, nesting, early-brood rearing and winter seasonal and timing restrictions for all human activities, including exploration.

§? Avoid the surface disposal of produced water unless it can be proven to be beneficial to sage-grouse and includes measures to preclude the spread of West Nile virus.

Comment Number: OR-GRSG-0434-33

Comment Excerpt Text:

The extremely low amount of fluid mineral leasing and development in the planning area also affords an opportunity to pursue buy outs or exchanges of leases in order to direct leasing and development toward areas with low or no habitat conflicts. BLM should include a decision in the proposed action allowing the agency to pursue these transactions for any lease in PPMA, PGMA or connectivity habitat.

Comment Number: OR-GRSG-0434-34

Comment Excerpt Text:

BLM should include a new Action B-MLS 7 to close and withdraw some portions of PGMA to new leasing. This action should correspond to the existing PGMA leasing closure area described under alternatives A and B in Table 2-5. No such Action is included in Table 2-6. For those portions of PGMA that are not closed and withdrawn BLM should select Action D-MLS 7.

BLM should include a new action only allowing fluid mineral leasing in connectivity habitat subject to no surface occupancy stipulations.

Comment Number: OR-GRSG-0532-127

Comment Excerpt Text:

Pg. F-11, Table F-1, Alternative D - Identify how the 5% disturbance limit was reached.

Comment Number: OR-GRSG-0567-57

Comment Excerpt Text:

Mining/Minerals are mentioned as a major threat facing the Northern Great Basin (Oregon population) in the COT report. However, BLM's draft EIS Alternative D fails to ameliorate this threat due to the following:

- Relies on discretionary actions for avoiding impacts to sage-grouse from mining activities; does not close PPMA to Fluid mineral mining (allowing disturbance of breeding/nesting sage-grouse and further fragmentation of sage-grouse habitat); does not recommend PPMA for withdrawal for locatable mineral mining; maintains current stipulations for PPMA (allowing disturbance of breeding/nesting sage-grouse and further fragmentation of sage-grouse habitat); and allows new disturbance as long as within 3 percent cap; however, scale (which is very important) at which this percentage cap will be established and measured is not discussed.
- We recommend the following: close PPMA to fluid mineral mining and withdrawal PPMA for locatable mineral mining (do not allow disturbance of breeding/nesting sagegrouse and further fragmentation of sage-grouse habitat in PPMA); establish scale at which the 3 percent disturbance cap will be set and measured; and the Alternative D should be replaced by Alternatives C and F for mining/minerals.
- The only change from the current situation on BLM lands proposed in Alternative D is the change to PPMA designated as 'NSO' (no surface occupancy) for fluid minerals. There is no change from the current condition on BLM lands for locatable minerals (i.e. gold) from Alternative D. This is currently a much larger threat to sage-grouse in Oregon than fluid mineral mining. Additionally, BLM's draft EIS states that Alternative D (and Alternative A-No Action) are the least effective in avoiding impacts to sage-grouse and their habitat from mining activities (page 2-140, Table 2-8).

Comment Number: OR-GRSG-0591-40

Comment Excerpt Text:

BLM should also consider a phased leasing alternative under which a third or less of the planning area is open at any given time to leasing and development. Leases that are not drilled and held by production are forfeited back to the agency after their 10-year lease term expires, except in cases of unitization. It makes

the best sense for BLM to close areas that are highly sensitive to future leasing even if they are leased today; most of BLM's Wilderness Study Areas were heavily leased upon establishment, and even though operators were given the opportunity to be grandfathered in if these leases were developed, few were and today WSAs are almost entirely free of the encumbrance of oil and gas leases.

Comment Number: OR-GRSG-0591-5
Comment Excerpt Text:
Wellpad Density Standards

Alternatives B and F would limit surface disturbances to no more than one per section. DEIS at 2-94. BLM's Preferred Alternative has no limit on the density of wellpads or other surface disturbances. Id. Please review the best available science and make a determination regarding whether one wellpad/disturbance per section, or no limit at all, is the most scientifically supported approach or whether no limit on wellpad density would best achieve the purpose and need of the plan amendment. Please consider the following studies which directly address the threshold of well density at which impacts to sage grouse occur: Holloran (2005), Doherty (2008), Walker et al. (2007), Taylor et al. (2012), and Copeland et al. (2013). Attachments 3, 4, 5, 6, and 7, respectively. Each of these studies find significant declines of sage grouse populations as well densities exceed one pad per square mile, and some of these studies indicate negative effects on sage grouse at lower wellpad densities.

SECTION 15.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0433-9
Comment Excerpt Text:
The DEIS contains a significant discrepancy between the stated acreages for fluid mineral leases in the planning area that requires clarification. Appendix O shows that there are approximately 43,000 acres of current oil and gas leases and approximately 47,000 acres of active geothermal leases in Oregon. Chapter 3 states that there are currently 204,691 acres leased. These figures need to be reconciled and BLM should provide maps of both active geothermal leases and active oil and gas leases.

Comment Number: OR-GRSG-0532-58
Comment Excerpt Text:
Pg. ES-4 -This section points out the split mineral estate with the BLM and private lands, but does not reference the state split estate, where the State (e.g., DSL) owns a significant amount of mineral estate in the planning area. Recognition should be made of the DSL split mineral estates, and the legal constraints that might impose on some activities.

Comment Number: OR-GRSG-0532-60
Comment Excerpt Text:
Pg. 1-9 indicates that actions outlined in this plan will not have an impact on the split estates where the surface is owned by state agencies. However, on pg. 3-101 the DEIS states exclusively that "acreage refers to the federal mineral estate." The federal mineral estate includes BLM-administered minerals that occur beneath surface estate managed by the BLM, as well as beneath surface estate owned by state or private entities (also known as split-estate lands). The DEIS needs to clarify whether split estate approaches include both federal and state split estates.

In particular, the DEIS needs to describe the approach on a split estate where the State owns the mineral estate and the BLM retains surface ownership. Generally the mineral estate is the dominant estate, which would indicate that the State has the right to develop the minerals while showing due regard to the BLM's surface ownership. This should be explicitly stated. The State (DSL) needs clarification on the impacts on both the State Trust surface-owned split estate, and the State Trust subsurface- owned split estate.

State surface ownership with BLM minerals - Currently BLM does not notify the state (particularly DSL) when there is an interest in BLM minerals underlying DSL surface ownership. This often leads to exploratory pits and dozer lines on state land (without the consent or knowledge of DSL) and are

not restored to previous conditions. The State recommends the BLM commit to notifying responsible state agency when there is interest in federal minerals underlying State ownership to provide the opportunity to negotiate entrance and exploratory mining activity requirements in terms of compensation and restoration/mitigation for any surface disturbances.

Comment Number: OR-GRSG-0591-5
Comment Excerpt Text:
Wellpad Density Standards

Alternatives B and F would limit surface disturbances to no more than one per section. DEIS at 2-94. BLM's Preferred Alternative has no limit on the density of wellpads or other surface disturbances. Id. Please review the best available science and make a determination regarding whether one wellpad/disturbance per section, or no limit at all, is the most scientifically supported approach or whether no limit on wellpad density would best achieve the purpose and need of the plan amendment. Please consider the following studies which directly address the threshold of well density at which impacts to sage grouse occur: Holloran (2005), Doherty (2008), Walker et al. (2007), Taylor et al. (2012), and Copeland et al. (2013). Attachments 3, 4, 5, 6, and 7, respectively. Each of these studies find significant declines of sage grouse populations as well densities exceed one pad per square mile, and some of these studies indicate negative effects on sage grouse at lower wellpad densities.

SECTION 16 - LIVESTOCK GRAZING

Comment Number: OR-GRSG-0003-18
Comment Excerpt Text:
The preferred alternative (Alternative D) put forth in the RMPA recommends in a number of places that the "retirement" or "termination" of grazing on certain allotments within sagegrouse habitat should be considered or sought after. These recommendations are unclear. First, it is unclear what circumstances would "necessitate" a termination (Appendix I, p. I-6), whether retirement would be a course of last resort, whether a permittee would be compensated for their loss of property value by being given AUMs elsewhere, or how the BLM proposes to "work with" a permittee to relinquish a valuable part of his or her ranch.

Comment Number: OR-GRSG-0003-9
Comment Excerpt Text:
The BLM Cannot Terminate a Grazing Permit Without a Reclassification Determination that the Allotment to be Retired is no Longer "Chiefly Valuable for Grazing"—

The Department of Interior ("DOI") has established that grazing permits within grazing districts (as opposed to leases not in grazing districts) have been classified by the Secretary of Interior as being "chiefly valuable for grazing." As such, grazing on such permits cannot be "terminated" unless the Secretary makes a determination that the classification of the allotment(s) in question should be revised, effectively removing the allotment from the grazing district. If an analysis determines that the grazing classification is still appropriate, it is expected that grazing will continue on the allotment.

As explained by the Solicitor of the Department of Interior ("DOI") in M-37008, 2002:

"[L]ands within grazing districts have been found to be 'chiefly valuable for grazing and the raising of forage crops.' There must be a proper finding that lands are no longer chiefly valuable for grazing in order to cease livestock grazing within grazing districts."

Clearly, "terminating" or "retiring" grazing permits as the RMPA contemplates is an instance of "ceasing" livestock grazing as described by the DOI above. Therefore, in order to terminate or retire any permit, in addition to making a land use planning decision the BLM would necessarily have to analyze the land to determine whether a reclassification was appropriate. The RMPA fails to clarify this obligation.

In pursuing this course, the BLM would also have to take into account the fact that any reclassification

decisions are subject to consistency requirements with local government plans, policies, and land classifications, including plans, policies, and land classifications established by this District

Comment Number: OR-GRSG-0048-5

Comment Excerpt Text:

The mention of voluntary relinquishment of permits by permit holders, while possible a reasonable theory, opens up a whole new mess for permit holders through harassment by environmental groups pushing for these closures (this has already happened in multiple instances in other states). Also, these statements say the permits will be voluntarily relinquished within 5 years. This is a contradictory statement within itself, by stating "Within 5 years" BLM is putting a non-voluntary restraint on the relinquishment. What is the true intent here? Please be clear in this.

Comment Number: OR-GRSG-0068-2

Comment Excerpt Text:

Proposal to Allow Grazing Permit Retirement Is Unacceptable

There is statutory evidence, supported by case law, that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated (see e.g. DEIS Vol. 2 p.166, etc.). Although the Secretary may decrease grazing or temporarily rest an allotment for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. …Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbit, 167 F.3d 1287, 1308 10th Cir. 1999).

By allowing for permit termination in the planning area, BLM would not only be in danger of violating the law; it would be opening the floodgates to harassment of ranchers by radical special interest groups bent on eliminating grazing. This has proven to be the case in past instances where Congress acted to make permit retirement legal in specific areas, such as the Owyhee Wilderness Area in Idaho.

Comment Number: OR-GRSG-0090-2

Comment Excerpt Text:

Voluntary retirement of grazing permits by willing permittees is outlined in the BLM's preferred alternative. The Taylor Grazing Act provides protection to ensure a stable livestock industry in the west because the economies of local communities depend on public land grazing. These retired permits must be returned to grazing unless rangeland monitoring documents there are detrimental effects from livestock grazing. If these voluntary retirements are included in the RMP A, this would allow the area to be closed to grazing even if there were no negative impacts to sage-grouse or if grazing provided long term benefits to sage-grouse habitat. There is no evidence that grazing is a factor in the Sage-Grouse population decline. (Table 2-6, D-LG-RM 28: p. 2-86). Why would BLM has this as an alternative when there shows to be no long term benefits to sage grouse?

Comment Number: OR-GRSG-0093-60

Comment Excerpt Text:

Initially, the DEIS/RMPA is unclear on the approach it proposes to take regarding grazing in GRSG habitat. For example, it is impossible to determine the outcome sought by BLM when it states that the authorized officer will "work with" grazing permittees to "relinquish" grazing permits. Does such an action involves moving permittees to other allotments or allowing them to access suspended or inactive AUMs in other areas of their existing allotment(s), or would permittees would experience a net loss of AUMs? Further, it is not clear whether "working with" permittees to relinquish their permits is an action of last resort, or whether managers might pursue this course of action prior to, and in lieu of, implementing less drastic changes, temporary suspensions, or range improvements.

Similarly, the RMPA/DEIS does not explain whether an authorized officer must "work with" permittees to relinquish their grazing permits even when permittees do not wish to relinquish their permits. If the authorized officer is in fact required to do so, it is also unclear what involuntary relinquishment would entail, and how or whether BLM would replace relinquished AUMs.

Perhaps most troubling, the RMPA/DEIS instructs the authorized officer to "terminate leases if necessary," but does not explain what would necessitate a "termination." The RMPA/DEIS also fails to clarify that "termination" of a grazing permit on a grazing district would require—in addition to a land use planning decision—that a reclassification analysis be undertaken and result in a proper finding that the land was no longer chiefly valuable for grazing, causing the allotment's subsequent removal from the grazing district. Finally, although the word "termination" implies a permanent end to grazing, the RMPA/DEIS fails to clarify that any ecision to discontinue grazing established through land use planning is open to review and subsequent reversal in future land use plans

Comment Number: OR-GRSG-0093-62

Comment Excerpt Text:

In two recent memoranda, the Solicitor's office has stated that the BLM need only engage in a reconsideration of whether land remains chiefly valuable for grazing if it intends to establish, add to, or modify a district's boundary. M-37008; IM 2013-184. Although this is correct, this fact does not imply that BLM is authorized to cease grazing on grazing districts without undertaking a reclassification analysis. Within an existing grazing district, it is impossible to retire land from grazing (as proposed by the DEIS/RMPA) without ispso facto modifying the boundaries of the grazing district. Any other approach would result in the scenario, struck down by the court in Public Lands, where lands officially designated for grazing, and so placed into grazing districts, are not being used for the purpose for which they have been classified. It is therefore untenable for the DEIS/RMPA to imply that the removal of grazing on certain allotments, and the termination of the associated permits on lands designated "chiefly valuable for grazing" would not require modification of the grazing district boundary. These actions are clearly one in the same. Therefore, the BLM is not authorized, as the DEIS/RMPA suggests, to "terminate" permits and "retire" allotments without going through the proper procedures for removing these areas from the grazing district.

The RMPA/DEIS urges the "relinquishment" and "termination" of permits on RNAs and ACECs, most of which are within grazing districts. Yet no mention is made of the required reclassification analysis, and subsequent necessary finding that the allotment(s) in question is no longer "chiefly valuable for grazing," which would be necessary to accomplish the "termination" of grazing permits that the RMPA/DEIS contemplates. This suggests that the BLM is trying to eliminate grazing on grazing districts without undertaking the necessary reclassification analysis and supporting the subsequent finding. The law does not allow this, as the 10th Circuit has ruled. In the same decision (which considered the legality of "conservation permits") the 10th Circuit made explicit that land within grazing districts could not be reserved for purposes exclusive of grazing.

Comment Number: OR-GRSG-0145-9

Comment Excerpt Text:

Grazing Permit Retirement

There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated permanently (see DEIS Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. . .. Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbit, 167 F.3d 1287,1308 10th Cir. 1999).

By allowing for permit retirements in the planning area, BLM would not only be in danger of violating the law; it would be opening the floodgates to harassment of ranchers by radical special interest groups bent on eliminating grazing. This has proven to be the case in past instances where Congress acted to make permit retirement legal in specific areas, such as the Owyhee Wilderness Area in Idaho

Comment Number: OR-GRSG-0220-25

Comment Excerpt Text:

Harney County is concerned that the proposal to eliminate the grazing in certain areas is being considered outside the context of the Taylor Grazing Act. The Taylor Grazing Act outlines procedures to be followed in the "relinquishment" of permits. Further, under the Taylor Grazing Act if the permit is within a grazing district and has been previously determined to be "chiefly valuable for grazing and the raising of forage crops" then any reconsideration, modification or reversal in this determination must be addressed in all subsequent land use decisions.

Comment Number: OR-GRSG-0302-5

Comment Excerpt Text:

Finally, the RMPA in a number of places urges that the BLM pursue the "termination" or "retirement" of grazing permits by "working with" permittees to relinquish vital parts of their operations. There are a number of problems with this proposal. First, it is vague—the RMPA does not clarify the circumstances under which such a course of action would be pursued, nor does it explain whether permittees would be compensated for AUMs lost with AUMs in a different location. What is clear is that permittees will be forever in fear of having their permits retired, specifically given that failing to meet the unrealistic HAF standards are noted in the RMPA as one reason for seeking retirement of permits. It is simply unfair to terminate ranchers permits—and potentially put them out of business— because their allotment does not meet a standard that is neither locally-specific nor trend based. We recommend that the RMPA eliminate any recommendations to retire or terminate permits. Grazing allotments should remain open to grazing unless 1) the allotment is failing to meet locally-specific and trend-based rangeland health standards and cattle are the cause; 2) all possible adaptive management approaches have been applied, and closure is a measure of last resort; 3) the potential adverse affects of removing grazing (increased threat of rangeland fire, invasive weeds) have been taken into account

Comment Number: OR-GRSG-0309-4

Comment Excerpt Text:

On page I-6, there is language stating that in the priority RNAs, the BLM will work with grazing permit holders to voluntarily relinquish permits and terminate grazing leases, with the goal of removing all existing permitted grazing in RNAs within five years. This sort of language will open up the BLM to lawsuits from extreme environmental organizations trying to force relinquishment of permits. Although there is a process in which permits can be voluntarily relinquished, the way described in the RMPA may very well be illegal and in violation of the Taylor Grazing Act.

Comment Number: OR-GRSG-0356 (FrmLtr07)-7

Comment Excerpt Text:

Grazing Pennit Retirement. There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be tenninated permanently (see Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the Resource Management Plan process (or on a more temporary basis) for the sake of rangeland health, the Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if

deemed sufficiently healthy, are to be made available for grazing:

BLM may impose temporary reductions, or pennittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, pennissible grazing levels will rise. .,. Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbit, 167 F.3d 1287, 1308 10th Cir. 1999).

Comment Number: OR-GRSG-0357 (FrmLtr08)-1

Comment Excerpt Text:

There is statutory evidence, supported by case law, that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated (see e.g. DEIS Vol. 2 p.166, etc.). Although the Secretary may decrease grazing or temporarily rest an allotment for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts are to be made available for grazing:

"BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. …Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbit, 167 F.3d 1287, 1308 10th Cir. 1999)."

Comment Number: OR-GRSG-0373-1

Comment Excerpt Text:

There is statutory evidence, supported by case law, that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated (see e.g. DEIS Vol. 2 p.166, etc.). Although the Secretary may decrease grazing or temporarily rest an allotment for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. …Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbit, 167 F.3d 1287, 1308 10th Cir. 1999).

By allowing for permit termination in the planning area, BLM would not only be in danger of violating the law; it would be opening the floodgates to harassment of ranchers by radical special interest groups bent on eliminating grazing.

Comment Number: OR-GRSG-0450-1

Comment Excerpt Text:

The Proposal to allow Grazing Permit Retirement is not a viable option. Through the Taylor Grazing Act and the Federal Land Policy Management Act both mandate that forage resources on grazing districts are made available for grazing. Retiring the permit even voluntarily would take the land out of its designated use, causing a higher risk of wild fire and ultimately loosing the existing habitat we are attempting to augment.

Comment Number: OR-GRSG-0465-3

Comment Excerpt Text:

The proposed standards and guidelines contravene the TGA because they myopically focus on sage-grouse range management to the detriment of livestock grazing and development of the range.

Comment Number: OR-GRSG-0532-37

Comment Excerpt Text:

Pg. 2-86 - Action B-LG/RM 28 -Action D LG/RM 28 is the same as Alternative B. If grazing is not contributing to decreases in rangeland health, and the current permittee no longer wants to graze, allow another operator the opportunity to graze the allotment and/or consider how the allotment can be used by other operators to better distribute livestock and reduce impacts in other areas, prior to full retirement of the grazing permit. There is a need for

grass banks in the area given the nature and ongoing effects of fire and invasive weed work, and that should very much be taken into account in the BLM's decision-making prior to full retirement of a grazing permit or closure of an allotment.

Comment Number: OR-GRSG-0606-7

Comment Excerpt Text:

The BLM National Sage-grouse Habitat Conservation Strategy is entitled "Guidance for the Management of Sagebrush Plant Communities for Sage-Grouse Conservation," and hence is directly applicable to the instant planning area. The Strategy includes a host of enforceable limitations and requirements on livestock grazing to protect sagebrush habitats, and to maintain, enhance or restore sagebrush habitat, including:

- Avoid constructing livestock management facilities (i.e., corrals, tanks, troughs, pipelines, fences, etc.) next to leks;
- Design and locate the placement of fences for livestock . . . so as not to disturb important sage-grouse habitat areas;
- Consider seasonal closures to protect priority sage-grouse habitat if other alternatives will not achieve desired objectives;
- Use grazing practices that promote the growth and persistence of native shrubs, grasses and forbs needed by sage-grouse for seasonal food and concealment. . . Vegetation structure (height) should be managed so as to provide adequate cover for sage-grouse during the nesting period;
- Maintain seeps, springs, wet meadows, and riparian vegetation in a functional and diverse condition for young sage-grouse;
- Maintain sagebrush and understory diversity . . . adjacent to crucial season sage-grouse habitat unless removal is necessary to achieve sage-grouse habitat management objectives;
- Where other grazing management options are not achieving, or cannot achieve, the desired objectives, a short-term option may be livestock exclusion.8

These measures must be directly incorporated in the current plan for the DRMPA/DEIS to comply with the agency's own regulation.

SECTION 16.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0001-1

Comment Excerpt Text:

The Habitat Assessment Framework proposed to be included in all Rangeland Health Assessments is overkill. The HAF is a single species oriented monitoring program that comes with expensive and time consuming methodology. Where in the RMPA is it addressed how this monitoring is going to be paid for?

? Current monitoring by Rangeland Health Assessments has been conducted since 1998 and is still only 57% complete. Our own RHA that was done in 2011 addresses not only the Special Status Species such as the Greater Sage Grouse, but all aspects of the ecology of that permit including wildlife, forages, etc. The BLM has already adjusted management on many of these completed

allotments to meet the Standards for Rangeland Health for the entire ecology of the allotment. If the current RHA's haven't been completed over 15 years where will the manpower and funding come from to add the HAF? Continue to utilize what you have started, and is working, rather than implementing more unwarranted regulation specific to one part of the ecology. For example, our own RHA on our permit indicates no problem with GRSG habitat, but that a future threat may come from Juniper Encroachment. It even states that Juniper Removal could be implemented in the future if necessary, but that the existing Juniper is providing excellent habitat for other species on the allotment. A regulatory program specific to one species is going to cause problems for the others and the cycle will not end. What's good for one is not good for the other.

Comment Number: OR-GRSG-0001-2

Comment Excerpt Text:

The BLMs preferred alternative D will close to grazing all Research Natural Areas (RNA's) which have over 50% general habitat not meeting the Standards for Rangeland Health with unsuitable HAF ratings. (Table 2-6, D-LG-RM 1 pg. 2-79). This approach is unsubstantiated as it fails to require livestock grazing to be identified as the cause of the failed ratings.

Comment Number: OR-GRSG-0003-4

Comment Excerpt Text:

The stated purpose of the RMPA is to conserve GRSG habitat by implementing "appropriate conservation measures" that "conserve, enhance and/or restore GRSG habitat by reducing, eliminating, or minimizing threats." (RMPA p. ES-6). However, the stated justification for the termination of grazing on priority RNAs is to create "baseline reference areas" of "sagebrush plant community cells that are important for GRSG" in order to "monitor the effects from climate change on sagebrush ecosystems." (Appendix I, p. I-4).

Eliminating grazing on priority RNAs for this purpose has no substantive connection with the purpose of the RMPA as stated, i.e. the action does not "conserve, enhance and/or restore" habitat by "reducing, eliminating, or minimizing" threats to the GRSG. Grazing, BLM rangeland health reports have shown, is not posing a threat to the GRSG in the five RNAs used by ranchers represented by this District; grazing should therefore not be eliminated. It is, moreover, untenable to suggest that eliminating grazing on these particular RNAs is necessary to provide a "baseline reference area" to study the effects of climate change on sage grouse habitat. The RNAs are adjacent to over 700,000 ungrazed acres on the Hart and Sheldon Wildlife Refuges that are representative of sagebrush steppe ecosystems. The fact that some of these RNAs were originally designated for the study of rare plants or intact plant cells in no way makes them uniquely suitable for a baseline study of sagebrush ecosystems, or whether such ecosystems can generally support the GRSG in the presence of climate change. Such a study can just as effectively be conducted on the Refuges, without incurring profound economic hardship to local ranchers and ranch employees.

Comment Number: OR-GRSG-0003-6

Comment Excerpt Text:

Although the HAF makes reference to "regional standards," some of the key HAF indicators (e.g. a 7-inch residual uplands stubble height in the table for Arid and Mesic areas) appear to apply in the HAF across all regions. Given the wide variability in vegetative communities across GRSG habitat, such one-size-fits-all standards are entirely inappropriate. Further, HAF standards were developed as a point-in-time assessment. By contrast, an appropriate standard would have to be established on the basis of trendbased studies, to reflect the seasonal and yearly variability of habitat over time.

Comment Number: OR-GRSG-0003-7

Comment Excerpt Text:

It is also important to recognize that there is, as a matter of scientific method, no existing gap that the HAF standards fill—the BLM currently applies a locally adjusted / trendbased analysis in its rangeland health assessment that in entirely adequate for the purposes of conserving sage-grouse habitat. The current methodology behind rangeland health assessments in Lakeview District is based on over a decade of site-based monitoring and trend data; it is therefore a far more appropriate and effective tool for gauging rangeland health and habitat suitability for GRSG in this area than HAF standards.

Comment Number: OR-GRSG-0003-8

Comment Excerpt Text:

The puzzling statement: "For identified ACECs, work with grazing permit holders to modify the grazing system, adjust the timing, duration and intensity, AUMs, or relinquish grazing allotments, if needed (or if grazing management is not currently meeting standards), if necessary to benefit ACEC values and the sage-grouse," (Table 2-6 p. 2-106) implies that relinquishment of a permit might be "needed" even in an instance in which grazing was meeting rangeland

health standards. Such an action is not an "appropriate conservation measure" according to the RMPA as it would not "reduce, eliminate, or remove" a threat to sage-grouse. It therefore falls outside the scope of the RMPA.

Comment Number: OR-GRSG-0027-3

Comment Excerpt Text:

D-LG/RM 9, pg. 2-81&2-82, Alternative D states in this section to implement management actions described under ALT. B to meet GRSG seasonal habitat requirements in PPMA & PGMA where rangeland health standards are not being met. This would be done to achieve a suitable rating consistent with HAF or with values adjusted for regional conditions. Implement management actions (grazing decisions, AMP/Conservation Plans, or other agreements to modify grazing management to meet seasonal GRSG habitat requirements. (Conelly et.a1.2011b). Consider the following changes in: season or timing of use, numbers of livestock (includes temporary nonuse or livestock removal, distribution of Livestock use, intensity of use, type of livestock, adjustments in allowable use level, extended rest or temporary closure from grazing or permanent closure to grazing.

An Alternative to this would be that when Rangeland Health Standards are not being met and livestock is the causal factor in PPMA &PGMA; implement grazing management actions (grazing decisions, AMPkonservation plans, or other agreements to modify grazing management to address threats to GRSG habitat (USFWS 2013...COT report). Consider singly or in combination: changes in season of use; timing or intensity of use; changes in numbers, including temporary nonuse or livestock removal; and changes in distribution or type of livestock. Also the Conelly paper is looking at stubble heights in a region that may not compare to the several different regions in Eastern Oregon. There should be something in the BLM wording to look at types and heights of grasses by region, some regions in Eastern Oregon do not reach the minimum stubble height for sage grouse because of environmental variables.

Comment Number: OR-GRSG-0039-1

Comment Excerpt Text:

Alternative D states that BLM will close grazing to all RNAs which have over 20% primary and/or 50% general habitat not meeting the Standard for Rangeland Health and do not have a suitable rating consistent with the HAF. These AUMs would be removed until positive ratings were achieved on both assessments. The analysis of removing or reducing livestock is flawed because it fails to identify that grazing would need to be the cause of the failed ratings in order to justify removal of AUMs.

Comment Number: OR-GRSG-0048-4

Comment Excerpt Text:

This EIS needs to be clear on what is intended for closure to grazing. A general statement that grazing would be eliminated in some RNA's, without specifically naming said RNA's, is insufficient. There is also suggestion in the document that RNA's outside of sage-grouse habitat would be closed; this and any focus on lands outside of sage—grouse habitat, is outside the scope of this document, shows a completed bias against grazing and abuse of power, and should be removed from analysis. There is no complete or appropriate reason given as to why these RNA'S (whichever ones they may be, where will this 'list' come

to light?) are slated for elimination of grazing. One mention of using them as research areas is not sufficient; this is a poor reason as there are already many areas set aside for research and wait as there being no time, money, or personnel available to complete any research on BLM land. There is also nowhere in the EIS that addressed how these RNA's, again we don't even know which ones they will be, will be closed. In most cases closing solely the RNA will require additional fencing, which has not been analyzed in the document. Does this mean instead that the whole allotment or pasture surrounding the RNA will be closed in order that no new fences will be needed? This level of grazing closure (if that is the case) needs to be included in the analysis within this document

Comment Number: OR-GRSG-0048-8

Comment Excerpt Text:

In many places throughout the EIS "indicators" are mentioned. It is not plainly stated but can be surmised-that the "Indicators" mentioned are those initially developed by Connelly et al. 1997. While developed scientifically these indicators were simply established in order to provide an idea of what is needed for habitat for sage-grouse. However, there is a need to have locally adapted ranges; this is recognized by Stiver et al. 1999. The EIS often state "indicators deveioped by the HAF or regionally adjusted" when it refers to the indicators but the document needs to state indicators developed for local conditions not simply "regionally adjusted" in requiring the use of the indicators detailed in the HAF the BLM is trying to make them a fit all locations which is not possible. For instance many of the indicators as stated in the HAF are not possible at the local Ecological Sites. One example is that the indicators require height measurements for both herbaceous and shrub components; the minimum height requirement is often taller than grasses in Harney County will grow based on precipitation and ecological site, this height measurement is out of the control of management. In order for the BLM to improve management for sage-grouse habitat (which is the goal here is it not?) the focus should be on factors that are within the BLM's control. The BLM can't make the argument that it is using the best available science if the informations it is being based on is simply convenient but outdated. The EIS needs to have references to the HAF, the Indicators, etc. removed and allow for the development of "Indicators" and methods for monitoring at the local level. There has been an amazing amount of progress made on this front already in Harney County through the development of the CCAA using local researchers, land owners, agencies (including the US Fish and Wildlife Service). This process has developed scientifically and ecologically appropriate, achievable methods for monitoring that can be continually updated as new science becomes available, thus not becoming outdated; this would be a good example to be used by the BLM

Comment Number: OR-GRSG-0068-5

Comment Excerpt Text:

Habitat Assessment Framework (HAF) Indicators:

The HAF indicators were developed without public comment or inclusion of the best available science and should not be used to guide management actions. It is incumbent upon the BLM to immediately obtain science and implement changes to the indicators so that it reflects local ecosystem conditions. As it stands, the HAF indicators include stubble and shrub height standards that could be impossible to reach in many areas for various reasons, including natural limitations. The RMPA does not evaluate the impacts the HAF will have on grazing management, particularly if indicators are not adjusted to reflect variability across the BLM Districts at issue in the RMPA. If BLM proposes using the HAF indicators, the RMPA must set forth how BLM will use the indicators, where BLM will use the indicators, and the likely impacts to BLM and permittees as a result of using the HAF. None of the alternatives do this analysis.

Comment Number: OR-GRSG-0068-8

Comment Excerpt Text:

Fences: The RMPA does not address, in detail, what BLM will require of permittees with regard to fences. Fences are often a critical component of rangeland management, and should not be limited in instances where they will improve management of livestock—which stands to benefit sage grouse. Research from University of Idaho shows that fences in flat topography are of greater risk and can be marked to improve visibility near leks.14 The BLM has recognized this research in its IM 2012-043.15 Accordingly, ranchers have marked hundreds of miles of fences throughout sage grouse habitat. Fences should not be limited on sloping topography if they will improve livestock management. On flat topography, fences should be allowed with markers if they will improve livestock management. We continue to break our pastures into smaller units with fencing. We believe this improves our pastures and better utilizes the forages. We are concerned that new restrictions for fencing could curtail our

pasture management that improves the range resource.

Recommendation: The RMPA needs to acknowledge this research and its own internal memo in its analysis and decision.

Comment Number: OR-GRSG-0074-11

Comment Excerpt Text:

Use of current Rangeland Health Assessments (based on long term trend studies) as the primary tool for habitat suitability determinations. Use of Habitat Assessment Framework should be abandoned for the following reasons: this is a single species (research level) habitat assessment, not ecologically driven, BLM has adequate methods with information from long term monitoring and Rangeland Health Assessments that will encompass GRSG habitat requirements; BLM cannot manage its' current rangeland monitoring workload; At the level of sampling conducted by BLM which is the plant community sampling the HAF indicators provide erroneous data. It was designed for a patch level scale.

Comment Number: OR-GRSG-0074-21

Comment Excerpt Text:

The HAF system seems to be an important theme in Alt. D. The habitat indicators for SG suitability at the site scale are not attainable at the scale assessments will be conducted. Most of the information these indicators were based on small (patch) scale measurements that reflect the immediate vicinity of the location of radio-marked or flushed birds (e.g., Gregg etal. 1994; Sveum et. Al. 1998; for detailed information on sage-grouse habitat at the patch scale see Connellyet.al. 2000 and Hagen et. Al. 2011). This is significant because large scale monitoring efforts which BLM conducts are most feasible at the plant community scale or larger and current knowledge of successional change in the sagebrush steppe is firmly based on relationships described at the plant community scale. This discrepancy in scale can lead to problems when plant composition at the plant community scale is expected to conform to idealized vegetation attributes (as shown in HAF manual for SG suitability characteristics and indicators) which are based on smaller measurements. For example, working at the community scale, Davies et. Al. (2006) examined over 100 "Late- seral" Wyoming big sagebrush communities and reported that: " No sites met the nesting or optimum brood-rearing habitat suggested by the BLM(2000). Mesic and arid breeding cover values suggested by Connelly et. Al.(2000) were met by 0% and 18% of the sites, respectively". Additionally, in a meta-analysis of sage-grouse nesting and brood rearing habitats Hagen et. Al. (2007) determined that sagebrush cover, grass cover and grass height was greater at nest sites than at random points and vegetation at brood areas contained less sagebrush, taller grasses and forb cover than random sites. Understanding the optimum mix and spatial arrangements of these plant communities and their effects on the demographic rates in a landscape could substantially enhance sage-grouse management

Comment Number: OR-GRSG-0083-6

Comment Excerpt Text:

Rahilly-Gravelly RNA Comparison To Hart and Sheldon Refuges: Specifically, the Hart Mountain and Sheldon National Refuges, both have been ungrazed since the 1990's. Both refuges are within 30 and 10 miles of the Rahilly-Gravelly allotment respectively. In our view, it makes scientific sense to advance research studies on sage-grouse habitat on the refuges where cattle grazing has been not permitted for nearly 20 years.

We find this to be the more viable solution to sage grouse habitat analysis rather than to remove our cattle from the Rahilly-Gravelly permit for 5 years as designated in the RNA. The neighboring Sheldon Refuge essentially is similar to Rahilly-Gravelly in topography, elevation, pinion juniper densities, and sagebrush-grass ecosystems.

We believe a true study of merit should include a same time frame scientific comparison analysis of sage grouse on Rahilly-Gravelly before, during, and after grazing side by side with the Sheldon Refuge. This would provide a true example of credible evidence through scientific investigation using two scientific control groups, Rahilly-Gravelly, and Sheldon.

Comment Number: OR-GRSG-0093-10

Comment Excerpt Text:

Implementing HAF assessments as an addition monitoring requirement is not realistic given existing workloads. HAF has an overall expectation of actions guided by a level of scientific knowledge regarding sampling design, sampling analysis, and proper scientific interpretation of the habitat assessment data. Currently BLM Districts rely on seasonal workers to fulfill their monitoring obligations. Descriptions in the HAF about sampling design are likely too complex and too burdensome for seasonal workers already trying to complete significant levels of monitoring. In some situations they may simply be too complex for the current staff if they are not trained in sampling procedures and data interpretation methods.

In order to fully implement HAF, the BLM will have to modify numerous geographic and allotment management plans. This will add significantly to overloaded BLM District staff responsibilities and delay other important work.

Further, HAF is not designed to assess the impacts of livestock grazing because it is a vegetation assessment process. Additional steps have to be taken before any information gained from an assessment can be applied to adjust livestock grazing. Thus, overloaded BLM staff would not gain information they could use to manage livestock from the use of HAF.

And, it would be difficult to coordinate the use of HAF with the RHS. RHSA are a qualitative process and the HAF is describing quantitative steps to determine habitat suitability. The two processes were not designed in tandem and do not match up.

Comment Number: OR-GRSG-0093-105

Comment Excerpt Text:

Page 2-80 Action LG/RM 4: The BLM has not adequately explained or evaluated how its prioritization of GRSG habitat allotments for RHSA will impact other species and other rangeland health objectives. Absent this assessment, neither the BLM nor the public can fully review or evaluate the impact of this action.

Comment Number: OR-GRSG-0093-106

Comment Excerpt Text:

Page 2-80 Action LG/RM 5: Reject Alternative B. The RMPA does not adequately explain why additional indicators or measurements are necessary beyond those that are present in the RHSA. Further, the RMPA does not commit to using local, ecological site conditions when determining indicators or conducting measurements, making this requirement indefensible. With regard to Alternative D, the BLM has not adequately explained or evaluated how its prioritization of GRSG habitat allotments for RHSA will impact other species and other rangeland health objectives. Absent this assessment, neither the BLM nor the public can fully review or evaluate the impact of this action. It may be more appropriative for the BLM to give general guidance to prioritize RHSA in PPMA/PGMA as described in Alternative D, but not require strict adherence to the proposal in light of the lack of information about how this prioritization may impact other species and rangeland health objectives.

Comment Number: OR-GRSG-0093-11

Comment Excerpt Text:

The BLM does not address how it will implement HAF at the site scale. Instead, it looks for adjustments at the regional level. Though regional adjustments may make sense at the landscape scale, it is not appropriate to assess the impacts of individual activities at anything other than the local, ecological site conditions level so as to avoid arbitrary and unrealistic evaluations of conditions and to avoid inaccurate indicators of habitat suitability.

Throughout the RMPA/DEIS, the BLM discusses regionally adjusted values, particularly in discussions concerning the application of the HAF to grazing permits and assessments. The intended definition of regionally adjusted values is not provided in the DEIS, though the BLM has indicated in conversation that it is intended to be based on the GRSG regions identified in the HAF. Further, the DEIS is not clear

to what extent ecological site conditions will be used to assess whether specific activities are providing suitable habitat for GRSG

Comment Number: OR-GRSG-0093-110

Comment Excerpt Text:

With regards to Action D-LG/RM 12, the idea of managing for "sufficient" cover for broods is very vague and undefined. This direction is unnecessary because, as explained by the USFWS and the BLM (Pages 4-23 and 4-24), the existing RHSA and grazing regulations protect GRSG habitat. If left in the RMPA, this unnecessary term provides an opportunity for radical antigrazing litigants to file a lawsuit concerning noncompliance with a provision that does not benefit the GRSG (in light of existing protections) in the first place.

Comment Number: OR-GRSG-0093-12

Comment Excerpt Text:

the HAF itself emphasizes the use of stratification of ecological sites for data interpretations. The DEIS/RMPA does not reflect the direction of these reports or the HAF's use of stratification. Instead, it talks about regional adjusted values. Regional adjustments that apply across the large GRSG regions do not sufficiently account for the variation in ecological sites within Oregon GRSG habitat. To the extent that the HAF is incorporated into grazing permits or rangeland health or habitat suitability assessments, the BLM must use indicators and conduct assessment that are based on local ecological site conditions.

Comment Number: OR-GRSG-0093-13

Comment Excerpt Text:

In addition to modifying the HAF to account for local, site ecological conditions, if the BLM determines that HAF assessments will be required, the OCA and OFB offer the following comments on how the HAF should be implemented:

Grass and Forb Heights

Residual forage heights should not be standardized as shown in the table for Arid and Mesic areas. A standard in the uplands at >7 inches is not appropriate for the various plant communities in Oregon and the variations between geographic areas.

Average maximum heights of grass and forbs are attributes that can be measured. However, an average maximum droop height of grass and forbs is not a meaningful measurement of these attributes. "Droop" is subject to significant observer bias and plant droop has not been proven to be ecologically or statistically significant across the range of GRSG and the ecological sites contained therein. Grass and forb height must be determined by species, ecological site, site potential and weather.

Many sites have mixed grass species due to many factors and the attribute must be carefully defined prior to any assessment. A bluebunch site may achieve a mature height of 10-12 inches, but some sites with a mixture of grass species achieve a mature height of 7-8 inches. Other sites achieve even less. The same pattern is true for forb species. Further, mixing the different forb species will not accurately assess forb height, rendering the information arbitrary and ineffective at providing an assessment.

Recommendation: Identify grass and forb height as attributes of interest, provide general guidance to the districts but allow district specialists to determine attributes and methodology that will be most accurate and efficient given their budgetary constraints and ecological sites. Identify grass and forb height as separate attributes of different plant communities.

Comment Number: OR-GRSG-0093-15

Comment Excerpt Text:

[referring to the HAF standards]

Sagebrush Height and Shape

Sage brush heights could be measured in a meaningful way, however, the heights and differences established in the tables have not been proven to be ecologically and statistically significant across the range of GRSG and the ecological sites contained therein. Further, shape delineation will not yield accurate or useful

information. The shape definition is qualitative and will be subject to significant observer bias.

Recommendation: Identify sagebrush height and shape as attributes of interest and provide general guidance to the districts but allow district specialists to determine the methodology that will be most accurate and efficient given their budgetary constraints and ecological sites.

Comment Number: OR-GRSG-0093-16
Comment Excerpt Text:
[referring to the HAF standards]

Forb Availability Standards

A gross standard indexed as good, fair or poor forb availability cannot be implemented at a broad landscape scale and then be expected to work at a fine scale because of the variability between forbs and between sites.

Recommendation: Forb availability standards need to be developed by district specialists so that the standards are appropriate for fine scale analyses at the local ecological site level. Identify forb availability as an attribute of interest and provide general guidance to the district's but allow district specialist to determine attributes and methodology that will be most accurate and efficient given budgetary constraints and local ecological sites.

Comment Number: OR-GRSG-0093-17
Comment Excerpt Text:
[referring to the HAF standards]

Figures 1 to 9

The techniques described in Figures 1 to 9 have been used to conduct vegetation inventories, but they are not appropriate and efficient for all fine scale monitoring projects. The techniques require specific inventory and plot designs. The number, length and design of line, point or belt transects is dependent on community structure and composition. Changes in community structure and composition will dictate changes in inventory methodology and design.

Whatever inventory methodology is selected needs to be an efficient method that will yield an accurate attribute estimate and a mechanism for determining the certainty of that estimate. The Daubenmire plot, as set forth in Figure 1-9, is not an efficient quadrat size in many plant communities. Selection of an improper plot size will make the attainment of an adequate sample very difficult and will yield a low level of estimate certainty.

Similar issues exist with point sampling. Problems associated with cover estimation accuracy were discussed under sagebrush, grass and forb canopy coverage standards. Similarly, difficulties with categories of shrub shape and natural or droop height were discussed previously and are subject to significant bias, which will limit estimate accuracy.

Recommendation: The BLM should identify attributes of interest and provide examples and general guidance to the districts. At the same time, the BLM should allow district specialists to determine attributes and methodologies that will be the most accurate and efficient given their budgetary constraints and ecological sites. This is the only way to ensure the work could be done in a meaningful and time-sensitive manner.

Comment Number: OR-GRSG-0093-21
Comment Excerpt Text:
Page G-7 states: When evaluating the land health habitat standard in designated GRSG habitats, the BLM will analyze core indicators and other supplemental site scale GRSG habitat indicators (see HAF) as appropriate for the seasonal habitat. The activity level plans will describe a sampling scheme for collecting indicators with a non-biased sampling design for vegetation treatments or management actions implemented at the site scale.

The DEIS states that monitoring will be based on quantitative indicators. However, the Districts currently do not conduct quantitative vegetation monitoring. Instead, they generally rely on the qualitative measurements of the RHS. This disconnect must be explained and addressed in detail so that the

DEIS/RMPA has clear mechanism for determining if actions or disturbances are meeting particular goals.

Recommendation: Develop landscape assessments to evaluate the condition of GRSG habitat and compare those assessments with GRSG population information over time. Do not rely on individual site-specific HAF assessments to determine the condition of GRSG habitat. Address the disconnect between HAF and RHSA and the lack of site-specific indicators developed based on local ecological sites in HAF. Relying only on RHSA for purposes of evaluating rangeland health. Provide a clear mechanism for how the BLM will determine whether actions or disturbances are impacting particular land health goals.

Comment Number: OR-GRSG-0093-85

Comment Excerpt Text:

The public cannot evaluate the DEIS/RMPA when it is unclear. Further, there is no explanation for why the HAF should be applied to "priority landscapes". The BLM is required to rationally explain its decision. As explained in Sections III and IV, the BLM has not explained why the HAF should be applied to the planning area.

Comment Number: OR-GRSG-0134-12

Comment Excerpt Text:

Monitoring and assessment of grazing allotments and, where necessary, adjustments in grazing use, would be based, in part, on the Habitat Assessment Framework (HAF) (Stiver et al. 2010) (2-21; see, e.g., 2-80, Table 2-6, Action DLG/ RM 6; 2-79, Table 2-6, Action D-LG/RM 2; 2-81, Table 2-6, Action DLG/ RM 8). HAF, as published, includes minimum 18 cm grass height in sagegrouse nesting and brood-rearing habitat as criteria for assessing these habitats at a fine scale (Stiver et al. 2010: II-13, citing Connelly et al. (2000) and Hagen et al. (2007)), although this standard could be "adjusted for regional conditions."

However, Appendix G, "Greater Sage-Grouse Monitoring Framework," which is apparently a condensed version of Stiver et al. (2010) for the draft plan, strips out the criteria for fine and site scale habitat assessments, including grass height, and instead states that "details and application of monitoring at these two scales will be determined during implementation of the [draft plan]" (G-8).

Comment Number: OR-GRSG-0150-3

Comment Excerpt Text:

Removing Livestock from RNA's based on % of PPMA or PGMA without assessment of conditions to determine whether or not Livestock are the cause of any failure to meet rangeland Health Standards is counterproductive as a cause of increase of fuel load and if livestock are not the causal factor, other Management Practices need to be initiated- not the removal of livestock. See Table 2-6 D-LG/RMI p. 2-79

Comment Number: OR-GRSG-0209-1

Comment Excerpt Text:

The habitat assessment framework encompasses all eleven states, without differentiating the unique aspects of regions. Harney County is different in many ways from other affected regions. The plan must take into account different landscapes and include specifics such as time of year, elevation, and water availability.

Comment Number: OR-GRSG-0226-5

Comment Excerpt Text:

The purpose of a RNA is "to preserve some natural feature, physical or biological or both, in as nearly undisturbed state as possible for research and educational purposes."

Recognizing this focus on research and education, the R<P/EIS should change its emphasis from "work with grazing permit holders to voluntarily relinquish permits, and/or terminate grazing leases if necessary to protect NRA values" (Action D-SD1, Table2-6 and Appendix I, p. 1-6) to a much more beneficial collaborative approach to work with existing permit holders to utilize a RNA in a true research and educational capacity. Grazing has been mentioned repeatedly as not being detrimental to sage-grouse values however this is based solely on empirical observations or conclusions rather than actual research. Proactively set the stage to use existing

RNA's with grazing use to monitor and study a variety of factors within a RNA grazing allotment that may have impacts on sage- grouse such as cheatgrass invasion, medusahead invasion, juniper encroachment, fine fuels buildup for wildfire mitigation and more efficient water sources for wildlife and livestock are a few examples directly related to beneficial sage-grouse habitat

Comment Number: OR-GRSG-0226-6

Comment Excerpt Text:

The BLM should modify Alternative D by striking the language "In RNA's, work with grazing permit holders to voluntarily relinquish permits, and/or terminate grazing leases if necessary to protect RNA values." The protection of RNA values has nothing to do with the directive to conserve sage-grouse. I would suggest language better suited to the directive of conserving sage-grouse to be:

In RNA's, work with grazing permit holders to voluntarily engage in prescriptive range management research to identify best range management practices as well as those that may be detrimental to sage-grouse habitat to improve the scientific knowledge base of the relationship between livestock and sage-grouse.

Comment Number: OR-GRSG-0281 (FrmLtr11)-12

Comment Excerpt Text:

Proposed Action and Alterntaives; GRAZING

Goals and objectives

Vol 1, page 2-46 Manage livestock grazing to maintain or improve priority GRSG habitat by achieving land health standards. Change to state: Manage livestock grazing to maintain or improve priority GRSG habitat.The Land health standards are not designed to improve any habitat. The SRH protocols provide direction to the BLM to make a broad assessment that identifies areas that should be selected as part of a monitoring program and conducted with replicated, statistically valid vegetation monitoring. SRH protocols have no provision to link the cause with the appearance of the landscape.

Comment Number: OR-GRSG-0281 (FrmLtr11)-21

Comment Excerpt Text:

The DEIS is a broad landscape plan and should provide guidance for steps that should be taken into consideration at the RMP, Geographic Landscape Plans, and then AMPs. Guidance does not mean the broad landscape view of water systems should guide using specific steps, because most of the decision regarding streams and springs have to be managed based on local conditions. Lentic and lotic systems do not function the same way. All lotic riparian areas are not the same.

Therefore, the DEIS actions regarding water areas should be a guide about maintaining the quality of water systems for good sage grouse habitat. Action 12 should direct steps for wet meadow lentic areas, Action 13 should direct steps for lotic drainages to maintain vegetation appropriate for the ecological area, Action 14 should direct steps for lotic intermittent and ephemeral drainages to maintain vegetation appropriate for the ecological area. All PFC surveys should be conducted where there is perennial water and segments that do not meet PFC should have follow-up work to quantify the characteristics of concern to determine if the site potential is being met.

Comment Number: OR-GRSG-0281 (FrmLtr11)-30

Comment Excerpt Text:

Comment, Vol 1, Page 3-81: One important objective in managing livestock grazing relevant to GRSG is to maintain residual cover of herbaceous vegetation to reduce predation during nesting (Beck and Mitchell 2000). When all rangeland health standards have been met, it is expected that current grazing management is adequate to maintain perennial bunchgrass communities and support GRSG habitat objectives. This is consistent with Cagney et al. (2010) and France et al. (2008) who indicate that moderate levels of livestock use are generally compatible with maintenance of perennial bunchgrass, though sustainable use varies with a number of environmental factors.

Solution: The HAF is not needed to maintain residual cover of herbaceous vegetation when rangeland health standards are used to determine if the area is sustaining the perennial bunchgrass communities that support GRSG habitat objectives. SRH assessments can be improved if the monitoring site selections are made after quantified information determines which sites are not in compliance with the SRH. The HAF adds numerous kinds of measurements that may not be needed and the use of transects will introduce complexity to the monitoring field trips to severely impact the work load at the District levels.

Comment Number: OR-GRSG-0281 (FrmLtr11)-47

Comment Excerpt Text:

HAF, page 1-4: Flexibility is part of the suggested procedures and professional judgment will be required in its application, hence the need for experience. An increased capacity to deliver conservation will need to be addressed regionally because actions necessary to enhance populations vary widely across management zones (Figure I-3). Quantity and quality of population and distribution data also vary widely for individual populations and across management zones (Figure I-3), and users of the HAF may be required to make certain assumptions concerning local populations.

Solution: We can agree with the differentiation of scale orders and the concept of 'rolling-up' information from fine and finer-scale to coarse scale. However, the mechanism to have the information "roll up" from the site scale to the Regional scale is not described in the DEIS. The HAF presents a set of unrealistic standards across Zone IV and Zone V and the DEIS refers to the use of HAF at the upper or midscale to the finer scale of specific ecological sites. HAF is not specific about how many ecological sites per RMP or GMA or AMP should be examined.

Comment Number: OR-GRSG-0281 (FrmLtr11)-48

Comment Excerpt Text:

The DEIS and HAF do not make it clear how often the assessment should be done. Each technique requires a question that needs to answered and other than collecting data on a transect to determine sage grouse habitat, the HAF does not address other techniques that may deliver more accuracy in a shorter time period. Sagebrush cover is difficult to standardized due to numerous factors that impact their growth. The cover technique offered in the HAF will interject observer bias which is a problem without a resolution using a transect and tapeline. Currently most of the BLM monitoring programs use single transect without recognizing it is a sampling unit and they do not determine sample adequacy in their Trend and Condition assessments and no plots are established during the SRH surveys. Utilization surveys have relied on the Landscape Appearance protocol, which is qualitative and does not rely on stratification of ecological sites for interpretations. The overall monitoring programs at the BLM have to be examined in order for the HAF to be useful.

Comment Number: OR-GRSG-0281 (FrmLtr11)-49

Comment Excerpt Text:

HAF, page 1-6: At the second order, state and regional planners and decision makers have the flexibility to design a "future" landscape and the location and types of actions necessary to achieve desired conditions. The resource manager is provided significant flexibility evaluating third and fourth order habitat selection. The manager must provide an accurate estimate of populations, sub-populations; seasonal-use habitats and ecological site potentials to effectively coordinate and design appropriate conservation actions.

The BLM manager cannot provide an accurate estimate of populations, sub-populations, because in Oregon Oregon Dept. of Fish and Wildlife is in charge of the bird population counts and they do not count birds. ODFW count leks and are at a stand-still regarding bird counts. BLM can estimate acres of sagebrush habitat on public lands, but must rely on the state to determine population numbers and where the life-cycles of broods, rearing, etc. take place.

Comment Number: OR-GRSG-0281 (FrmLtr11)-50

Comment Excerpt Text:

Residual forage heights should not be standardized as shown in the table for Arid and Mesic areas. A standard in the uplands at >7 inches indicates a lack of knowledge about the various plant communities in Oregon and the variations between GMAs. Furthrmore, measuring seed heads on grass plants makes no sense when 10-20% of the plants produce seed heads and the plant relies mostly on production through tillering (Briske, D.D. and J.H. Richards. 1995. Plant responses to defoliation: A physiological, morphological and demographic evaluation. Pages 635-710. In D.J. Bedunah and R.E. Sosebee (editors). Wildland Plants: Physiological Ecology and Developmental Morphology. Society of Range Management). Grass forage heights should properly be measured as leaf length and averaged across plots prior to forage use after establishing the plant communities on different ecological sites.

Comment Number: OR-GRSG-0281 (FrmLtr11)-51

Comment Excerpt Text:

Average Maximum Heights of Grass and Forbs HAF

Comment: These attributes could be measured. We disagree that an average maximum droop height of grass and forbs is meaningful. "Droop" is subject to significant observer bias Plant droop has not been proven to be ecologically and statistically valid across the range of sage grouse and the ecological sites contained therein. Grass and forb height must be determined by species, ecological site, site potential and weather. Many sites have mixed grass species due to many factors and the attribute must be carefully defined prior to any assessment. A bluebunch site may achieve a mature height of 10-12 inches, but some sites with a mixture of grass species achieve a mature height of 7-8 inches. The same pattern is true for forb species and they would have to be measured in separate plots. HAF (HAF, page III-44) shows a photo of arrow-leaf balsamroot and if lomatium is part of the forbs on that site, the two species would also have to be separated.

Solution – Identify grass and forb height as separate attributes of different plant communities, which are submitted by the districts. The district specialists can determine the best methodology to use to be most accurate and efficient given their budgetary constraints and local ecological sites. If tall forbs are the question of interest then directions should reflect measurement of the heights of "tall forbs", but mixing the different forb species will render meaningless information.

Comment Number: OR-GRSG-0281 (FrmLtr11)-64

Comment Excerpt Text:

The HAF at page II-27 #4 states: For most fourth order descriptions, stratified, random sampling of the seasonal habitat area based on land cover types and soils (ecological sites) will be appropriate. Page II-28 states: The number of samples required for each cover type depends on the vegetation heterogeneity of the land cover type, degree of precision desired and size of the seasonal use area. Elzinga et al. (1998) and Herrick et al. (2005) provide guidance on sampling design. In # 5 on page II-28 the field data collections the HAF states: we strongly advise the use of line-point intercept technique because of its application across scales.

Solutions: Line point intercept techniques are not time efficient and Oregon BLM "believes" one transect is enough. There is a severe misunderstanding about using a line transect as a sampling unit and do not have an appreciation for the location of random plots. Our experience with the BLM monitoring techniques has shown us that the BLM needs to invest in hiring personnel within each District who have training, practice, and knowledge about sampling and are experienced in the statistical methods needed to ensure a level of confidence that the data is replicated, and statistically valid vegetation monitoring. Due to the line point intercept techniques that take too much time and are not practical and time-efficient we recommend using plot frames selected by size to fit the plant community and task at hand. Random selection of the sampling units (ie plots) should be emphasized and examples of the

number of plots needed due to the variation in the data that is being collected.

The agency must address the issue in order to avoid making arbitrary decisions. The following text books on sampling should be reviewed and added to the DEIS references.

Bonham, Charles D. 1989. Measurements for Terrestrial Vegetation. Wiley and Sons. New York. Snedecor, G.W. and William Cochran. 1967. Statistical methods. Iowa State University Press.

Ames, IA. Valiela, Ivan. 2009. Doing Science, Design, Analysis, and Communication of Scientific Research. Oxford University Press. NY

Brown, Dorothy. 1954. Methods of surveying and measuring vegetation.Commonwealth Bureau of Pastures and Field Crops. Hurley Berks, Bulletin 42. p 223

Dowdy, S. and S.Weardon. 1983. Statistics for research. John Wiley and Sons. New York,New York.

Comment Number: OR-GRSG-0318-1

Comment Excerpt Text:

Concern - The sage grouse EIS looks to the HAF document for guidance in monitoring. The HAF document identifies standards for sage brush cover and the line intercept (5cm precision) for measurement. Problem: The first problem is that the precision bias in the line intercept is five times greater than the veg measure program. The line intercept methodology will result in a significant over-estimation bias. The second problem is that each line intercept transect = 1 sample. It will not be possible to establish data certainty without a significant number of transects per site and increasing the monitoring cost. The third problem is that the standard proposed in the HAF does not recognize the qualitative nature of cover estimation and the fact that different techniques yield different answers. No reference is made to the technique (s) used to establish the standard and the bias of those techniques. I recommend that you push for the use of reference areas to establish site specific standards and allow each district or state to identify the appropriate method of measurement.

Comment Number: OR-GRSG-0357 (FrmLtr08)-2

Comment Excerpt Text:

The RMPA does not evaluate the impacts the HAF will have on grazing management, particularly if indicators are not adjusted to reflect variability across the BLM Districts at issue in the RMPA. If BLM proposes using the HAF indicators, the RMPA must set forth how BLM will use the indicators, where BLM will use the indicators, and the likely impacts to BLM and permittees as a result of using the HAF. None of the alternatives do this analysis.

Comment Number: OR-GRSG-0357 (FrmLtr08)-6

Comment Excerpt Text:

the preferred alternative directs the agency to replace every water source that is proposed for removal. However, the RMPA should specify that BLM must replace water sources before any water source is removed, and only after verifying with grazing permittees that the new water source will act as an acceptable replacement. This process must also include obtaining the necessary state water right permits. If replacements are not put in place before removing existing water sources, lack of agency resources may delay replacements, which would be detrimental to cattle and wildlife

Comment Number: OR-GRSG-0357 (FrmLtr08)-7

Comment Excerpt Text:

Fences: The RMPA does not address, in detail, what BLM will require of permittees with regard to fences. Fences are often a critical component of rangeland management, and should not be limited in instances where they will improve management of livestock—which stands to benefit sage grouse. Research from University of Idaho shows that fences in flat topography are of greater risk and can be marked to improve visibility near leks. 13 The BLM has recognized this research in its IM 2012-043.14 Accordingly, ranchers have marked hundreds of miles of fences throughout sage grouse habitat. Fences should not be limited on sloping topography if they will improve livestock management. On flat

topography, fences should be allowed with markers if they will improve livestock management

13 Stevens B.S., Impacts of Fences on Greater Sage-Grouse in Idaho: Collision, Mitigation, and Spatial Ecology, University of Idaho (2011).

14 Bureau of Land Management, IM 2012-043: Greater Sage-Grouse Interim Management Policies and Procedures, (2011).

Recommendation: The RMPA needs to acknowledge this research and its own internal memo in its analysis and decision.

Comment Number: OR-GRSG-0373-2
Comment Excerpt Text:
The RMPA does not evaluate the impacts the HAF will have on grazing management, particularly if indicators are not adjusted to reflect variability across the BLM Districts at issue in the RMPA. If BLM proposes using the HAF indicators, the RMPA must set forth how BLM will use the indicators, where BLM will use the indicators, and the likely impacts to BLM and permittees as a result of using the HAF. None of the alternatives do this analysis.

Comment Number: OR-GRSG-0444-1
Comment Excerpt Text:
Specific elements of HAF that are deficient are as follows: 1) The HAF is not technically sound in terms of modern ecological science and transition state conditions; or, 2) in terms of historical natural disturbances altering vegetative composition and structure; or, 3)natural ecological successional changes which are driven by site-specific potentials and climate. Research shows that canopies of shrubs, grass, and forbs at the stated levels are not achievable at a landscape scale, or even at most site specific levels (K. Davies, Bates, et al). As stated above in number 2, natural disturbances are instrumentally tied to why a landscape looks the way it looks at any one point of time, and why patchiness of dense cover at the stated levels occur. Further, cover and plant height that is not achievable (HAF attributes) completely obscures and fails to assess the vegetative pattern, edge effect, and patchiness that correlate to the landscape meeting seasonal needs of sage grouse. In addition, HAF fails to document how that landscape is changing due to ecological succession and historical natural disturbances

Comment Number: OR-GRSG-0489-12
Comment Excerpt Text:
Grazing

The DEIS states that "When all rangeland health standards have been met, it is expected that current grazing management is adequate to maintain perennial bunchgrass communities and support GRSG habitat objectives. This is consistent with Cagney et al. (2010) and France et al. (2008) who indicate that moderate levels of livestock use are generally compatible with maintenance of perennial bunchgrass, though sustainable use varies with a number of environmental factors" (pg. 3-81).

The DEIS also states that the 48 allotments which are not achieving all standards and guidelines due to livestock grazing have had appropriate management actions implemented to move toward achieving standards and guidelines in the future (pg. 3-78).

Given these statements, there is no defensible reason to remove livestock grazing. BLM should not remove livestock grazing from RNAs or any other existing allotments (Actions D-LG/RM 1 and 9, Table 2¬6, pp. 2-79 and 2-82). Not only is there no scientific reason to do so, but this action would certainly have detrimental social and economic impacts and potentially detrimental impacts to sage-grouse. These potential detrimental impacts to sage-grouse include:

1. Accumulation of excessive fine fuels, resulting in higher bunchgrass mortality in the case of a fire, and increased risk of annual grass dominance (MRCS, 2012).

2. Loss or degradation of sage-grouse habitat on private lands due to increased grazing pressure (as livestock are displaced from BLM allotments to private lands) or due to development (as ranches are subdivided and sold when the ranching business is no longer financially sustainable). The impacts of these

losses could have disproportionate effects due to the fact that private lands have most of the late brood rearing habitat associated with riparian areas and wet meadows.

Comment Number: OR-GRSG-0532-132

Comment Excerpt Text:

Due to variability of some of the indicators in the HAF methodology (e.g., forb cover, stubble height), their application should be within the context of interannual trend (i.e., change over time) and site capacity as determined by ESDs We recommend that range standards be adjusted to reflect the ecological site potential of an area and believe the proposed measures outlined in the draft EIS do little to provide guidance for the maintenance of, or transition to, a desired ecological state.

Comment Number: OR-GRSG-0532-30

Comment Excerpt Text:

Alternative D states that "a slight reduction in areas open to livestock grazing would occur because some RNAs in PPMA would be closed to livestock grazing (pg. 2-117). In developing grazing alternatives, the BLM needs to explicitly state which RNAs will be closed to grazing, list the criteria closures will be based on, and identify where additional reductions to livestock grazing will occur within the planning area. For example, the DEIS states that 59 ACECs (17 ACEC + 42 RNA) will be revised to add GRSG management considerations. Of the 42 RNAs, 22 RNAs are priority RNAs for long term monitoring and grazing will be removed from these 22 RNAs within 5 years. The remaining 20 RNAs will be managed for GRSG and if standards are not met, grazing will be removed. However, the State heard at the Prineville meeting (Bob Hopper) and Burns meeting (Joan Suther) removal of grazing from the RNAs within 5 years is an error and will not be in the final EIS. Alternatively, the draft EIS also states the RNAs with 20% PPMA or 50% PGMA would be closed to grazing voluntarily or by termination (pg. 4-266). The final EIS should provide clarification on where reductions to livestock grazing would occur and the site-specific evidence or basis for that decision.

Comment Number: OR-GRSG-0558-5

Comment Excerpt Text:

In numerous places throughout this document Indicators are mentioned. While not explicit, it can be surmised that these Indicators are the ones referenced by Stiver et al. 2010 (HAF), initially developed by Connelly et al. 2000. The Indicators mentioned, while developed scientifically, were meant to provide a general idea of what sage-grouse need for habitat requirements. However, even Stiver et al. (2010) recognizes the need to have locally adapted ranges. Throughout this document the BLM usually states "habitat indicators and associated values that are consistent with the HAF or with values adjusted for regional conditions." The document needs to state indicators developed for local conditions. Indicators are not a "one size fits all" and by requiring the indicators which are listed in HAF, that is exactly what the BLM is attempting to do.

Comment Number: OR-GRSG-0560-4

Comment Excerpt Text:

Alternatives B-F require that range improvements conserve, enhance and restore GRSG habitat. Most range improvements are not intended to benefit GRSG or GRSG habitat. They are intended to provide a grazing function, such as cattle containment, supplemental feed distribution or water supply. None of these Alternatives contain adequate standards to clearly determine if a proposed improvement fulfills these requirements. Without clear and quantifiable standards, it will be essentially impossible to demonstrate compliance.

It has not been demonstrated that rangeland improvements constitute a significant threat to GRSG or its habitat. Rangeland improvements have not resulted in significant habitat loss.

Inclusion of these management actions will provide no significant benefit while severely limiting or eliminating compatible land uses.

Comment Number: OR-GRSG-0567-14

Comment Excerpt Text:

As noted by BLM staff at the meetings, there are some inconsistencies between various sections discussing the approximate 118,000 acres of RNAs that would be closed. In Chapter 2, Livestock Grazing/Range Management, Action D-LG/RM 1 (page 2-79), states "Close all RNAs that contain over 20 percent PPMA acres and/or 50 percent PGMA that are not meeting rangeland health standards and do not have a suitable habitat rating consistent with the HAF [Habitat Assessment Framework 1 or with values adjusted for regional conditions to maintain native plant community cells in relatively undisturbed condition to serve as a baseline for understanding the impacts of grazing and not grazing sage-grouse habitat." It further states "Maintain closed RNAs as closed until attainment o/rangeland health standards can be documented and a suitable habitat rating that is consistent with the HAF or with values adjusted for regional conditions is achieved." This infonnation seems to indicate that only those RNAs over a certain percentage of PPMA or those not meeting rangeland health standards will be closed until meeting rangeland health standards. Please provide clarification.

Further into the document (Chapter 2, Special Designations - Areas of Critical Environmental Concern, Action D-SD 1 (page 2-106» states "In RNAs, work with grazing permit holders to voluntarily relinquish permits, and/or terminate grazing leases i/necessary to protect RNA values." Is this the same set of RNAs that are under consideration for closing or is this additional R."lAs that might be closed? In the Summary of Environmental Consequences section (Chapter 2, Livestock Grazing/Range Management (page 2-117», states "A slight reduction in areas open to livestock grazing would occur because some RNAs in PPMA would be closed to livestock grazing. In the specific allotments closed, permittees and lessees would need to locate alternative ji)rage sources and may face financial impacts . .... " This statement indicates complete closure of some RNAs. We recommend that BLM clarify the final EIS by describing what the intent is for closing the RNAs, whether the RNAs will be closed permanently, or whether some level of grazing would be allowed to continue for other reasons.

Comment Number: OR-GRSG-0567-55

Comment Excerpt Text:

Chapter 2, Action D-LG/RM 1 and 2 (page 2-79) and Action D-SDI (page 2-105). There is conflicting guidance on closing RNAs under three actions. Please clarify.

Comment Number: OR-GRSG-0567-56

Comment Excerpt Text:

Chapter 2, Action D-LG/RM 10 (page 2-82). What is the timeframe for determining if it is a drought year? Precipitation patterns are highly varied and last minute grazing closures are not usually something a permittee can easily absorb. In this action, it would be helpful if timeframes were developed to begin early conversations with permittees so they can arrange for a back-up plan or sell livestock to assist sage-grouse conservation during drought periods.

Comment Number: OR-GRSG-0606-16

Comment Excerpt Text:

The DRMPA/DEIS does not discuss how the key areas used in Standards & Guidelines assessments overlap with sage-grouse habitat or whether the S&G parameters specifically measure the impacts of livestock at specific points in sage-grouse lifecycles. The DRMPA/DEIS does not explicitly link the measurements of the S&G assessments to the criteria established for sage-grouse nesting and brooding success. Without site-specific monitoring or a clear connection between the rangeland health standards and the habitat needs of sage-grouse, meeting the S&Gs cannot be considered an adequate regulatory mechanism to prevent listing. The DRMPA/DEIS also does not disclose exactly when the S&Gs were evaluated on the allotments, making it uncertain whether BLM's conclusions here are even timely. This type of land health assessment monitoring should also be available online.

Comment Number: OR-GRSG-0632-3

Comment Excerpt Text:

Alternative D would apply stubble-height standards that where established by Stiver (2011) to all ACEC's in Oregon's GRSG's habitat---without taking into consideration regional variability. In many areas this cannot be met even without grazing. This will have the effect of setting up failure so grazing can be limited or removed from these areas (Vol. I p.2-8). Stiver in 2006, "strategies for addressing potential effects of gazing on Greater Sage-Grouse must be developed at the regional, and perhaps more effectively, local levels (and coordinated regionally)."

SECTION 16.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0001-3

Comment Excerpt Text:

Removal of livestock would actually endanger the habitat by increasing the risk of the primary threat of Wildfire as fine fuels increase with the lack of grazing. In turn, invasives such as medusa head and cheatgrass would be spurned with the fire cycle. (Launchbaugh & Strand 2013, Davies et al. 200; Davies et al. 2010).

Comment Number: OR-GRSG-0039-2

Comment Excerpt Text:

Neither BLM nor peer reviewed scientific studies offer any direct experimental evidence that links grazing practices to population levels of greater sage-grouse in Oregon. At Hart Mountain National Antelope Refuge where livestock have been excluded for almost 20 years, the populations have fluctuated (declined) similarly as they have elsewhere in Oregon where grazing was permitted. (Hagen, C., Greater Sage-Grouse Conservation Assessment & Strategy for Oregon, 43. 2011).

Comment Number: OR-GRSG-0048-3

Comment Excerpt Text:

Actually the opposite is true, Evans 1986 shows that proper grazing is compatible with sage-grouse and the preservation of sage-grouse habitat, and can actually benefit sage-grouse. Properly managed grazing is critical to protecting sagebrush habitat and promoting heaithy ecosystems (Davies 2011). There are no studies that tie appropriately managed livestock grazing (as required by BLMs regulations and Standards and Guidelines for Grazing Management) to a decrease in sage-grouse populations

(Connelly et al. 1997). There needs to be analysis in this EIS to relate this science, where is it? The BLM constantly focuses on the damage to habitat that can be caused by improper grazing

Comment Number: OR-GRSG-0074-17

Comment Excerpt Text:

The Draft RMPA provides an inordinate number of grazing regulatory mechanisms and provides 40% (Alts. C & F) of the action alternatives which are premised on wholesale livestock use reductions, restrictions and species specific assessments on sage-grouse habitat. Livestock grazing use in the Oregon project area is not a primary threat to GRSG habitat. Why did BLM concentrate with 2 action alternatives and many grazing regulatory mechanisms on this perceived threat? The preponderance of science on this subject indicates that improper or mismanaged grazing may have negative impacts on sage-grouse seasonal habitat not the act of grazing. "Improper livestock management, as determined by local ecological conditions, may have negative impacts on sage-grouse seasonal habitats (75CFR 13910 and references therein)" (Greater Sage-Grouse Conservation Objectives: Final Report, 2013). This report is by the Western Association of Fish and Wildlife Agencies commissioned by the USFWS to provide range wide conservation objectives and to inform the agency for its' 2015 listing decision. It is a base document for this Draft RMPA analysis. Why in this draft RMPA is the act of grazing and not improper livestock management addressed as the threat?

Comment Number: OR-GRSG-0093-124

Comment Excerpt Text:

The DEIS does not provide a list of allotments that are within the planning area and impacted by the RMPA. This makes information, such as that presented in Table 3-24 (Summary of Allotments and

AUMs in Sage-Grouse Habitat by District), impossible to evaluate and comment on. For example, according to the draft Baker RMP, there are 349 allotments within the Baker resource management area. The SEORMP covers 168 allotments. This provides a total of 517 allotments within the Vale District. We were unable to locate an explanation or maps showing how the BLM determined that these 335 allotments are within GRSG habitat. Further, we are unable to locate a list or map of the allotments within the planning area and impacted by the proposed RMPA. Overall, the maps provided with the DEIS do not allow reviewers to identify allotments or the impacts of the DEIS/RMPA within the allotments.

The DEIS lacks critical information pertaining to the affected environment. It does not provide a list of the allotments that will be impacted by an RMPA. The allotments considered to be in GRSG habitat within the planning area and that will be affected by the RMPA must be provided and explained in the DEIS to allow public review and comment

Comment Number: OR-GRSG-0093-125

Comment Excerpt Text:

Page 3-77 (3.7.1 Existing Conditions, Livestock Grazing/Range Management)

This section needs to be expanded and clarified to provide relevant information about existing conditions pertaining to livestock grazing and range management. Though it references ppendix N, it does not sufficiently interpret or discuss the data presented in Appendix N. More specifically, Section 3.7 and Appendix N do not discuss the PFC information discussed in Section 3.3.2, do not explain or interpret range conditions where livestock are present, and do not include or sufficiently explain the information available from the RHSA.

Comment Number: OR-GRSG-0093-126

Comment Excerpt Text:

Appendix N provides a summary of some, but not all aspects of the RHSA. One notable omission is trend information that is recorded with the assessments. This information is directly relevant to rangeland condition and needs to be included in Appendix N and discussed in the affected environment in order to provide BLM with the information necessary to conduct an adequate and complete alternatives analysis

Comment Number: OR-GRSG-0093-127

Comment Excerpt Text:

Appendix N and Section 3.7 rank allotments evenly regardless of whether they missed one standard or five standards in the RHSA. Further, there is no discussion as to whether each RHSA has equal impact on GRSG. The information provided in the DEIS is insufficient to explain or characterize the affected environment. Moreover, the lack of information and lack of explanation and discussion creates an incomplete and inaccurate description of livestock grazing and its impacts in the planning area.

Comment Number: OR-GRSG-0093-129

Comment Excerpt Text:

Page 3-81 (3.7.2 Trends) This section is incomplete in many respects. It does not incorporate or interpret the PFC information or photo trends mentioned in Section 3.3.2 nor the RHSA results found in Appendix N. It also does not specifically explain or address changes in grazing management that have resulted in improved rangeland and riparian health, which are addressed elsewhere in the DEIS (see e.g. Section 3.4.2).

This section does acknowledge that the moderate level of grazing currently in place in the planning area will maintain perennial bunchgrass communities and support GRSG habitat objectives (Page 3-81). We agree with this statement. However, it could be strengthened considerably as follows:

? Appropriate grazing can be used to increase or stimulate forb production and growth (Neel 1980, Klebenow 1982, Evans 1986), an important habitat feature for sage-grouse .

? Klebenow (1982) reported that moderate grazing, that left protective hiding cover for sage-grouse, did not affect sage-grouse use of meadows.

? Grazing intensity is thought to be the most important factor when considering livestock grazing in sage-grouse habitat, followed closely by timing and duration (Adams et al. 2004).

? Moderate grazing levels with periods of rest or deferment do not negatively impact sagebrush plant communities (West et al. 1984, Courtois et al. 2004, Manier and Hobbs 2006)

Further, the acknowledgement that grazing will maintain perennial bunchgrass communities and support GRSG habitat objectives needs to be incorporated and stated consistently throughout the DEIS.

Comment Number: OR-GRSG-0093-130

Comment Excerpt Text:

Appendix N: The data presented in this table was collected over a 13-year period (1998 to 2011). The BLM did not disclose the year the assessment occurred on each allotment. According to the DEIS, Page 3-77, paragraph 2, 7th sentence: "If standards are not being met, then management changes would be implemented to make progress toward attainment per current BLM grazing regulations."

This statement is consistent with the grazing regulations. However, if the RHSA were completed several years ago, we would assume that the BLM-implemented management changes on these allotments would result in an improved condition. This point is neither made nor analyzed in the DEIS.

Appendix N should have a column that indicates the year of the assessment and some discussion in Section 3.7.1 (Existing Conditions) and Section 3.7.2 (Trends) that addresses the improvements that would have resulted due to modified livestock management. There should be implementation monitoring on these allotments that would show that the changes were successful. That monitoring should be reported and analyzed as well.

The DEIS understates the effectiveness of the current RMPs in many places due to its failure to acknowledge the effect of these grazing regulations. This leads to an incorrect evaluation of the effectiveness of the "no action" alternative in achieving the intent of the RMPA.

Comment Number: OR-GRSG-0093-131

Comment Excerpt Text:

The DEIS does not reflect the information in Appendix N regarding the types and number of rangeland health standards missed. Of the 48 allotments not meeting standards attributed to livestock:

- 12 allotments missed 1 standard;
- 12 allotments missed 2 of the standards
- 17 allotments missed 3 of the standards
- 5 allotments missed 4 of the standards
- 2 allotments missed all 5 of the standards

Number of allotments missing

Standard 1 (Uplands) = 14

Standard 2 (Riparian) = 34 (less than 2.1% of planning area is in riparian habitat)

Standard 3 (Ecological) = 17

Standard 4 (Water Quality) = 22

Standard 5 (Native, T&E Species) = 30

The DEIS does not distinguish between these allotments based on the standards met or based on the number of standards met. This is a significant oversight and leads to an overstatement of how livestock may be influencing rangeland health, and an understatement of the health of the range.

Recommendation: Revise the DEIS to reflect that information actually provided by the RHSA data. Re-evaluate the environmental consequences, and particularly the trend data and effectiveness of the no action alternative at achieving conservation and protection of GRSG habitat in the DEIS.

Comment Number: OR-GRSG-0093-6

Comment Excerpt Text:

In Oregon, grazing at moderate levels is not identified as a threat to GRSG. The best available science very clearly demonstrates that such grazing will not harm or negatively impact GRSG habitat. See e.g. Strand and Launchbaugh 2013; Davies et all 2010; Neel 1980, Klebenow 1982, Evans 1986; Adams et al. 2004; West et al. 1984, Courtois et al. 2004, Manier and Hobbs 2006.

Comment Number: OR-GRSG-0093-8

Comment Excerpt Text:

The BLM need look no further than the February 2013 Conservation Objectives Team ("COT") Report, prepared by the USFWS, which requires that livestock be managed to achieve proper functioning condition in riparian areas and the standards of rangeland health in uplands, to confirm that its existing regulatory mechanisms already protect GRSG. See Greater Sage- Grouse Conservation Objectives: Final Report, February 2013 ("COT Report"), p. 45.

Indeed, BLM's own limited evaluation of Alternative A, the "no action" alternative, indicates that BLM's existing program regulates livestock grazing to achieve the conservation sought by the USFWS. The DEIS states, in part, that:

Livestock grazing would continue to be managed through existing grazing management plans unless monitoring and new information or assessments indicate a change is necessary in existing management. Methods and guidelines from the existing RMPs would be used to achieve land health standards, maintain ecological conditions, and enhance wildlife habitat during implementation of grazing regimens. Monitoring would be used to maintain the effectiveness of grazing management practices and integrated ranch planning used to plan allotments as single units.

For both livestock grazing allotments and wild horse and burro management, land health assessments and other management evaluations would support rangeland health standards, which would provide for the health of rangeland vegetation that also supports GRSG and other wildlife. Standards for Rangeland Health and Guidelines for Grazing Management require periodic assessments of range conditions and adjustments to grazing practices to improve ecosystem function, although the standards do not specifically address GRSG habitat needs.

***

Where land health standards are not being met, livestock or wild horse and burro management will be modified to make progress towards achieving desired conditions and suitable habitat conditions for GRSG.

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In other words, existing BLM regulations can and do achieve the protections sought by USFWS to maintain and improve GRSG habitat and to conserve GRSG.

Despite this fact, in Table 2-7, the DEIS describes Alternative A as having a "low probability of adjusting grazing management to maintain GRSG habitat from degradation due to the lack of direction in older land use plans." It is possible that this statement is intended to address the fact that RHSA are not prioritized, and that rangeland assessments may not be conducted on allotments in PPH habitat prior to other allotments. However, if that is what the BLM intended, it should have said so. Instead, the BLM implies that existing grazing management is unlikely to maintain GRSG habitat—a statement that simply is not true according to both the BLM and the USFWS.

Comment Number: OR-GRSG-0220-18

Comment Excerpt Text:

While the BLM dismisses this empirical evidence supporting the position that there could be a correlation between declines in GRSG and declines in the level of livestock grazing on BLM administered lands as lacking science based methodologies (p. 2-31), in fact, when one examines the data, one finds

there are scientific studies that do in fact support that premise.

For example, C.C. Evans described sage-grouse densities in her research sites as being greater in the grazed meadow sites as opposed to the ungrazed meadow sites and concluded that the differences were attributable to the influence of livestock grazing. (See HMNARCP/EIS Appendix I, p. 17). While her conclusions relative to the relationship between grazing and sage-grouse are not directly addressing the reduction in grazing and sage-grouse since adoption of the Taylor Grazing Act, it does provide science based support for the premise that reduction in cattle grazing has an impact on sage- grouse and, in some cases, a negative impact. Similar relationships between grazed meadows and ungrazed meadows were found by Klebenow and Burkhardt in 1982 studies on the Sheldon National Wildlife Refuge.

Comment Number: OR-GRSG-0246-2

Comment Excerpt Text:

There must be full data in the final RMPA/EIS of all livestock grazing allocations within the whole sage grouse planning area (including within federally designated wild horse/burro habitat areas), along with a complete listing of all BLM and FS allotments, acreage, Active (permitted) AUMs as well as genuine AUM usage for the last five years.

Comment Number: OR-GRSG-0309-7

Comment Excerpt Text:

Action D – LG/RM 21 discusses mosquito control. In number one, it states that mitigation is needed for water sources that provide breeding habitat for mosquitoes. I think the BLM needs to clarify what is meant by mitigating for water sources. Would this mean eliminating other water sources that may be breeding grounds for mosquitoes?

Comment Number: OR-GRSG-0310-2

Comment Excerpt Text:

Regarding extensive livestock & livestock related discussions throughout DEIS: USFWS COT Report only mentions that IMPROPER livestock management 'May have' negative impacts. USFWS COT Report DID NOT identify PROPER livestock management as a concern, nor does ODFW. Recommendation: Acknowledge where BLM's Proper Liwstock Management is occurring, identify where BLM's Improper Livestock Management, then address how the areas of Improper liveestock Management is affecting the Overall sage-grouse consenetion needs and, if therefrom needed, what measures are needed to correct the BLM's Improper Livestock Management practices in those specific areas.

Comment Number: OR-GRSG-0433-42

Comment Excerpt Text:

The Oregon Department of Fish and Wildlife recommends that BLM measure grazing levels "on that portion of the pasture which is known to be sage-grouse habitat" (Hagen 2011). In our experience, BLM seldom knows where key nesting and brood-rearing habitats are in a given project area. This is a fundamental data and analytical gap—one that must be addressed through the land use plan amendments' direction on how to evaluate impacts to sage-grouse in project-specific planning. See especially 43 U.S.C. § 1711(a); 43 C.F.R. § 1610.4-3; 40 C.F.R. §§ 1500.1(b), (c). BLM "assessment points" rarely have any known relationship to actual sage-grouse seasonal habitats. In large project areas like Louse Canyon, there are sometimes up to ten thousand acres between purported "representative" assessment points (BLM 2002).

Comment Number: OR-GRSG-0530-1

Comment Excerpt Text:

Based on the 2007 report from the Murphey Complex Livestock Fuel Team, the report stated that "on public lands in the Great Basin, livestock grazing is an underutilized tool in assisting managers to achieve fuels and vegetation management objective that could minimize wildfire impacts to high priority areas." According to the Murphey Complex Livestock Fuel Team, 2008, "livestock grazing that reduces the carryover of dead fuels from one year to the next can influence fire behavior," and more research on how intensive grazing could mitigate fire damage and suppress fire was called for. Even though these findings are encouraging for using livestock grazing as

a fuel reducer and a way to minimize the thread of fire, which is a major threat to the Sage-Grouse, there was little information if and how this tool (grazing) would be used in the alternatives. While the USFWS listed unmanaged grazing as a cause of Sage-Grouse decline, all grazing on public land is currently managed

Comment Number: OR-GRSG-0532-131

Comment Excerpt Text:

It is unclear whether range standards will be measured using HAF (Stiver et al. 2010) or based on the standards for rangeland health and guidelines for livestock grazing outlined in Appendix M.

Comment Number: OR-GRSG-0532-31

Comment Excerpt Text:

Where the DEIS speaks to addressing livestock grazing, the State recommends that BLM put additional effort into discussing the existence and ongoing development of Candidate Conservation Agreements (CAA) and CCA with Assurances (CCAA) in Oregon, which we believe will bring improvements to GRSG and their habitat. This CCA and CCAA effort are strengths for Oregon and for BLM in demonstrating that livestock-based impacts to GRSG habitat have been addressed through a mechanism of value to the USFW's ESA listing review. For example, on pg. 1-22, Section 1.7, the State recommends BLM acknowledge that this DEIS is not the only effort being made to protect GRSG habitat. Many agencies and organizations are involved in the effort to provide sufficient certainty for conservation of this species to avoid its listing under the ESA, and the examples of CCA and CCAA's with Harney County SWCD, Oregon Department of State Lands, and on the BLM lands with the engagement of Oregon Cattlemen's Association are worth highlighting. The CCA on BLM lands is especially relevant to the discussion of and decisions related to public land livestock grazing in this EIS.

Comment Number: OR-GRSG-0558-4

Comment Excerpt Text:

Many of the alternatives include a reduction in livestock grazing. The Taylor Grazing Act mandates that forage resources be made available for grazing. The Taylor Grazing Act states that "So far as consistent with the purposes and provisions of this Act, grazing privileges recognized and acknowledged shall be adequately safe-guarded..." The Proposed Action, and many of the other alternatives, is in direct violation of this act because they eliminate grazing that is legally 'safe-guarded'. While under some circumstances the BLM has the authority to eliminate grazing, there must be a valid resource concern. In the instance of sage-grouse, there is not a concern. Science has shown that proper grazing is compatible with sage-grouse and the preservation of sage-grouse habitat, and can actually benefit SG (Evans 1986, Anderson & McCuistion 2008). Davies et al. 2011 found that properly managed grazing is critical to protecting sagebrush habitat and promoting healthy ecosystems. In fact, there are no studies that link appropriate livestock grazing (which the BLM requires through its regulations and Standards and Guidelines) to a decrease in sage-grouse populations (Connelly et al. 1997). Where is the analysis that relates to this science in the document?

Comment Number: OR-GRSG-0580-1

Comment Excerpt Text:

We formally request that the agency add the paper to the administrative record for the EIS and consider the implications of this research in context of any grazing alternatives.

Mark D. Jankowski, Robin E. Russell, J. Christian Franson, Robert J. Dusek, Megan K. Hines, Michael Gregg, and Erik K. Hofmeister (2014) Corticosterone Metabolite Concentrations in Greater sage-grouse are Positively Associated with the Presence of Cattle Grazing. Rangeland Ecology & Management In-Press.

Comment Number: OR-GRSG-0591-48

Comment Excerpt Text:

In Oregon, 717,900 acres of PPH and 350,000 acres of PGH are not meeting rangeland health standards due to livestock grazing problems. DEIS at 3-79. This broad-scale failure of federal agencies to successfully manage livestock grazing at ecologically sustainable levels is indicative of a need for remedial action.

Existing livestock management is clearly failing across the majority of sage grouse habitats. Rangeland health standards must be met across all sage grouse habitats, and the most immediate method of achieving his is through the reduction of stocking levels for livestock. It is striking that almost half of the grazing allotments have yet to be monitored to determine whether they are meeting rangeland health standards (Table 3-26, DEIS at 3-79). This is a surprisingly high rate of noncompliance with monitoring requirements, and is especially severe in the Vale District. Id. Please explain why all allotments have not had at least one compliance check. All allotments in Priority Habitats must be managed to meet or exceed Rangeland Health standards, and following natural fires, livestock should be excluded for at least a 2-year period.

Comment Number: OR-GRSG-0591-50

Comment Excerpt Text:

All livestock allotments are managed under a rotational pattern, some using herding and others using fencing. However, scientific studies are split on the effectiveness of this approach, with many studies pointing out that it is the number of Animal Unit Months, not the pattern of grazing, that is the key factor in maintaining rangeland health. Bock et al. (1993) noted that rotational or uniform grazing pressure leads to uniform habitat types rather than a mosaic of successional stages, a result of the slow recovery of ecological succession compared to the typically rapid frequency of grazing rotation. But while optimization for livestock weight gain may maximize livestock production while maintaining net primary productivity, it may also shift the community away from late-successional dominants (which have high value to grouse) to mid- to early-successional annuals, including introduced weed species (Briske 1993). Given that fencing is a major cause of collision mortality for sage grouse, the use of fencing for rotational grazing should be discontinued, and allotments with fences within designated sage grouse habitat should have their fences removed.

Comment Number: OR-GRSG-0591-59

Comment Excerpt Text:

Livestock grazing also leads to cheatgrass invasion, as overgrazing eliminates native bunchgrasses and degrades biological soil crusts, both of which represent the ecosystem's natural defenses against this invasive weed (Reisner et al. 2013, Attachment 18). The plan amendment must implement measures that will reverse this trend with ironclad certainty. In order to minimize the spread of cheatgrass, livestock forage removal limits need to be set under the RMP amendment, allowing no more than 25% of the available forage to be consumed each year. Widespread devastation of rangeland (and more pertinently to this amendment, sage grouse habitat) and loss of habitat value can be wrought by this invasive weed. Importantly, "grazing utilization levels are not specified" under Alternative B. DEIS at 4-34. BLM must restore degraded habitats by managing for elimination of cheatgrass from the system.

The failure to recognize the key role of livestock grazing in cheatgrass-wildfire dynamics is a key 'hard look' problem with the Draft EIS. BLM asserts that livestock grazing can be used to reduce fine fuels and therefore be part of an overall fire suppression strategy. DEIS at 4-12. Conversely, the agency argues that livestock removal will increase fine fuels. DEIS at 4-40. In addition, BLM argues that grazing can reduce the spread of cheatgrass. DEIS at 4-13. BLM argues that elimination of livestock grazing would result in a buildup of fine fuels. DEIS at 4-14. However, under reference conditions (in the absence of livestock grazing), perennial bunchgrasses had much greater height and canopy cover (and thus more fine fuels were present), yet wildfires in sagebrush habitats were very rare (Baker 2007, 2011). BLM should redraft its analysis in light of the evidence that it is the type of fine fuels (cheatgrass/medusahead versus native perennials) that results in increased fire risk, not the quantity of fine fuels. Indeed, removal of livestock grazing, as discussed elsewhere in these comments, would result in a shift from highly combustible invasive grasses to native perennials that pose a very low fire risk.

Comment Number: OR-GRSG-0591-75

Comment Excerpt Text:

Please expand your analysis to include some real-world data regarding the frequency that ranch failures in the planning area result in subdivision, versus acquisition by more profitable neighboring ranches or hobby operations that keep ranchlands in open range.

Comment Number: OR-GRSG-0591-9

Comment Excerpt Text:

In addition, Braun (2006) recommended a maximum 25% forage utilization standard for livestock; this is supported by Holechek et al. (2010). Please review the scientific literature and make a determination regarding what percentage of available forage should be dedicated to forage utilization for domestic livestock.

Comment Number: OR-GRSG-0606-14

Comment Excerpt Text:

Without information on existing grazing in the planning area, it is more difficult to tell whether the DRMPA/DEIS is really making substantive changes to benefit sage-grouse. Nowhere does the DRMPA/DEIS provide a thorough disclosure of existing grazing management, as required by NEPA. Specifically, failing to indicate actual recent livestock use on the cattle allotments makes the preferred alternative unclear. Though the DRMPA/DEIS shows billed AUMs by RMP, it should have included actual use for each allotment in the chart that lists authorized AUMs in Appendix N. Because the DRMPA/DEIS lacks sufficient and accurate baseline information, it lacks a barometer with which to measure the proposed actions.

Comment Number: OR-GRSG-0606-15

Comment Excerpt Text:

Nowhere does the DRMPA/DEIS disclose the seasonality of grazing within the planning area, which prevents the reader from understanding how spring or spring-fall grazing regimes could affect sage-grouse in the planning area. It also does not provide trailing routes, pasture rotation plans, etc. In general, the DRMPA/DEIS has not taken a hard look at the details that hide the devil of declining sage-grouse populations in the project area. BLM should be supplying information equivalent to allotment management plans and annual operating instructions with terms and conditions for each grazing allotment in the planning area. Better yet, this information should be easily found online.

SECTION 16.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0093-137

Comment Excerpt Text:

The discussion on Page 4-42 also does not address the indirect impacts of the loss of grazing permits. For example, it does not address the loss of local fire control, the loss of West Nile Virus control efforts, or the loss of weed control due to the loss of local ranchers who would no longer be present in areas where grazing is no longer permitted

Comment Number: OR-GRSG-0093-151

Comment Excerpt Text:

2. Eliminating all cross-country motorized travel would result in a loss of ability for permittees to maintain range improvements, complete required fence maintenance, and effectively manage their grazing operations within their allotments. This impact will contribute to the cumulative economic impact in the management of the allotments and permit compliance.

3. Page 5-40, Alternative C states, "Many livestock operations that rely on BLMadministered lands also incorporate private and leased lands in their operations." Many ranching operations also have Forest Service and State grazing permits. This document does not address the cumulative impacts (and economic impacts) resulting from:

? Proposed Forest Service Forest Plan Amendments and State permit changes for Oregon Greater Sage-Grouse could impose land use restrictions on Forest Service allotments and State grazing lands reducing total acres available for grazing. This could be a substantial cumulative impact to the livestock industry in the State of Oregon.

? A delay in moving cattle directly to Forest Service or State permitted grazing allotments may require additional shipping/holding costs and increase animal stress. Reduced acres available for grazing will result in a faster rotation through BLM pastures. Many permittees are dependent on moving cattle directly to Forest Service/State permits once the BLM rotation is complete. Often at higher elevation, "turn on" dates onto State/Forest Service lands are delayed until spring growth has resulted in sufficient forage for cattle grazing.

Comment Number: OR-GRSG-0093-152

Comment Excerpt Text:

Equally important, the BLM did not evaluate whether the objectives of the RMPA can be achieved without restricting grazing uses, nor did the BLM accurately evaluate the effect of the proposed management within ACECs on grazing as required by the Handbook. H-1613.22(A). Indeed, an evaluation of the impact of Appendix I and Appendix J's proposals is generally absent from the DEIS.

Comment Number: OR-GRSG-0093-77

Comment Excerpt Text:

the BLM does not consider all of the impacts of changes in water sources. For example, the DEIS does not consider the fact that a change from surface water sources, such as ponds or dugouts, to wells causes significant up-front and long-term financial impacts due to the change and increase in infrastructure. Wells and pipes require more maintenance than ponds and dugouts. This also means that the BLM must be prepared to address and must analyze the additional access requirements needed to replace surface water with groundwater. In addition, where the BLM removes surface water from use by livestock, it is also changing water sources for wildlife and wild horses. These impacts are not explained or considered in the DEIS.

Comment Number: OR-GRSG-0145-8

Comment Excerpt Text:

Additional Proposed ACECs

Several alternatives in the DEIS propose new ACECs in the planning area. BLM has determined that they pass the "importance and relevance" test for designating such areas; however, BLM has failed to acknowledge that these new ACECs would cause irreversible harm-to ranching operations, and subsequently to sage grouse that depend on viable ranches for their habitat. As noted above, ACECs under the preferred alternative are likely to put ranching operations in the area out of business.

Comment Number: OR-GRSG-0220-24

Comment Excerpt Text:

The preferred Alternative D proposes to close 118,000 acres within RNA's to grazing with an overall reduction of 1 % of the total authorized grazing within the Oregon Sub-Region (RMPA/EIS, p. 4-157). As discussed supra, the BLM has failed to discuss the cumulative effects of this grazing reduction in the context of other similar reductions. Further, the BLM has not provided any information as to the site specific effects or analysis that demonstrates this reduction is warranted.

Comment Number: OR-GRSG-0281 (FrmLtr11)-43

Comment Excerpt Text:

Comment and Solution, Vol 2, page 74 Livestock Grazing: Livestock grazing is properly managed through the BLM, RMPs, GMPs, and AMPs. The BLM Districts manage grazing through annual instructions and terms and conditions of the grazing permits. Since grazing is controlled by rotations and seasons of use the animals are only on the land for 4 months during which time they are allowed to use 50% of less of the available forage within each unit in the uplands and 35-45% of the available forage in riparian areas. The Environmental Consequences of the grazing is not what the section on page 4-74 implies and this needs to be revised to provide an adequate and reasonable description of how the BLM lands are managed. Wildlife also utilize the vegetation and are a

part of the diffuse form of biotic disturbance. Land health evaluations are used to assess rangeland condition and help to identify where a change in grazing management would be beneficial to rangeland health. The DEIS needs to identify that the SRH procedure is qualitative, and individual site-specific assessments that are used to evaluate rangelands at a local scale should be combined into state or national assessments without also combining the attributes with quantitative data obtained through hierarchical strata, and statistically valid sampling methods (Pyke et al. 2002). The DEIS is placing too much emphasis on the SRH assessments. If the SRH assessments are conducted as guided by TR 1734-6 to include quantification of the resource on-site, then they are no more than a biased opinion about a moment in time.

Comment Number: OR-GRSG-0532-103

Comment Excerpt Text:

Pg. 4-13 - Add "increase invasive plants" to list of conditions resulting from inappropriate grazing e.g., Reisner et al. 2013

SECTION 17 - LOCATABLE MINERALS

SECTION 17.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0007-15

Comment Excerpt Text:

Mormon Basin Mining Operation has been left out of the EISA

On page 5-14, I see the Mormon Basin Fuels Treatment Project, however the Mormon Basin Mining project has been left out. This project was approved in 2010 and is a current, ongoing mining operation. The wildlife biological assessment for this project, on page 5 of the Mormon Basin TES Clearance Survey 2008, states for Mormon Basin, "The survey showed little habitat with potential to support sage grouse leks which typically use open areas within sage brush. No sage grouse or grouse pellets were found within the project area ". The EISA has designated Mormon Basin as PPMA. This area should be deleted from PPMA habitat. Also, the adverse effects to this mining operation are not discussed in the EISA, nor is it included in the cumulative effects section as NEPA requires.

Comment Number: OR-GRSG-0007-9

Comment Excerpt Text:

On page 4-200, the EISA states that implementing management for the following resources to protect GRSG would. have negligible to no effect, and BLM lists" Mineral split estate". This is untrue. Either the EISA must be changed to reflect no effects (see Alternatives A and C), or the adverse effects to mineral split estate must be discussed.

Comment Number: OR-GRSG-0026-10

Comment Excerpt Text:

Page ES-4 of the document states "...this RMPA/EIS will apply only to BLM administered surface lands in the planning area and BLM-administered federal mineral estate that may lie beneath other surface ownership, often referred to as split-estate lands" Page 4-92 of the document states under Impacts from Split-Estate Management , "Impacts on vegetation from mineral split-estate management under Alternative D are the same as those described under Alternative B". This is a huge problem, because on page 4-87, we see, "Under Alternative B, conservation measures and RFDs would be applied on mineral split estate in PPMA where possible. This would reduce impacts on vegetation, as described for leasable minerals on these lands". When we look on the same page at impacts from non-energy leasable minerals management we see, "under alternative B, PPMA would be closed to ...mineral leasing and BMPs would be required on existing leases" (i.e. on existing mining operations on private land underlain with federal minerals which are now administered by the county, DEQ, DSL and DOGAMI).

In order for SRHA minerals, where the surface is private and the minerals are located by the private land owner, to be administered by BLM, BLM would have to take control of the surface, which is underlain by these minerals. Public Law103-93 would have to be amended through Congress, as would the surface mining regulations, to cover administration of private

lands by BLM. This would result in considerable expenditures of locatable minerals monies, would be a duplication of effort since these mining operations are already administered by the counties and by the state, and this move by BLM would undoubtedly result in costly litigation from surface owners.

Page 1-9 should be changed to reflect the fact that BLM administered split estate lands are only those lands where the miner and the surface owner have not come to an agreement. In these cases, BLM does have authority to administer the mining operation to protect the interests of the surface owner. The GRSG PLAN should be changed to state, "Because other federal and state surface land managers have management plans in place for their surface lands, the decisions resulting from this planning process will apply to only BLM administered federal mineral split estate where the surface owner and mining claim owner have not come to an agreement on the mining operation".

Comment Number: OR-GRSG-0026-11

Comment Excerpt Text:

Page 4-92, describing the effects to Split Estate Management, should be changed to read, "the impacts on vegetation from mineral split estate management under Alternative D are the same as those described for Alternatives A and C". The County, DOGAMI, DEQ and in some cases DSL already administer these operations. The BLM Handbook is clear that BLM has no right under the current laws and regulations to administer mining operations on private lands where the owner of the surface is the owner of the mineral estate (legally filed mining claims).

Comment Number: OR-GRSG-0026-12

Comment Excerpt Text:

On page 4-200, the GRSG PLAN states that implementing management for the following resources to protect GRSG would have negligible to no effect, and BLM lists "Mineral split estate". This is untrue.

The document must reflect the huge adverse effects on mineral split estate land owners, or BLM must revise the document so there would be negligible to no effect.

Comment Number: OR-GRSG-0026-8

Comment Excerpt Text:

In many ways, Alternative D appears to be a reasonable approach to managing locatable minerals activities. This alternative recognizes valid existing rights and does not recommend additional withdrawals from mineral entry. A concern is that although the 3% disturbance cap does not apply to locatable minerals, it is unclear as if whether infrastructure and ROWs connected to locatable minerals projects would be subject to the cap.

Comment Number: OR-GRSG-0137-2

Comment Excerpt Text:

BLM has no authority to restrict or even administer mining operations on split estate lands, (private lands patented under the Stock Raising Homestead Act of 1916), where the surface owner and the mineral estate owner have come to an agreement. Operations already must comply with the County conditional use process with Malheur County, a DOGAMI permit with the State, and settling pond permits with DEQ. If BLM can get Congress to amend the law, or the President acts without Congress, not just SRHA minerals in grouse habitat would be subject to BLM administration, but all SRHA minerals would be subject.

Comment Number: OR-GRSG-0137-3

Comment Excerpt Text:

On page 4-200, the EISA states that implementing management for the following resources to protect GRSG would have negligible to no effect, and BLM lists" Mineral split estate". However, in reading the document, this statement is untrue.

On page 4-92 of the document, it states under Impacts from Split-Estate Management,

"Impacts on vegetation from mineral split-estate management under Alternative D are the same as those described under Alternative B" This is a huge problem, because on page 4-87, we see, "Under Alternative B, conservation measures and RFDs

would be applied on mineral split estate in PPMA where possible. This would reduce impacts on vegetation, as described for leasable minerals on these lands". When we look on the same page at impacts from non-energy leasable minerals management we see, "under alternative B, PPMA would be closed to ...mineral leasing and BMPs would be required on existing leases". The document must reflect the huge adverse effects on mineral split estate land owners, or BLM must revise the document so there would be negligible to no effect.

Comment Number: OR-GRSG-0152-9

Comment Excerpt Text:

p. 4-199 which states:

Management actions to withdraw areas from locatable mineral entry or to prevent unnecessary or undue degradation also apply to locatable mineral activity on lands overlying federal mineral estate. This includes federal mineral estate underlying BLMadministered lands and lands not administered by the BLM [emphasis added]. There are 15,257,000 acres of federal mineral estate within the decision area (12,618,000 acres of BLM-administered surface with federal minerals and 2,639,000 acres of private, state, or other federal surface with federal minerals).9

Under Alternative B, conservation measures and RDFs10 would be applied on mineral split estates in PPMA where possible. This seems to indicate the BLM is taking control of private surface lands. Based on this, it appears to us that the agency is presuming a role in the regulation of the surface use of private lands which in our opinion, it clearly does not have. We also note that these activities are already regulated by the counties as well as the state through DOGAMI, DEQ, and in some cases, DSL.

The EOCA Counties request that the BLM modify the document to clearly indicate if, and in what circumstances, the agency has legal authority to regulate private lands and cite the source of that authority. Further, the document needs to more clearly indicate what private lands if any are subject to regulations or other requirements under the BLM RMPs and where they are located

Comment Number: OR-GRSG-0153-3

Comment Excerpt Text:

Page 1-9 should be changed to reflect the fact that BLM administered split estate lands are only those lands where the miner and the surface owner have not come to an agreement. In these cases, BLM does administer the mining operation to protect the interests of the surface owner. The EISA should be changed to state, "Because other federal and state surface land managers have management plans in place for their surface lands, the decisions resulting from this planning process will apply to only BLM administered federal mineral split estate where the surface owner and mining claim owner have not come to an agreement on the mining operation".

Comment Number: OR-GRSG-0434-35

Comment Excerpt Text:

Withdrawing critical habitat areas before mining claims are filed is the strongest approach to habitat protection. To accomplish this protection BLM should recommend all PPMA for withdrawal by selecting Action B-MLM 1. BLM should provide a map of the resultant area recommended for withdrawal including claims that could be subject to validity exams. For existing mining operations and claims determined to be valid in PPMA BLM should put in place limitations on surface disturbance from mining operations consistent with overall disturbance caps in the proposed action.

In PGMA and connectivity habitat BLM should put in place limitations on surface disturbance from mining operations consistent with overall disturbance caps in the proposed action. BLM should also require habitat mitigation for all plans of operation and mining notices and put in place other mine plan requirements such as timing limitations as appropriate. BLM should specify which mitigation practices are applicable to mine plans and notices.

Comment Number: OR-GRSG-0434-36

Comment Excerpt Text:

In PGMA and connectivity habitat BLM should establish limitations on surface disturbance from mining operations consistent with overall disturbance caps in the proposed action. BLM should also require habitat mitigation for all plans of operation and mining notices and put in place other mine plan requirements such as timing limitations as appropriate. BLM should specify which mitigation practices could be applied to mine plans and notices.

Comment Number: OR-GRSG-0532-39

Comment Excerpt Text:

In many instances, Alternative D indicates an absolute prohibition or exclusion on certain activities in GRSG habitat. These aspects of Alternative D need to be realigned with a disturbance framework. For instance, rather than proposing an absolute exclusion or prohibition of aggregate operations needed for road maintenance in PPH , or similar limits on renewable energy development and transmission, Alternative D should be revised to reflect a disturbance framework that:

(a) Requires concentrated human activities that disturb GRSG habitat (both direct and indirect impacts) to be located to avoid PPH or other agreed-upon spatial measures of key habitat (such as the groupings of core areas currently proposed in the state framework);

(b) Requires such activities that must located in key habitat areas to minimize their direct and indirect impacts;

(c) Requires mitigation for remaining direct and indirect impacts to both PPH and PGH, to achieve a net conservation benefit; and

(d) Establishes an overall limit, or threshold, on the direct impacts in PPH (or other agreed upon units of key habitat).

Comment Number: OR-GRSG-0532-52

Comment Excerpt Text:

At present, each alternative in the DEIS, other than the no-build alternative, calls for some level of closure of aggregate material source sites (though site specific application is unclear). Closure would cause a significant impact to road-maintenance and road-building work. Such actions should be required to avoid PPH where possible, but a complete exclusion is not workable. The highway system is considered critical infrastructure by the federal government and the state. ODOT needs access to aggregate material source sites located on BLM land to ensure a safe transportation system in Oregon. This includes the ability to access the source location via roads and also to mine/extract and stockpile material. Rock material is necessary for road building and the routine maintenance of the highway (including paving, shoulder building, and erosion repair), as well as capital improvements that may expand the highway footprint. These impacts should be addressed through the mitigation framework and with a disturbance threshold.

Comment Number: OR-GRSG-0532-53

Comment Excerpt Text:

ODOT invests significant funds in the development of viable material sources. Such investments on BLM land will be wasted if existing source sites are closed. Local sources that provide quality rock typically are used until the source is depleted. More than 65% of ODOT material source sites located in south central and south eastern Oregon occur on BLM land and in areas that provide sage grouse habitat with varying degrees of quality. Deeming these material sites inaccessible will increase costs to the point that highway maintenance and improvements could become cost prohibitive, ultimately reducing the highway level of service. Rock sources are localized and limited. State highways require chip sealing (relatively low cost) on a 7-10 year cycle to prevent pavement deterioration to the point that a full structural pavement overlay (much higher cost) is required. Normally, pavement deterioration to the point that a full structural overlay is required takes only 15 years in the absence of chip sealing. In most

of the area covered by this RMP, ODOT estimates the cost to haul rock at $0.25 per cubic yard, per mile. Typical pavement overlay projects require 50,000 cubic yards of rock. This equates to a haul cost of $12,500 per mile.

Based on these calculations, if material sources in a particular area were closed and new sources were allowed to open, ODOT will see very substantial project cost increases for one way haul / round trips as follows:

- ?10 miles increase x $12,500 = $125,000 / $250,000 round trip
- ?20 miles increase x $12,500 = $250,000 / $500,000 round trip
- ?30 miles increase x $12,500 = $375,000 / $750,000 round trip
- ?40 miles increase x $12,500 = $500,000 / $1,000,000 round trip

Substantially increasing haul costs for aggregate by restricting access to existing and/or new material sources on BLM land would be cost prohibitive for ODOT to continue to maintain and improve the existing highway infrastructure in the areas subject to this RPM. Alternate material sources on nonfederal land frequently are not available within reasonable proximity of a highway project to minimize the financial impacts that will results from inaccessible BLM sources.

Comment Number: OR-GRSG-0532-54

Comment Excerpt Text:

Pg. 4-107 - All alternatives would limit, to some degree, development of new material source sites in GRSG habitat. The State (ODOT) will require development of new material source sites in the future based on need. A process must be identified or a placeholder provided for the identification and allocation of new material source sites, including sites located in GRSG habitat. Material sources are becoming depleted due to years of extracting rock—many ODOT controlled sites are 50-plus years old and are nearing the point where extraction of remaining resources is not cost effective. Rock sources will always be needed as long as the highways are open and therefore new material source sites must be identified, secured, and used. A significant portion of the land and viable material source sites occur on BLM-administered land that contains varying degrees of quality GRSG habitat. If such land became off-limits for future production it would be cost prohibitive for ODOT to continue to maintain and improve the existing highway infrastructure.

Comment Number: OR-GRSG-0532-55

Comment Excerpt Text:

Since the BLM is the primary landowner/manager in SE Oregon, it is critical that the BLM consider the need for development of new material sources. Quality rock is not evenly distributed through the planning area so the proposed closure of nearly 7 million acres of PPMA to mineral material development could be very limiting. The State proposes that PPMA lands in the draft BLM RMP/EIS be identified as avoidance areas verses "exclusion areas" for mineral material development. This would allow BLM the flexibility to consider the development of new material sites when ODOT would make such a request.

Comment Number: OR-GRSG-0532-56

Comment Excerpt Text:

Pg. 4-169 Highway Operations: The State must be able to conduct activities necessary to ensure that existing highways and associated infrastructure are adequately maintained and meet safety standards; these actions include routine maintenance, operation, and capital improvements. Routine highway maintenance needs are well documented and include activities such as vegetation management (for fire control breaks, clear zones or recovery zones, site distance requirements, prevention of snow drifts, noxious weed control), shoulder building/blading, ditch cleaning, paving/patching, hazard tree removal, and winter maintenance/snow removal. Capital improvements or highway betterments include infrastructure enhancements and safety improvements such as curve-straightening, shaping back cutbanks, providing pullouts and chain-up areas.

Capital improvements may require additional right of way outside the current federally appropriated footprint. All DEIS alternatives appear to allow continued highway maintenance within the 'right of way.' It is critical that highway right of way be defined to include all property that is necessary to maintain, operate, and improve the highway system. It is also important that the term 'maintenance' include all activities necessary for the safe operation of the highway, for example sign installation, in addition to providing pullouts and chain-up areas, shaping cut banks, and straightening curves. All highway safety activities should be allowed without the need for further environmental review and without mitigation requirements associated with the GRSG

Comment Number: OR-GRSG-0532-61

Comment Excerpt Text:

Pg. 2-103. Mineral Materials (Salables): Table 2-6, Comparison of Action Alternatives, Alternative D indicates: "Close PPMA to development of new mineral sites. Existing permitted sites would not be closed, but reclaimed upon exhaustion of resource." The term "permitted" requires clarification because BLM typically 'authorizes' use of but infrequently 'permits' a material source. This statement should be rewritten to read: "Existing permitted, appropriated or authorized sites would not be closed..." The revised sentence would make it clear, that existing material sites authorized via Title 23 appropriations will be recognized and their continued use will be allowed.

Comment Number: OR-GRSG-0532-62

Comment Excerpt Text:

Pg. 4-57 - The DEIS states, "The approach under Alternative E would be less effective because development of locatable minerals is a non-discretionary action; withdrawing lands from entry is the only way to achieve no development." Alternative E would only be less effective if proposed withdrawals under other action alternatives are actually adopted in timely manner. Recommend that BLM includes in the action alternative the estimated probability the proposed withdrawals will actually take place. This will help the USFWS determine the likelihood the proposed action will be implemented.

Comment Number: OR-GRSG-0557-2

Comment Excerpt Text:

On page 4-92 of the document, it states under Impacts from Split-Estate Management , "Impacts on vegetation from mineral split-estate management under Alternative D are the same as those described under Alternative B" This is a huge problem, because on page 4-87, we see, "Under Alternative B, conservation measures and RFDs would be applied on mineral split estate in PPMA where possible. This would reduce impacts on vegetation, as described for leasable minerals on these lands". When we look on the same page at impacts from non-energy leasable minerals management we see, "under alternative B, PPMA would be closed to ... mineral leasing and BMPs would be required on existing leases". The document must reflect the huge adverse effects on mineral split estate land owners, or BLM must revise the document so there would be negligible to no effect.

SECTION 17.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0026-22

Comment Excerpt Text:

On page 3-110 the GRSG PLAN discusses the number of notices and plans of operation. However, we see throughout the document under Impacts from Locatable Minerals Management the statement,

"exploration has been minimal and potential is unknown across all alternatives". This statement should be replaced by the following: "exploration in the central and eastern portion of the project area has been ongoing, and potential for new mining operations exists across all alternatives".

Mormon Basin Mining Operation has been left out of the GRSG PLAN

Comment Number: OR-GRSG-0644-1

Comment Excerpt Text:

The activity summary on p. 3-111 is inaccurate. Bentonite is being mined in both the Prineville and

Vale districts. The statement that "Placer gold mines are operating and expanding in all of the districts." is both misleading and inaccurate. Active and proposed placer gold mines are restricted to northern Malheur and Baker counties (see the 01-16-2014 speadsheet for permits which can be downloaded from the Oregon Department of Geology and Mineral Industries MLRR website).

SECTION 17.4 - CUMULATIVE IMPACT ANALYSIS

Comment Number: OR-GRSG-0153-11

Comment Excerpt Text:

On page 5-14, we see the Mormon Basin Fuels Treatment Project, however the Mormon Basin Mining project has been left out. This project was approved in 2010 and is a current, ongoing mining operation.

Comment Number: OR-GRSG-0557-3

Comment Excerpt Text:

Mormon Basin Mining Operation has been left out of the GRSG PLAN

On page 5-14, I don't see Mineral Valley's Mormon Basin Mining Project listed. This project was approved in 2010 and is a current, ongoing mining operation. The wildlife biological assessment for this project, on page 5 of the Mormon Basin TES Clearance Survey 2008, states for Mormon Basin, "The survey showed little habitat with potential to support sage grouse leks which typically use open areas within sage brush. No sage grouse or grouse pellets were found within the project area". The GRSG PLAN has designated Mormon Basin as PPMA. This area should be deleted from PPMA habitat. Also, the adverse effects to this mining operation from designating this area priority grouse habitat, are not discussed in the GRSG PLAN, nor is the Moulton Basin Mining Project included in the cumulative effects section as NEPA requires

SECTION 20 - RECREATION

SECTION 20.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0062-6

Comment Excerpt Text:

Between March 1 and May 15, prohibit OHV events from using routes that pass through an active lek. Impose a time of day restriction (after 10 a.m.) for routes that pass within ¼ mile of an active lek.

Comment Number: OR-GRSG-0062-7

Comment Excerpt Text:

Consider adopting a defensible standard, such as the 2003 California State OHV Sound Law which states, "Sound emissions of competitive off-highway vehicles manufactured on or after January 1, 1998, shall be limited to not more than 96 dBA, and if manufactured prior to January 1, 1998, to not more than 101 dBA, when measured from a distance of 20 inches using test procedures established by the Society of Automotive Engineers under Standard J-1287, as applicable. Sound emissions of all other off-highway vehicles shall be limited to not more than 96 dBA if manufactured on or after January 1, 1986, and not more than 101 dBA if manufactured prior to January 1, 1986, when measured from a distance of 20 inches using test procedures established by the Society of Automotive Engineers under Standard J-1287, as applicable." Link to CA Sound Law - http://ohv.parks.ca.gov/?page_id=23037

Comment Number: OR-GRSG-0206-18

Comment Excerpt Text:

Although I realize that the BLM and USFS do not control hunting of sage grouse on federal land, an alternative must be proposed in conjunction with state laws to activate a moratorium on all sage grouse hunting until which time the species has returned to a healthy and self-sustaining population. It is absurd that our government should "manage" any wildlife in order to increase wildlife populations so that they can later be hunted by an insignificant segment of the public but even more absurd in any wildlife population that is being considered under the endangered species listing. The below paragraph is taken from the online

BLM website and states that there is no evidence that hunting of the sage grouse "poses a significant threat to the species". How ridiculous that anyone would be as reckless and irresponsible as to say that killing of a threatened species does not hurt the population! An immediate moratorium to stop all sage grouse hunting must be included as an alternative within the proposed EIS.

"Does hunting Greater Sage-Grouse pose a threat to the species?

In its March 2010 warranted but precluded finding on listing the Greater Sage-Grouse under the Endangered Species Act, the U.S. Fish and Wildlife Service (FWS) specifically looked at the threats to the species posed by hunting. The FWS found that "In the United States, sage-grouse hunting is regulated by State wildlife agencies and hunting regulations are reevaluated yearly.… We have no evidence suggesting that gun and bow sport hunting has been a primary cause of range-wide declines of the greater sage-grouse in the past, or that it currently is at a level that poses a significant threat to the species."

http://www.blm.gov/wo/st/en/prog/more/sagegrouse/frequently_asked_questions.print.html#hunting

Comment Number: OR-GRSG-0567-30

Comment Excerpt Text:

Recreation is mentioned as a major threat facing the Baker and Central Oregon sage-grouse populations in the COT Report In order for the proposed plan to be consistent with the COT report we recommend:

- setting limits on road construction in PPMA;
- seasonally close roads;
- prioritize completing travel management plans for Baker and Central Oregon;
- establishing a framework and/or sideboards for protections to sage-grouse for development of travel management plans;
- provide non-discretionary actions to avoid impacts to sage-grouse from recreation; and
- change passive wording such as evaluate, consider, and discuss to active wording such as implement

SECTION 20.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0119-4

Comment Excerpt Text:

In reference to recreational spending on BLM lands on pages 3-160 thru 3-162. We have a hard time believing what is presented. The number of visits is based upon estimates by BLM recreation specialists without benefit of science-based studies. We find 188,900 visits to Lakeview Area in FY 2011 shown on Table 3-60 totally unbelievable. This would be 536 visitors per day to Lakeview Area BLM land. Every local we have asked "True or False" has said "No Way – False". These numbers shown on Table 3-60 should be dismissed due to lack of science-based studies. Table 3-61 then takes these erroneous numbers and incorporates them into a chart based upon National Forests type of visit, party size, and dollars spent. Said chart leads one to believe a party of 2.6 spends $522.63 for overnight in Lakeview area. We find the dollars spent for each type of visit totally unbelievable for the Lakeview area. We also asked said locals "True or False" and

all have said "No Way – False". we think we can all agree that someone staying overnight in the Hood River area – skiing on the Mt Hood National Forest would spend a great deal more than someone staying in Lakeview visiting BLM administered lands.

Comment Number: OR-GRSG-0122-3

Comment Excerpt Text:

Issue:

Any plan amendment should include adequate site-specific analysis on anticipated impacts of motorized and non-motorized recreational activities, which often have little to no impact on wildlife. The impacts of motorized and mountain bike routes that are primarily used for recreation should not be "lumped in" with highways and other high-speed access roads.

Comment Number: OR-GRSG-0144-6
Comment Excerpt Text:
These roads are not well used. The data you have compiled is skewered in its comparisons. Oregon is not Wyoming.. The totals of visitors stated to the area are far from reality. I submit the BLM take a hard look at its figures and data utilized it this EIS.

SECTION 21 - SALEABLE MINERALS

SECTION 21.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0002-5
Comment Excerpt Text:
Many of the rock quarries are located on private land. The document is unclear on how such privately owned sources will be affected. The closure of rock and fill sources on private and/or public lands could adversely affect the availability of the material and cost of maintaining roads.

Comment Number: OR-GRSG-0311-2
Comment Excerpt Text:
Many of the rock quarries are located on private land. The document is unclear on how such privately-owned sources will be affected.

Comment Number: OR-GRSG-0312-4
Comment Excerpt Text:
Many of the rock quarries are loca ted on private land. The document is unclear on how such privately-owned sources will be affected.

SECTION 22 - SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

SECTION 22.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0007-18
Comment Excerpt Text:
Economic Analysis

On page 4-269 the EISA states there are less than 5 employees in the mining industry. On page 3-166, the EISA states, "mineral production is a relatively minor contributor to the economy...within the 7 counties, mining indusmes employed 103 people in 2010". These figures are in error. Just in Baker, Maiheur and Grant Counties, Ashgrove has over 100 employees, Mineral Valley, Three Valieys, High Bar, LuDan, Bonnanza, Malheur Queen, each employ 10-15 miners. In Adrian, the bentonite mine employs around 20, Supreme Perlite employs miners and truck drivers seasonally, there are rock pits scattered through the counties where mining takes place. In addition, there are many hundreds of small scale locatable minerals operations within the project area. This section should be revised for accuracy.

Comment Number: OR-GRSG-0022-3
Comment Excerpt Text:
On page 4-269, the EISA states there are less than 5 employees in the mining industry. On page 3-166, the EISA states "mineral production is a relatively minor contributor to the economy...within the 7 counties, mining industries employed 103 people in 2010". These figures are in error. This section should be revised for accuracy. Just in Baker and Malheur Counties, Ashgrove has over 100 employees, Mineral Valley, Three Valleys, High Bar, LuDan, Bonanza, Malheur Queen; each employs approximately 5-15 miners. In Adrian, the bentonite mine employs around 20, Supreme Perlite employs miners and truck drivers seasonally, there are rock pits scattered through the counties where mining takes place. In addition, there are many hundreds of small scale locatable minerals operations within the project area.

Comment Number: OR-GRSG-0026-21
Comment Excerpt Text:
On page 4-269 the GRSG PLAN states there are less than 5 employees in the mining industry. On page 3¬166, the GRSG PLAN states "mineral production is a relatively minor contributor to the economy...within the 7 counties, mining industries employed 103 people in 2010". These figures are in error. Just in Baker, Malheur and Grant Counties, Ashgrove has over 100 employees, Mineral Valley, Three Valleys, High Bar, Bonnanza, Malheur Queen, each employ 10-15 miners. In Adrian, the bentonite mine employs around 20, Supreme Perlite employs miners and truck drivers seasonally, there are rock

pits scattered through the counties where mining takes place. In addition, there are many hundreds of small scale locatable minerals operations within the project area. This section should be revised for accuracy. Minerals production is important for Grant, Baker and Malheur counties.

Comment Number: OR-GRSG-0026-24
Comment Excerpt Text:
The likely over-estimation of recreation and tourism impacts on the Socioeconomic Study Area has several implications. Appendix R provides an overview of the economic impact analysis methodology, including use of the IMPLAN Input-output model as the basis of quantifying economic impacts. Unfortunately, the Appendix does not discuss how the model was calibrated with respect to the recreation and tourism sector. However, Gooding and White indicate that the results of the recreation spending analysis (discussed above) can be readily transferred to I-O models such as IMPLAN.

Therefore, we presume this was done in order to calibrate the IMPLAN model. If this was done using erroneous results developed from the national recreational spending coefficients, then the IMPLAN model is doing a poor job of modeling the recreation/tourism sector. We would expect it is overestimating the contributions of recreation/tourism activity and conversely, underestimating the relative contributions of other sectors such as grazing.

Comment Number: OR-GRSG-0093-38
Comment Excerpt Text:
References for this section:

Boyd, Chad S., Jeffrey L. Beck, and John A. Tanaka. 2014. Livestock Grazing and Sage-Grouse Habitat: Impacts and Opportunities. Journal of Rangeland Applications. In press.

Hausman, J. 2012. Contingent valuation: from dubious to hopeless. Journal of Economic Perspectives. 26(4):43-56.

Maher, A.T., J.A. Tanaka, and N. Rimbey. 2013. Economic risks of cheatgrass invasion on a simulated eastern Oregon ranch. Rangeland Ecology and Management 66:356-363.

Tanaka, J.A., N.R. Rimbey, L.A. Torell, T. DelCurto, D. Bailey, K. Walburger, D. Taylor, and . Welling. 2007. Grazing Distribution: The Quest for the Silver Bullet. Rangelands 29:38-46.

Tanaka, J.A., L.A. Torell, and M.W. Brunson. 2011. Chapter 9: A social and economic assessment of rangeland conservation practices, p. 371-422. In: Briske, D.E. (ed.). Conservation benefits of rangeland practices: assessment, recommendations, and knowledge gaps. US Department of Agriculture, Natural Resources Conservation Service, Washington, DC. 429 p.

Torell, L.A., J.A. Tanaka, N. Rimbey, T. Darden, L. Van Tassell, and A. Harp. 2002. Ranchlevel impacts of changing grazing policies on BLM land to protect the greater sage-grouse: evidence from Idaho, Nevada, and Oregon. Policy Analysis Center for Western Public Lands. PACWPL Policy Paper SG-01-02.

Torell, L.A., G.L. Torell, J.A. Tanaka, and N.R. Rimbey. 2013. The potential of valuing rangeland ecosystem services on public rangelands. Western Economic Forum 12:40-46.

Torell, L.A., N.R. Rimbey, J.A. Tanaka, D.T. Taylor, J.P. Ritten, and T.K. Foulke. 2014. Ranchlevel economic impacts of altering grazing policies on federal land to protect the greater sagegrouse. University of Wyoming Extension Bulletin. In press.

Comment Number: OR-GRSG-0101-10
Comment Excerpt Text:
Budget Considerations

Consideration of budget is particularly important to federal agencies since it is difficult to guarantee the funds to implement the conservation measures will be approved for the long-term. BLM has made unrealistic assumptions that the conservation measures articulated in the NTT will be fully funded

by Congress for the foreseeable future, and disregards the reality of obtaining the necessary funds to implement the NTT conservation measures. If the conservation measures in the NTT are not effective because they were applied improperly due to disregard of scale, or they fail to ensure for adequate funding, especially with respect to land exchanges and fire management, then it is likely that the NTT's conservation measures will not survive PECE analysis during the 12- month listing process for the sage-grouse beginning in September 2014.

Comment Number: OR-GRSG-0118-6

Comment Excerpt Text:

For purposes of the Plan, the BLM considers Harney County to be one of the low-income communities. Page 3-174, Low-Income Populations, shows, in Table 3-67, that as an average over 2006 to 2010, Harney County had 18.5 percent of its population below the poverty level, 4.5 percent higher than Oregon as a whole, and 4.7 percent higher than the national percentage. To say that the reduction in available resource-related economy consistently undermines the health of Harney County is an understatement. The selection of Alternative D will only serve to exacerbate the condition by putting the health of GRSG above the health of the community. What source of information did you utilize to derive at these numbers?

Comment Number: OR-GRSG-0118-7

Comment Excerpt Text:

Unemployment, as shown in Table 3-59, Unemployment. 2007-2012, reiterates the devastating effects of area closures on resource areas previously able to be utilized by the public for economic benefit. Already experiencing higher rates of unemployment than the state average for each of the years listed, the Plan indicates unemployment rates could be even higher when taking into account seasonal, parttime, and transitional employment. During the years 2007-2011, per capita income in the SocioEconomic Study Area was "somewhat" below that of the State of Oregon. As the figures attest, "somewhat" is actually 20% below. Are these numbers accurate?

Comment Number: OR-GRSG-0119-3

Comment Excerpt Text:

In reference to Table 3-63: On our ranch an average calf is worth $850 over the past three years. The stated basis of said Table is over a past 10 year average being $50.24 per AUM. A calf today is worth ~ twice as much as a calf in year 2000. We recommend using today's True Market Values rather than over the past 10 years – this would keep us in line with FY 2011 as per Table 3-61 on page 3-162.

Comment Number: OR-GRSG-0119-5

Comment Excerpt Text:

We think Table 3-61 should be dismissed due to the fact National Forests have totally different attributes than BLM administered lands which make them non-comparable. We think said Table 3-61 should also be dismissed on the fact the dollar values are not adjusted to the Lakeview area as well as using the non-science based numbers from said

Table 3-60. Further any other part of this 1240, m/l, page Draft that utilizing any of the information presented in said Tables 3-60 and 3-61 should also be dismissed.

Comment Number: OR-GRSG-0119-8

Comment Excerpt Text:

Regarding Section Q – We see no regard to western heritage and culture. We feel a non- use value" as well as a "passive use value" should be placed on heritage & culture no matter whether it is ranching, fishing, logging, etc. Veterans fought for heritage and our way of life. We have had people from both New Zealand and Korea visiting our ranch enjoying our western culture. In this area there are lots of volunteers that want to help gather and herd cattle on BLM lands. A city kid getting to see a baby calf born, get cleaned by mom, and then nurse mom has a "consumer surplus value" far greater than anything on Table Q – 1. Letting a city slicker help gather cattle on BLM wide open spaces also has an extremely high "consumer surplus value". We have people begging to go on a BLM cattle drive. We recommend adding "Ranching Activities" to Table Q – 2.

Further in Section Q the Section "Values Associated With Grazing Land" on page Q –10 definitely does not apply to our ranch – our ranch is totally dependent upon our cattle income. This is not "Ted Turner Country". Our BLM permits were considered ranch value at time of purchase and enable us to run as many cattle as we do. We understood these permits to be guaranteed thru the Taylor Grazing Act. We have made improvements on said permits.

Comment Number: OR-GRSG-0152-14

Comment Excerpt Text:

We are concerned that the DEIS significantly overestimates the impact of recreation and tourism on the Study Area economy and, at the same time, underestimates the impact of the proposed RMP Amendments on recreational use. As we show below, the BLM's analysis overestimates recreation/tourism jobs by counting all jobs in sectors that primarily serve the local population. In addition, we believe the BLM's use of national-level recreation data significantly overstates both the total number of recreational visits and the proportion of non-local recreational visits in the Study Area.

Comment Number: OR-GRSG-0152-15

Comment Excerpt Text:

The Affected Environment section on Recreation (which includes tourism) concluded for 2010 that 4,806 jobs were related to travel and tourism, based on Headwaters Economics (2012) data from US Census Bureau. This equates to 17.6% of all private sector jobs in the Socioeconomic Study Area.

Headwaters cautions, however, that these numbers consist...

"...of sectors that provide goods and services to visitors to the local economy, as well as the local population [emphasis added]. These industries are: retail trade, passenger transportation; arts, entertainment and recreation; and accommodation and food. It is not known, without additional research such as surveys, what exact proportion of the jobs in these sectors is attributable to expenditures by visitors, including business and pleasure travelers, versus by local residents."

Nevertheless, the BLM's analysis, although it notes that the data include services to the local population, disregards this important caveat in the analysis, attributing all jobs in these sectors to recreation and tourism

Comment Number: OR-GRSG-0152-16

Comment Excerpt Text:

In fact, of the sectors identified by the BLM as being related to travel and tourism, we believe that only the 600 or so jobs in the Accommodations sector logically would serve primarily the travel and tourism consumer

Comment Number: OR-GRSG-0152-17

Comment Excerpt Text:

We also question the credibility of the recreational visits by Resource Area in Table 3-60. The source of the data is the BLM Recreation Management Information System (RMIS). The statistics indicate a total of 2,062,201 visits in FY 2011. In the RMIS, a visit is defined as "the entry of any person onto lands or related waters administered by the BLM for any period." We wonder if that includes incidental travel on public roads across BLM lands or a grazing permittee entering a BLM allotment for the purpose of managing the herd?

To put this number in perspective, if compared to the 2011 annual visits reported for the National Parks, the eight Oregon BLM Resource Areas would together rank 11th nationally in number of visitors, ahead of Glacier National Park, for example. According to the RMIS visitor statistics, the BLM Resource Areas attract 4.8 times the number of visits as Crater Lake National Park.

[Table: Comparison of BLM Resource Areas to the most popular National Parks.]

Traffic counts do not support the BLM's estimates of recreational visits. For some permanent counters located on highways, one would have to assume the

largest portion of traffic is non-local visitors whereas we believe the bulk of traffic is local.

Comment Number: OR-GRSG-0152-18

Comment Excerpt Text:

In estimating visitor spending from recreational activities (Table 3-61), the BLM admits it lacks recreational data for the Study Area. It instead relies on National Forest visitor use data from the a Forest Service publication (White and Gooding 2012).12 In doing so, however, the BLM fails to follow the analytical recommendations of the reference it cited.

(12) Final published version is: White E., D. Gooding and D. Stynes, Estimation of National Forest Visitor Spending Averages From National Visitor Use Monitoring: Round 2. U.S. Forest Service General Technical Report PNW-GTR-882, May 2013.

The BLM's estimation of visitor spending for recreation relied on national average spending patterns for visitors on national forests to estimate the distribution of trip types, average party size, and party spending per visit to BLM Resource Areas. However, more localized data from nearby national forests is available in the report.

The Forest Service report provides "segment shares" for each national forest in addition to the national average. The segment shares are used to allocate total visits to Trip Type (e.g. Non-Local Day Trips, Non-local Overnight on Public Lands, etc). The segment shares listed in the cited publication for the Malheur, Umatilla, and Wallowa-Whitman National Forests - those in the Socioeconomic Study Area - are significantly different than the national averages. It would seem more reasonable for the BLM to use these more localized coefficients in its analysis rather than national averages that likely bear little relationship to local recreational use patterns.

In addition, the average party sizes reported by White and Gooding for the same three national forests are also different than the national averages. It would seem more reasonable for the BLM to use these more localized coefficients in its analysis rather than national averages.

Further, since the local population is less affluent than the national average, it is likely that they spend less per recreational visit, since recreation is a discretionary expense. This is important since the local population accounts for 54% of total visits, according to Table 3-61. White and Gooding classify the nearby Umatilla and Malheur National Forests among those with "below average spending " while the Wallowa-Whitman is listed as "average spending. " White and Gooding provided high and low spending profiles in addition to the average. The low spending profile is on average 40% lower than the national average spending levels. Given the character of the Study Area and the classification of the most proximal national forests as "low spending," the BLM should have used the "low spending profile" provided in the publication in its analysis rather than the average spending.13

(13) We note that even the "low spending" coefficients may overstate actual recreational spending on BLM lands. For one thing, entrance and use fees on most BLM recreational sites are very low to non-existent, whereas the Forest Service charges fees for use of many of its recreational areas including camping and picnicking sites, snow-parks, etc.

Comment Number: OR-GRSG-0152-19

Comment Excerpt Text:

To test the effect of the BLM's failure to use more localized data available in the referenced publication, we re-created Table 3-61 below using un-weighted average of the trip type and average party size coefficients for the Wallowa-Whitman, Malheur, and Umatilla forests along with the low spending profile coefficients (in 2010$'s).

[Table: Recalculation of Table 3-61 using coefficients from eastern Oregon national forests and ""low spending profile.]

The result indicates that the BLM analysis may have overestimated the economic impact of recreation by 35% or $37 million, even if one accepts the 2 million visitor estimate. If visits are in fact, overestimated,

then the overestimation of the economic impact of recreation is multiplied.

Comment Number: OR-GRSG-0152-20
Comment Excerpt Text:
In Oregon, data supplied by Travel Oregon (Oregon Tourism Commission) is considered to be an accurate assessment of the economic impacts of the travel industry. A study developed for the Travel Oregon in 2013 provides the following data for the Study Area counties. Importantly, these numbers relate to all travel-related activities, not just those associated with recreational visits to BLM lands.

[Table: Travel Oregon's assessment of economic impact of travel industry in the Study Area counties.]

According to this study, there are 2,860 FTE jobs attributable to travel in the Study Area, compared to 4,806 jobs estimated by the BLM. The share of travel-generated employment averages 5.2% across the Study Area counties; much lower than the 17.9% private sector employment share cited by the BLM. Although these statistics may not be entirely apples-to-apples, they do suggest a problem with the BLM analysis

Comment Number: OR-GRSG-0152-27
Comment Excerpt Text:
Employment Data

The commonly used database in most of Eastern Oregon and well used throughout the state is the OLMIS website "Oregon Labor Market Information System." The FEIS should contain reference to this website and include at one month's copy of the eastern Oregon publication as a comparison to Appendix P. The website is: http://www.qualityinfo.org/olmisj/PubReader?itemid=00000046

Comment Number: OR-GRSG-0153-9
Comment Excerpt Text:
On page 3-166, the EISA states "mineral production is a relatively minor contributor to the economy ... within the 7 counties, mining industries employed 103 people in 2010". These figures are in error. Just in Baker, Malheur and Grant Counties, Ashgrove has over 100 employees, Mineral Valley, Three Valleys, High Bar, Bonnanza, Malheur Queen, each employ 10-15 miners. In Adrian, the bentonite mine employs around 20, Supreme Perlite employs miners and truck drivers seasonally, there are rock pits scattered through the counties where mining takes place. In addition, there are many hundreds of small scale locatable minerals operations within the project area. This section should be revised for accuracy.

Comment Number: OR-GRSG-0192-2
Comment Excerpt Text:
4) The Bureau of Land Management is failing to take a hard look at the proposed actions effect upon the quality of the human environment by excluding use of areas, either for sustenance or recreational means, as required by 40 USC Sec. 1500.2 and 40 USC Sec. 1508.14. These roads are important to me and my family for recreation and enjoyment of the federally managed public lands. Life experiences shared with family and friends today and into the future depend solely on access to these areas being closed. Entire social and cultural structures will be lost when access to these areas are taken away.

5) The Bureau of Land Management is failing to take a hard look at Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". State wide the average number of people living below the poverty level is 15 %, while the poverty rate in the three directly affected counties is Baker 20%, Harney 19%, Malheur 25% and Lake 17%. This plan will have a directly disproportionate negative effect on these communities to supplement their home heating and food cost due to lack of open access to the forest.

6) The Bureau of Land Management is failing to take a hard look at Executive Order 12898, in regards to "Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action. These factors should include the physical sensitivity of the community or population to particular impacts;

the effect of any disruption on the community structure associated with the proposed action; and the nature and degree of impact on the physical and social structure of the community." For this reason I ask that the project be remanded

7) The Bureau of Land Management is failing to take a hard look at the "composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area effected by the proposed action, and if so whether there may be disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or Indian tribes."; Pursuant guidance from Executive Order 12898.

Comment Number: OR-GRSG-0302-6

Comment Excerpt Text:

We find it astonishing that the RMPA gave extremely little notice to the importance and scope of the ecosystem services provided by ranchers that directly benefit the GRSG by reducing key threats to this species. The final draft of the RMPA must correct this omission. It is also important that the final RMPA recognize the connection between the economic stability of ranches, and their ability to provide these services on an ongoing basis. If more ranches are driven out of business by the exclusion of grazing on public lands—as the approach recommended in the RMPA threatens to do— the fewer of these critical ecosystem services will be available for the conservation of the GRSG

Comment Number: OR-GRSG-0309-13

Comment Excerpt Text:

On page 3 – 161 there is table 3 – 60 which list the visits by resource area in fiscal year 2011. In the Lakeview resource area the number of visits numbered 188,900. If you take that number and divide it by 365 days a year, you come up with an average of 517.5 visitors on the BLM per day. This number seems highly inflated. Probably during Memorial Day and Labor Day, there is not even that many visitors here on a 12 hour basis. Because it uses methodology which estimates off of the Forest Service, I find these numbers highly suspect.

On page 3 – 162, table 3 – 61 shows that there is $144 million in estimated direct expenditures in the resource area. That number seems absurdly high for direct expenditures. Again, these estimates were taken off of the national average for all national forests. There are two problems with this: using forest estimates and using nationwide estimates. I would like to see the BLM quantify these figures with better methodology directly related to the Eastern Oregon region.

Comment Number: OR-GRSG-0320-4

Comment Excerpt Text:

You can fudge the numbers and continue to paint a rosy picture all you want. In the Eastern side of the state we have to produce things to survive as we do not have a taxpayer supported economy. Malheur County alone as one of the most economically depressed areas of the state has more than 90,000 head of cattle for 33,000 residents. Denying or severely restricting access to traditional BLM grazing ground will have a very negative impact on the county. We do not have an economic recovery despite what we have been told and will not until legislators quit punishing citizens and denying their right to prosper. The unspoken message this proposal makes is that the sage grouse is more important than the citizen's livelihood. I hope you teach them how to vote. Legislators and regulators have regulated and taxed Oregonians out of their livelihood and still demand more. I think the sage grouse is a good place to tell you no more

Comment Number: OR-GRSG-0356 (FrmLtr07)-3

Comment Excerpt Text:

Page 3-165, Forestry and Wood Products, includes a statement that seems intent on showing that the area includes a high number of timber-related jobs, when the truth is that the jobs have nearly ceased to exist. "The share of timber-related jobs in the (area), though historically low for the region, remains over eight times the national average of 0.7 percent."

Showing a comparison with a national average is very deceiving and not germane.

Comment Number: OR-GRSG-0356 (FrmLtr07)-4

Comment Excerpt Text:

Page 3-165, Renewable Energy Resources, states three of five relinquished potentially viable wind sites had sage-grouse as a major conflict. This statement does not dejine adequately whether there was in fact a threat or a perceived threat to sage grouse or whether the "conflict" was afiling of actions by special interest group(s) to preventfitrther action. Since in Harney County several activities or the planning thereof are interrupted, stalled, filed and/or litigated against by special interest groups. it is important for .the intent of this Plan to clarifj, "conflict, " since the relinquishment may have been politically driven rather than the result of actual GRSG endangerment.

Comment Number: OR-GRSG-0434-56

Comment Excerpt Text:

Accurately assessing baseline levels of economic activity may be difficult given rapid changes to land use practices resulting from efforts to preclude an endangered species listing. The DEIS utilizes employment, income and demographic data from 2001 – 2011, with much of the data from the year 2010. While utilizing decennial census data may be standard for this type of analysis and relatively easy to obtain, it must be pointed out that 2010 data is unlikely to reflect some of the possibly significant changes to the baseline economic picture in the three-plus years since that data was collected.

Comment Number: OR-GRSG-0434-58

Comment Excerpt Text:

The DEIS description of baseline economic conditions examines trends for the period between 2000 and 2010. This period of time is deemed an acceptable baseline from which to present impacts (DEIS at 3-154). This truncated view of trends is not explained or justified in the DEIS and may not adequately reflect historic patterns of population, employment or income for the study area. The DEIS should include a 20 or 30 year period of time for baseline data. The DEIS should also include a table detailing total per capita income by county. This table is critical to an accurate understanding of the economic impacts.

Comment Number: OR-GRSG-0434-59

Comment Excerpt Text:

The DEIS should use the entire Ontario Micropolitan Study Area in defining the economic study area and in its analysis of effects. Excluding Payette County and portions of Ada County based on the notion that most labor inflow would not be impacted by alternative management actions is an unsupported assertion (DEIS at 3-148). Excluding one portion of a recognized economic study area may inaccurately skew results of the analysis or inflate the significance of changes to other sectors. Even if a determination is made not to include Payette and portions of Ada County in the primary study area they should be included as a service area economy in a similar fashion to Deschutes County. Including this information would allow a more complete understanding of the regional economy.

Comment Number: OR-GRSG-0466-2

Comment Excerpt Text:

On page 4-269, the EISA states there are less than 5 employees in the mining industry. On page 3-166, the EISA states "mineral production is a relatively minor contributor to the economy... within the 7 counties, mining industries employed 103 people in 2010". These figures are in error. This section should be revised for accuracy. Just in Baker and Malheur Counties, Ashgrove has over 100 employees, Mineral Valley, Three Valleys, High Bar, LuDan, Bonnanza, Malheur Queen, each employ 10- 15 miners. In Adrian, the bentonite mine employs around 20, Supreme Perlite employs miners and truck drivers seasonally, there are rock pits scattered through the counties where mining takes place. In addition, there are many hundreds of small scale locatable minerals operations within the project area.

Comment Number: OR-GRSG-0474-1

Comment Excerpt Text:

The socio/economic analysis is very lacking as it grossly underestimates the value of the forage that is produced on BLM rangelands. Let me offer a simple

calculation of the value of an AUM. An AUM is the forage required for a cow and her nursing calf for one month. A calf will gain two pounds a day on average during the summer months while grazing BLM permits and the value of a calf on the open market today is approximately $2.00 per pound. 30 days x 2 pounds per day at $2 per pound =$120 of value per AUM. On our ranch a cow spends 5 months on public land creating a $600 value per cow. I can reduce this value a little if I recognize that a cow is on the ranch year round but only nurses a calf 7 months of the year. A weaner calf is worth $2 x 510 pounds or $1020 per head today and 42% of that value comes from forage off of BLM permit land. 1020 x 42% =$428.40. Using either of these methodologies and understanding that calf prices change as does the dependency on BLM forage when considering ranches across eastern Oregon I think it safe to say that an AUM is worth $80 to $120 of production value.

Comment Number: OR-GRSG-0474-2

Comment Excerpt Text:

My bigger point is this: The economic value of an AUM is close to $100 and this $100 is turned 5 times in the local economy therefore the economic impact to Harney County is $500 per AUM.

The economic value of Grazing is very significant and the RMP amendment grossly undervalues this economic value

Comment Number: OR-GRSG-0517-9

Comment Excerpt Text:

4-264: "in the analysis of economic impacts of management alternatives on grazing, billed AUMs were used as a baseline ... " this is an incorrect way to assess economic impacts. Billed AUMS can vary for a variety of reasons, including non-use due to fire. Ranch values are based on capacity, and permitted AUMs should be used for the economic assessment to derive a more representative impact to livestock operations

Comment Number: OR-GRSG-0535-2

Comment Excerpt Text:

Funding for Sage-Grouse Habitat Restoration

A discussion identifying how obtaining sufficient funding is a key issue of vital importance in restoring important sage-grouse habitat by seeding as stated in above Item 1. This discussion should include specific sources and amount of funding to be obtained to reach the desired goals and objectives. Currently the funding for this extremely important purpose is woefully inadequate.

A discussion detailing the woefully deficient funding currently available for sage-grouse habitat restoration being lost by yearly wildfires is presented in an article the SRM published in Rangelands Volume 35, Number 3, June 2013 authored by Tim Murphy, David E. Naugle, Randal Eardley, Jeremy D. Maestas, Tim Griffiths, Mike Pellant and Stan J. Stiver.

Comment Number: OR-GRSG-0535-3

Comment Excerpt Text:

Further analysis of 2012 shows that significantly less than needed and requested funding was received by the BLM. Based on the seed purchased by the BLM for sage-grouse habitat restoration, only an estimated 20-25% of the sage-grouse habitat that was destroyed was restored by seeding efforts of important sage-grouse habitat species. In other words, because of the lack of needed funding, another 2 million acres of sage-grouse habitat was destroyed and will be much more difficult and expensive to restore at a latter date. Obviously without the necessary funding this will continue to occur yearly.

This discussion covers only the woeful lack of funding available for one year's lost sage-grouse habitat restoration. The reality is that millions of acres of lost critical sage-grouse habitat exist from many past years and greatly increased funding is needed to initiate a program to improve and restore these acres of lost important sage-grouse habitat.

This discussion also only addresses the loss of important sage-grouse habitat due to wildfires. It is well known that additional loss of habitat has occurred and will continue to occur from other activities such as mining, energy development, road

construction, and other projects both on public and private land in sage-grouse habitat.

Finally, more funds for solely research purposes is not what is needed. Many millions have been spent on research the last 13 years and more. Now is the time to put sufficient funds into the ground and obtain actual positive results.

Comment Number: OR-GRSG-0644-2

Comment Excerpt Text:

P 3-167 Locatable minerals of importance in the planning area also include bentonite clay, zeolite and uranium. Note the Aurora uranium project in southern Malheur County that is listed on Table 5-1.

Comment Number: OR-GRSG-0644-3

Comment Excerpt Text:

Appendixes - Tables P-1 and P-2 Given the number of motels and restaurants in Baker, Grant, and Harney counties, it is puzzling that employment data for this particular industry in these counties is not shown in order to avoid disclosure of confidential information. I unsuccessfully attempted to access this data through the www.bea.gov/regional/index.htm weblink. Note that the mining employment numbers, excluding Baker, Lake, Malheur, and Union counties, here totals 345. So, are the mining jobs 103, 273 or more than 345? This type of inconsistency calls into question all of the "data" presented in the EIS.

SECTION 22.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0002-4

Comment Excerpt Text:

Five of the RNA's listed in Appendix I, Table 1-2 are utilized by ranches that are based within our school District. Eliminating grazing on these will cause one or more of the ranches to be sold or downsized. Losses of any jobs in our small community will drastically reduce our already small student population. If the District were to close our elementary school, students would have to be bused 40 miles over a mountain pass to school.

Comment Number: OR-GRSG-0003-11

Comment Excerpt Text:

The RMPA does not sufficiently consider, beyond a simple estimation based on AUM loss, the economic impact incurred by ranches. Ranches that lost AUMs—either through immediate closures on RNAs and ACECs, or through subsequent closures due to use of inappropriate standards like the HAF—would be forced to seek other pasture, which is currently very expensive to lease. This expense was not calculated into the estimated impacts, nor was the potential expense of transporting cattle to replacement pasture. Alternatively, some ranches, including some of the affected ranches in this District, would simply have to downsize (sell part of their herd) as a result of losing AUMs, leading to a reduction in annual production and income. This fact is also not considered in the RMPA.

Further, the loss of value in a ranch from permanent BLM permit reductions is a known issue that BLM has chosen not to acknowledge. Not only does this reduce resale value of the property, but as property and business values decrease, the RMPA's impacts would lead to a decrease in county revenues that support schools, police, hospitals, and roads. All of these impacts are absent in the RMPA analysis.

Comment Number: OR-GRSG-0003-12

Comment Excerpt Text:

The economic impact to ranchers caused by the immediate and subsequent closures of allotments proposed in the RMPA would have a direct impact on the full and part-time employees of these ranches, day working ranch employees, and the extensive community of service and retail businesses which depend on ranchers as their primary clients. These small businesses include, but are not limited to: hay contractors, mechanics, heavy equipment operators, saddle and tack artisans, veterinarians, welders, tire retailers, automotive and tractor dealers, consultants, horse trainers, restaurants, and many others. Although the impact on the surrounding ranching communities may be just as important as the direct economic impact, these impacts are largely glossed over with passing references in the RMPA.

The RMPA also trivializes the impact, both economic and social, that would result from the loss of jobs in small, rural communities. On p. 5-68, the RMPA claims that under Alternatives A, B, D, and E, "employment would increase by 11 percent" across the seven counties in the planning area over the next six years, with four jobs lost annually as a cumulative impact of the RMPA. Setting aside the fact that the 11-percent increase is hardly meaningful, as it would include large urban areas like Bend, the projected annual loss of four jobs across the planning area (seven counties) is clearly less than common sense dictates. The 23 family ranches represented by this District employ some 15 full and part-time regular employees, and additionally pay out between $3,000 and $10,000 per year, per ranch, in wages to day workers. Ranches impacted by permit closures would simply not be able to pay for the level of help they now employ, nor would they be running cattle herds that necessitated as much help. Consequently, the annual loss of four jobs per year projected in the RMPA for all seven counties in the planning area would be more realistically applied to our community alone

Comment Number: OR-GRSG-0003-13

Comment Excerpt Text:

The token references in the RMPA to the "custom and culture" of ranching communities are superficial and insufficient. Great Basin ranching culture, like the American Amish or Argentine gaucho culture, is an irreplaceable cultural resource. The RMPA categorically fails to recognize the lifeways, traditions, skills (such as horsemanship, stockmanship, and range management), ethnic background, vocabulary, folk arts, literature, and religion that collectively distinguish us as a people. Nor does the RMPA contemplate how the economic downsizing of ranches that would be caused by grazing reductions—and the consequent loss of jobs—would diminish this singular and iconic lifestyle.

Comment Number: OR-GRSG-0026-25

Comment Excerpt Text:

As stated in 4.19.2, "the main economic impacts derived from changes in resource management are reflected in changes in local employment and earnings, costs incurred by the private sector, fiscal revenues, and regional growth prospects." We would add that implications of proposed actions on the agency's budget need to also be considered. Yet the analysis only addresses employment and earnings, and largely ignores the other aspects of the impacts. For example, only a cursory discussion of impacts on state and local tax revenues is provided on p. 4-277, which includes no quantitative assessment of impact. Thus it is impossible for the reader to evaluate the significance.

Comment Number: OR-GRSG-0026-26

Comment Excerpt Text:

As outlined in 4.10.2, page 4-173/4: In ROW avoidance areas, ROW applications would be subject to additional requirements, such as resource surveys and reports, construction and reclamation engineering, special design features, rerouting, and long-term monitoring. These requirements could result in the denial of projects, or at least restrict location, delay availability, limit access, and certainly increase the cost. These requirements carry heavy financial burdens for private individuals or (for example) utility companies. In the case of energy supply or communications services, these costs would be passed on to consumers, decreasing the affordability of such services. Yet, there is no analysis of this impact.

Comment Number: OR-GRSG-0026-27

Comment Excerpt Text:

As another example of the incompleteness of the analysis, there is minimal discussion of the economic impact of exclusion of new ROW authorizations or requirements to bury or relocate transmission lines at renewal or amendment of ROWs "if it is technically or financially feasible." Harney Electric Coop, for example, estimates long-term power transmission line relocation costs of $500 million.

Comment Number: OR-GRSG-0047-4

Comment Excerpt Text:

It is important to address the fact that the BLM may want wells and pumps rather than

ponds/lakes/dugouts. This requirement would create significant expense and maintenance issues, and has not been addressed in the RMPA.

Comment Number: OR-GRSG-0047-6

Comment Excerpt Text:

Economic Analysis: BLM has failed to do a complete economic analysis of implementing the proposed RMPA. Modifications to grazing- either through season of use, level of use, or change in rotations—have a direct impact on our ability to stay in business. Even a small reduction can have significant effects on our operations, as alternative sources of feed can be difficult or impossible to afford.

Further, the economic analysis does not account for the economic benefits to the rancher or the BLM of using grazing as a tool to manage sage-grouse habitat. This can reduce rancher's costs by providing additional forage, and reduce BLM's cost by requiring fewer artificial measures (i.e., spray) and reducing firefighting and prevention costs (grazing reduces fire risks by reducing fuel loads). In addition, the RMPA does not address the fact that cancelling AUMs reduces the availability of forage on the marketplace.

Comment Number: OR-GRSG-0053-1

Comment Excerpt Text:

With this drastic measure of removing cattle we would be unable to support the cattle numbers with less grazing. With less cattle numbers we would be forced to reduce all facets of our operation, there would be no need for a veterinarian, the local commodity feed store, less employees to run the ranch, less number of children in our local school, less need for teachers in our community, no need for extra fuel for the tractors, with less cattle no need for the local cattle truck driver. Many dollars are spent on tires, supplies and repair, so there is less need for goods and services. With less spending means less money to run our counties, cities and our State. LESS GRAZING means LESS DOLLARS.

Comment Number: OR-GRSG-0081-3

Comment Excerpt Text:

Additional economic analysis must be completed prior to any decision. What analysis has been done is flawed and does not account for economic benefits to either the ranch or the BLM / public as a tool to manage habitat. It does not account for the savings grazing provides to the BLM by reducing the cost of wildfire fighting and prevention, not to mention spraying that would likely have to occur without grazing.

Comment Number: OR-GRSG-0081-4

Comment Excerpt Text:

The Socioeconomic information, particularly that provided for preferred Alternative D seems to only touch the surface when calculating the economic and job losses that would result from the alternative. It does not reflect the integral portion that grazing permits have over the years become for many of the ranches in those remote areas. In one small area in which I provide financing, all of which is in the Greater Sage Grouse Habitat Management Zone, I do business with six family operations for which BLM grazing permits range from 30% to 60% of their capacity. Obviously, the greater the reliance on the permits, the more economically devastating the removal of cattle from public lands would be on the particular operation.

Comment Number: OR-GRSG-0081-5

Comment Excerpt Text:

Based on a production percentage of 85% and at current market prices, the annual gross revenue generated from these six operations exceeds $4,000,000. Extension reports I have reviewed document ranch income multiplies at least 1.2 times in a community. That is over $4,800,000 of economic activity that only these six ranches contribute to an area of approximately 3,000 people. Admittedly, there will be some remaining production in some form or another after the loss of the permits, but based on their current dependence on those permits and economies of scale, the impact will be substantial, and again this is only six of dozens of operations in

this area that will be similarly affected by these proposals.

Comment Number: OR-GRSG-0093-111

Comment Excerpt Text:

RMPA does not adequately address or analyze the impacts of moving from ponds, reservoirs, stream access, dugouts, and other surface water sources to groundwater sources. Those modifications increase costs and the need for access to ensure wells and pipes are functioning properly.

Comment Number: OR-GRSG-0093-22

Comment Excerpt Text:

The BLM's use of IMPLAN is described on page 4-265 and Appendix R (not K as indicated in the text). The model is not adjusted for beef cattle and sheep enterprises. As explained below, these adjustments are necessary to provide accurate information about the economic impacts. The BLM has estimated the value of production (e.g., gross sales) based on both active and billed AUMs. This basic approach underestimates the value of production. Torell et al. (2002), which is cited in the DEIS, developed recursive ranch level models to estimate the impact on representative ranches in Oregon, Nevada, and Idaho. Those models are in the process of being revised with new information and the update publications expected shortly. It should be utilized by the BLM for the EIS and RMPA. The BLM did not apparently apply Torell, et al. (2002).

Comment Number: OR-GRSG-0093-24

Comment Excerpt Text:

The other factor that the IMPLAN model did not evaluate is what effect the AUM reductions would have on ranch size. As forage is lost in a critical grazing season with few alternatives, the ranch may have to reduce herd size which would further reduce gross sales beyond what would be expected from the lost AUMs.

Comment Number: OR-GRSG-0093-25

Comment Excerpt Text:

According to Torell et al. (2002), the typical Lake County, Oregon ranch would be affected as shown in Table 1 for different levels of BLM permit reductions (note that the models would be effectively using the billed level or actual use of BLM AUMs). The values shown are based on 2002 prices and costs and have not been adjusted. The revised numbers and runs will be forthcoming in Torell et al. (2014).

Table 1

Optimal Adjustments to Reductions in BLM Permits. Results for a Typical Lake County, Oregon Cow-Calf Ranch (Torell et al. 2002)

	Base	50% Reduction	75% Reduction	100% Reduction
BLM Available	2400	1200	600	0
Average number of brood cows	416	350	318	278
Average number of AUM	723	607	552	485
Percent Reduction in AUM		-16	-23.7	-32.9
Average Gross Sales	190,762	160,729	147,091	131,219
Percent in reduction in gross sales		-15.7	-22.9	-31.2
Change in AUMs for yearlong ranch		1392	2052	2856
Percent ranch reduction of AUMs versus BLM reduction		116	114	119

Comment Number: OR-GRSG-0093-26

Comment Excerpt Text:

Gross sales are what are used in the IMPLAN model to estimate economic impacts on a region. While these values are just for one typical ranch, it is possible to scale this up to the region as was done in Tanaka et al. (2007). This is largely a reflection of the reduced size of the ranch as the BLM AUM reduction increases and the mix of resources used for production of the herd size.

The model runs indicate that the reduction in AUMs is greater than indicated strictly by the BLM reduction. Thus, while the BLM reduction under Alternative C would be 2,400 AUMS, the actual reduction is 2,856 AUMS. The DEIS/RMPA's impacts are underestimated.

Comment Number: OR-GRSG-0093-27

Comment Excerpt Text:

BLM grazing occurs in a defined season. As found in Torell et al. (2002), when grazing is reduced on a BLM permit, the impact on the ranch is normally greater than just the BLM AUM reduction. This is due to the ranch having to adjust its forage base, herd size, and/or grazing strategy. The response is based on alternative seasonal forage and the costs of such alternative forage. Without those adjustments by the ranch, it is a possibility that private land will be affected in terms of grazing pressure or season of use and lead to cumulative impacts detrimental to the resource as a whole. As found in Torell et al. (2002), Tanaka et al. (2007), and other studies, such a change can lead to a reduction in herd size. For alternative C (full removal), Torell et al. (2002) would indicate that the full loss of AUMs compared to the BLM reduction is a ratio of 1.14:1 to 1.19:1.

Comment Number: OR-GRSG-0093-28

Comment Excerpt Text:

The IMPLAN analysis assumed that going from a cow yearlong to the total herd resulted in a ratio of 1.2:1. In other words, for every cow, the ranch also had to maintain another 20% in AUMs for replacements, bulls, horses, etc. Torell et al. (2002) showed this ratio to be closer to 1.73:1 or an additional 73% in AUMs over just the cow. So a cow yearlong requires 12 AUMs of feed, while the whole herd requires just over 20 AUMs per cow.

The result of these two factors indicates that the data used to feed into the IMPLAN model were likely too low. The economic impact on the economy and jobs is therefore also too low. Putting the two together would indicate that the BLM analysis used a gross income that was 44% too low (1.73/1.20) and an AUM impact that was 14-19% too low.

The Lake County, Oregon model is based upon the enterprise budget developed by Turner et al. (1997) adjusted to 2002 values. Based on the above, the estimate is that AUMs should have ranged as shown below. For alternative C, the range of AUM impacts should have been 791,314 to 826,021 lost AUMs for the high impact scenario. Additionally, the direct economic impact in $/AUM should have been $72.62/AUM versus the $50.37/AUM used in the analysis.

Comment Number: OR-GRSG-0093-30

Comment Excerpt Text:

Pages 4-146 to 4-147 state that "Changes in livestock grazing management could impact grazing opportunities in a variety of ways. For example, implementing particular livestock grazing management requirements to benefit GRSG could affect livestock grazing by changing required management actions. Management requirements would increase short-term and long-term costs to permittees and lessees and decrease AUMs, particularly when they require one or more of the following:

- Modification of a grazing strategy
- Change in season-of-use or kind of livestock
- Removal or modification of range improvements, when ability to disperse livestock is impacted

These management requirements could result in direct and indirect economic impacts on individuals, companies, and the local community. For example, if a ranch is dependent seasonally on forage on public lands, reducing or eliminating AUMs on public lands would affect the entire ranching operation by reducing the total amount of available forage (Torell et al. 2002)."

Changes would also be felt in the local community. Loss of ranch revenues would directly impact county revenues and the rate of departure from rural communities to urban communities.

These statements recognize the impacts of changes on ranches, but the DEIS does not determine the economic impact or evaluate it.

Comment Number: OR-GRSG-0093-31

Comment Excerpt Text:

Impacts from Livestock Grazing/Range Management

Alternative C would eliminate livestock grazing from all allotments completely or partially within occupied GRSG habitat. There would be 0 AUMs in GRSG habitat. Eliminating grazing from all allotments intersecting occupied habitat would result in economic impacts on permittees and lessees. As discussed under Section 4.7.2, permittees and lessees would be faced with reducing livestock numbers for their operations or locating replacement forage, potentially at higher costs and with limited availability. Changes to permitted AUM levels could also impact property values of ranches next to federal lands, which act as base properties for authorized permittees and lessees. Closures would also impact permittees' and lessees' current seasonal rotations or other management strategies n federal and private lands. Due to these factors, the elimination of permitted grazing in PPMA could result in permittees and lessees going out of business, with impacts on them and local communities as a whole. Additional details of the economic impacts are discussed in Section 4.20, Social and Economic Impacts (Including Environmental Justice).

This is one of the few places where other impacts on ranches are discussed. However, the BLM does not analyze those impacts either from an economic or social perspective. Further, this statement does not appropriately reflect the scale of the impacts to ranchers, most of whom will most certainly go out of business under Alternative C.

Comment Number: OR-GRSG-0093-32

Comment Excerpt Text:

IMPLAN by itself only tells part of the economic and social story. The impact on ranches and communities themselves may be just as important as the direct economic impact, but these impacts are largely glossed over with passing references in the DEIS. Those impacts in the context of community structure and function are equally important.

For example, one impact to the community would be the loss of businesses that rely on ranches as their primary customers. These impacts would be exacerbated by other economic impacts to the county, such as reduced recreation income associated with lost access to public lands as a result of road closures and travel restrictions. Then, as property and business values decrease, the RMPA's impacts will lead to a decrease in county revenues that support schools, police, hospitals, and roads.

From a social perspective, the loss of permits or restrictions on permits impacts an individual's and the community's perception and view of the BLM, other ranchers, and the impacted rancher him or herself. In addition, concerns about consolidation of land ownership and/or loss of control over lands long devoted to ranch purposes and seen as integral to a ranch also can have a significant, negative social impact. This trend and the resulting anxiety was well-documented in a recent study in nearby Owyhee County, Idaho:

The number of people involved in agriculture is shrinking and the number of livestock and the amount of land per farm is increasing. Precisely because many are aware of these consolidation trends in other regions that have large allotments of public lands, the anxiety from anticipation of whether they have to follow the same path becomes a measurable impact in the present.

J.D. Wulfhorst, Neil R. Rimbey, Tim D. Darden (September 2003), Social and Community Impacts of Public Land Grazing Policy Alternatives in the Bruneau Resource Area of Owyhee County, Idaho, Agricultural Economics Extension Series No. 03-07, Department of Agricultural Economics and Rural Sociology, Moscow, Idaho. Page 60.

Comment Number: OR-GRSG-0093-34

Comment Excerpt Text:

While we know that profit is not the only factor involved in the decision to stay in business, part of that choice is based on the availability of off-ranch employment at a high enough wage to cover the cash

losses and to have enough for the family to live off of. The DEIS does not evaluate this issue, and specifically does not account for the absence of family wage level jobs in he rural communities associated with the ranches that rely on grazing within the planning area. Further, the loss of value in the ranch from permanent BLM permit reductions is a known issue that BLM has chosen not to acknowledge. Permittees have paid for the value of these permits through purchase of the ranch or inheritance taxes. The credibility of the impact analysis is diminished when it does not acknowledge such values.

Comment Number: OR-GRSG-0093-37

Comment Excerpt Text:

Page 4-143 provides a list of impacts to grazing that include: activities that affect forage production; areas open to livestock grazing; the kind of livestock (e.g., cattle, sheep, or goat); the season of use and timing; the ability to construct and maintain range improvements; impacts from human disturbance, including disruption of livestock movement or unwanted dispersal.

Each of these impacts to grazing could be analyzed for their economic impact. Torell et al. (2002) examined changes in season of use and timing. In addition, the ability to construct and maintain range improvements and activities that affect forage production have been analyzed in many studies, none of which have found that these investments pay for themselves in terms of just livestock production changes (Tanaka et al. 2011). These studies have found that there are ecosystem services associated with the range improvements as well. Furthermore, for areas open to livestock grazing, a study by Maher et al. (2013) looked at what happened to a ranch when unpredictable wildfires removed public lands open to livestock grazing by that ranch.

Comment Number: OR-GRSG-0093-77

Comment Excerpt Text:

the BLM does not consider all of the impacts of changes in water sources. For example, the DEIS does not consider the fact that a change from surface water sources, such as ponds or dugouts, to wells causes significant up-front and long-term financial impacts due to the change and increase in infrastructure. Wells and pipes require more maintenance than ponds and dugouts. This also means that the BLM must be prepared to address and must analyze the additional access requirements needed to replace surface water with groundwater. In addition, where the BLM removes surface water from use by livestock, it is also changing water sources for wildlife and wild horses. These impacts are not explained or considered in the DEIS.

Comment Number: OR-GRSG-0113-4

Comment Excerpt Text:

EOCRO correctly points out that the analysis appears to consider only direct construction and operations employment resulting from energy generation development. Indirect and induced jobs are insufficiently considered. The multiplier associated with energy generation facility construction and operation is significant due to the wages associated with construction and operation.

There is also insufficient information provided on the impacts to income, and other economic variables, including but not limited to the implication on tax revenue to local taxing entities - schools, rural fire districts, health districts, parks & rec. districts, and counties from generation project development. These revenues have been vitally important to rural counties that have seen renewable energy development. The BLM needs to do a much better job researching and understanding the economic benefits arising from generation development in rural counties in which it has occurred. CREA believes that DEIS is underestimating those impacts and benefits. It also needs to more accurately assess the potential for renewable energy development on the land under study in the DEIS. CREA believes that the BLM is significantly underestimating the long term potential for renewable energy development in this area. We believe the combination of these two analytical shortcomings results in a dramatic underestimation of the financial impacts of proposed development restrictions. The loss of these potential benefits, combined with the costs imposed on rural electric

distribution and transmission utilities only results in further economic hardship on people living in areas already suffering disproportionate economic impacts, and unfairly precludes opportunities to enhance local economies.

Comment Number: OR-GRSG-0115-1
Comment Excerpt Text:
How will the cattle industry in Eastern Oregon be affected by this plan to protect Sage Grouse?

Comment Number: OR-GRSG-0119-4
Comment Excerpt Text:
In reference to recreational spending on BLM lands on pages 3-160 thru 3-162. We have a hard time believing what is presented. The number of visits is based upon estimates by BLM recreation specialists without benefit of science-based studies. We find 188,900 visits to Lakeview Area in FY 2011 shown on Table 3-60 totally unbelievable. This would be 536 visitors per day to Lakeview Area BLM land. Every local we have asked "True or False" has said "No Way – False". These numbers shown on Table 3-60 should be dismissed due to lack of science-based studies. Table 3-61 then takes these erroneous numbers and incorporates them into a chart based upon National Forests type of visit, party size, and dollars spent. Said chart leads one to believe a party of 2.6 spends $522.63 for overnight in Lakeview area. We find the dollars spent for each type of visit totally unbelievable for the Lakeview area. We also asked said locals "True or False" and

all have said "No Way – False". we think we can all agree that someone staying overnight in the Hood River area – skiing on the Mt Hood National Forest would spend a great deal more than someone staying in Lakeview visiting BLM administered lands.

Comment Number: OR-GRSG-0125-1
Comment Excerpt Text:
the EIS does not reflect any of the results of the removal of private properties and the possibility or improvements on these properties, from the tax rolls. However history shows the result of recent listings on communities in Oregon where the primary existing businesses are reduced or eliminated (i.e. the lumber industries) and the adverse effect that had on local communities.

Comment Number: OR-GRSG-0127-1
Comment Excerpt Text:
Above all, this document is not legal, as no Economic impact study has been adequately prepared. For example, the DEIS says that only five miners would be impacted in Baker County. This is not true. Oregon Department Of Transportation (ODOT) has gravel pits in North East Oregon, they employ several people. Ash Grove has approximately 150 employees. Both Ash Grove, and ODOT are mining. There are also several other mining companies in Baker County, by far, more than five miners.

Comment Number: OR-GRSG-0145-14
Comment Excerpt Text:
Socio-economic Impacts

Use of the IMPLAN model may have resulted in an underestimation of the socio-economic impacts of the alternatives in the DEIS. In counties that are at capacity for grazing, removing grazing from federal lands will result in a reduction of AUMs for the entire year. As described by Torell (2010), "If the ranch is dependent seasonally on federal forage, a reduction in federal AUMs may create forage imbalances and produce a greater reduction in grazing capacity than just the loss of the federal AUMs."

In instances where alternate forage is available, Torell et al. (2010) note, ranchers are likely to "use deeded lands and meadows more intensively as grazing alternatives to public lands... Unfortunately, these same acreages are often prime habitat for sage grouse, and adjusting seasons of use and stocking levels on deeded rangelands and meadows could be counterproductive."

Comment Number: OR-GRSG-0152-21
Comment Excerpt Text:
The likely over-estimation of recreation and tourism impacts on the Socioeconomic Study Area has several implications. Appendix R provides an overview of the economic impact analysis methodology, including use

of the IMPLAN Input-output model as the basis of quantifying economic impacts. Unfortunately, the Appendix does not discuss how the model was calibrated with respect to the recreation and tourism sector. However, Gooding and White indicates that the results of the recreation spending analysis (discussed above) can be readily transferred to I-O models such as IMPLAN. Therefore, we presume this was done in order to calibrate the IMPLAN model. If this was done using erroneous results developed from the national recreational spending coefficients, then the IMPLAN model is doing a poor job of modeling the recreation/tourism sector. We would expect it is overestimating the contributions of recreation/tourism activity and conversely, underestimating the relative contributions of other sectors such as grazing.

Further, the BLM has determined that the alternatives will not result in measurable impacts on recreation visitor days (a subject we will return to later). It was concluded that the net economic effect on recreation was not possible to quantify. Therefore, not only is the impact of the recreation/tourism sector overstated, it is also insensitive to the Alternatives, having the effect of muting the overall economic impacts on other sectors.

Finally, the conclusion that the Alternatives have no impact of recreation does not make sense in light of the projected impacts on jobs, which range up to 896 job losses under Alternative C. The local population represents 54% of recreational visits according to the BLM's analysis. Recreation is a discretionary activity dependent on income. Loss of jobs and lower incomes would have a negative impact on recreational use.

We ask that the BLM undertake a new analysis of the status of recreational use on BLM lands, its economic contribution to the local economy, and the effects of the Alternatives on recreational use. We suggest that this effort ought to utilize the data sources we referenced from Travel Oregon and ODOT.

Comment Number: OR-GRSG-0152-23

Comment Excerpt Text:

As outlined in 4.10.2, page 4-173/4: In ROW avoidance areas, ROW applications would be subject to additional requirements, such as resource surveys and reports, construction and reclamation engineering, special design features, rerouting, and long-term monitoring. These requirements could result in the denial of projects, or at least restrict location, delay availability, limit access, and certainly increase the cost. These requirements carry heavy financial burdens for private individuals or (for example) utility companies. In the case of energy supply or communications services, these costs would be passed on to consumers, decreasing the affordability of such services. Yet, there is no analysis of this impact

Comment Number: OR-GRSG-0152-24

Comment Excerpt Text:

Another example of the incomplete analysis is the lack of analysis of the 3% disturbance cap. Without a clear view of how the disturbance cap would be measured, it was not possible for the BLM to consider its impact in the socio-economic assessment. If this is the case, it seems to us that the concept has not been sufficiently well thought-out and should be eliminated from all Alternatives. If this is not done, a thorough economic impact assessment of this element is required

Comment Number: OR-GRSG-0152-25

Comment Excerpt Text:

there is minimal discussion of the economic impact of exclusion of new ROW authorizations or requirements to bury or relocate transmission lines at renewal or amendment of ROWs "if it is technically or financially feasible." Harney Electric Coop, for example, estimates long-term power transmission line relocation costs of $500 million in the worst case. Even if their analysis is only 1% correct, the financial impact to their members should be analyzed

Comment Number: OR-GRSG-0152-26

Comment Excerpt Text:

It appears the economic analysis was completed piecemeal using different methodologies and looking at each individual impact in isolation rather than cumulatively. Also, results are not presented in a consistent fashion.

It appears that IMPLAN was used only to analyze the impacts of management actions affecting grazing (Table 4-50) and wind energy development (Tables 4-52 and 4-53). Typically, this type of analysis shows changes by economic sector. However, in these tables, only total impacts on output, employment, and earnings are shown. We request that the BLM show more detail at the sector level so that readers can properly understand the potential impacts on different parts of the economy.

Geothermal exploration and development appears to have been analyzed differently; only direct jobs during construction and operation are discussed. Only numbers of jobs were indicated, not earnings or output effects. Also, there is no assessment of the indirect and induced multiplier effects of these direct impacts. Notably, the impact on geothermal involved a large number of jobs for this region and would have considerable downstream economic impacts.

Comment Number: OR-GRSG-0152-29

Comment Excerpt Text:

Table 4-50 does not provide adequate level of information for reader's to judge the economic impacts of management actions affecting livestock AUMs. The numbers provide no context - what percentage of the total are these numbers? What sectors of the economy are impacted? What proportion of the output, jobs, and earnings impact are on farm sector, retail, services, etc?

Comment Number: OR-GRSG-0152-32

Comment Excerpt Text:

[Reference to Mining Analysis] On p. 3-166, the document state that mineral production is a relatively minor contributor to the economy of the Study Area, claiming that within the 7 counties, mining industries employed 103 people in 2010.

- However, on p. 4-270, the document says that the level of employment in just the salable minerals industry ranged from a low of 5 in Lake County to as many as 250 in Baker County. For the seven counties, the total is between 135 and 320 jobs - up to three times the number cited on 3-166. This is an illustration of the disjointed and conflicting analysis found in the DEIS

Comment Number: OR-GRSG-0152-33

Comment Excerpt Text:

[Reference to Mining Analysis] On p. 4-270, the report states the following: " Under Alternatives A and C, approximately 21 percent of the federal mineral estate would be closed to salable minerals development. This percentage would increase to approximately 44 percent under Alternatives B, D, E, and F. If employment were to fall proportionally to closures of federal mineral estate, the impact on salable minerals-related employment in the study area would be a loss of between 39 and 93 jobs under Alternatives B, D, E, and F. The impacts of Alternative B, D, E, and F would likely be larger [emphasis added], however, for several reasons. ROW avoidance increases in several of these alternatives could further decrease construction and derived demand for mineral materials. Because salable minerals from BLM-administered lands are typically available to local governments free of charge, these alternatives could have a cost impact on public projects in the study area."

- Yet, these projected job losses of 39 to 93 jobs or more, are omitted from the cumulative effect analysis including Table 5-2, which sums job losses, and Table 5-3, which addresses changes in earnings. This omission invalidates the analysis

Comment Number: OR-GRSG-0152-34
Comment Excerpt Text:
Geothermal Analysis

-The analysis is incomplete and insufficient, considering only direct construction and operations employment. Indirect and induced jobs are not considered nor is any information provided on the impacts to income, and other economic variables. As a result, important differences between alternative has not been fully analyzed.

- No reason or explanation provided for this omission or why this sector was treated differently than the others.

Comment Number: OR-GRSG-0152-35
Comment Excerpt Text:
[Reference to Wind Energy Development Analysis] There are inconsistent statements in regard to relative impacts of the Alternatives on wind energy. On p. 4-272 it states, "The BLM projects that 182 megawatts of wind energy installed capacity expected to occur under Alternatives A, D, and E would no longer occur under Alternatives B, C, and F." However, on p. 4-278 it says, "the BLM's analysis shows wind energy development would be unaffected by the choice of alternatives."

Comment Number: OR-GRSG-0152-36
Comment Excerpt Text:
As for grazing, the impact tables 4-52 and 4-53 do not provide enough information to provide context to allow readers to understand the relative impacts. What sectors are affected?

Comment Number: OR-GRSG-0152-37
Comment Excerpt Text:
There is no mention of the property taxes directly attributable to wind energy projects. Taxing districts in counties where wind power is located would see a significant upturn in tax revenue, which is not considered in the DEIS

Comment Number: OR-GRSG-0152-38
Comment Excerpt Text:
[Reference to Wind Energy Development Analysis]

- Since Harney County is the focus of the foreseeable wind energy development activity, presumably the majority of economic impact - jobs and income - would be within Harney County. This multiplies the potential impact because it is concentrated in one area.
- There is no discussion at all of the implication of tax revenue to the taxing entities - schools, health district, parks & rec. district, county, from this project. It would double the tax base in the county.
- Harney County is one of the identified low-income counties, yet the Environmental Justice implications on the county's population resulting from the prohibition of wind development under Alternative B, C, and F are not discussed.

Comment Number: OR-GRSG-0152-39
Comment Excerpt Text:
Appendix Table P-2 provides employment percentages. There are 5 identified low-income counties: Baker, Harney, Lake, Malheur, and Union. Malheur, Lake and Harney have the highest percentage of farm employment as a subset of total county employment, but Baker, one of the other 5 low-income counties, is not far behind (10.5% compared to Malheur's 12.5%). What is the threshold BLM is using for "significant share" of farm employment?

Comment Number: OR-GRSG-0171-1
Comment Excerpt Text:
At the public hearing the BLM economist stated that he predicted only 9 jobs would be lost in Adel, OR; if the BLM's preferred plan was followed. Nine sounds small but it is likely about 20% of the jobs in this community. Can you imagine the public outrage if BLM was contemplating a plan that would cut jobs by 20% in Portland, OR; or maybe for the state of Oregon or California. How would the BLM

employees feel if someone came up with a plan to cut the number of BLM employee's by 20%. This is only the direct impact with no trickledown effect.

Comment Number: OR-GRSG-0182-1

Comment Excerpt Text:

I would like to respond to the sage-grouse issues appeal for a balanced approach in looking at solutions.

I grew up in the Lakeview/Plush area in a ranching family. We are now entering the 4th generation in the business. I live and have worked as a nurse in Portland for over 30 years. When I was growing up the timber industry was flourishing, so was the town of Lakeview. It was a grteat place to grow up. I had fully intended to retire there.

However, the timber polices instituted with the Spotted Owl issue have decimated the town. As mills closed, so did local business. There were once three pharmacy drugstores, now there is one that is not open 7 days a week. There is now little incentive for young people to move back or for people like myself to retire in the area.

The population in the area is aging and as the elderly pass away, homes are unable to be sold, so many have become rental. As the area deteriorates, it can become more appealing for crime or drug traffic through the area.

At this time many small in the state are encountering similar problems. Having lived in the urban area for all these years, I don't see much understanding in this area, of now the problems around the state will affect all of us. We now have 1 in 5 Oregonians on food stamps, our schools need more funding, some places are looking for state support to provide police in their town. We also have an aging population in this country that will be living on fixed incomes and an increased demand for health care.

We really cannot afford to put small businesses out of business. We need the tax base, we need healthy communities, good schools and good health care.

Please consider the collateral damage done to communities if a balanced approach to the sage-grouse is not considered.

Comment Number: OR-GRSG-0190-1

Comment Excerpt Text:

1. Economic analysis of benefits from maintaining and restoring Greater Sage-Grouse populations and habitat: The economic analysis for the Draft RMPA unfortunately does not appear to have included an assessment of economic benefits to rural communities that will result from protecting and restoring Greater Sage-Grouse populations and their habitat. This should be corrected so that economic benefits are given proper weight in the analysis of alternatives.

According to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (conducted by the U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, and U.S. Census Bureau) wildlife watchers annually spend $776 million — an average of $523 per participant — in Oregon, including:

- $155.4 million on food & lodging.
- $ 97.0 million on transportation.
- $ 10.1 million on other trip costs.

As of 2006, birders and other wildlife viewers were estimated by this study to support over 22,000 full-time jobs in

Oregon. They also generated over $60 million in taxes for Oregon & federal governments .

Comment Number: OR-GRSG-0192-2

Comment Excerpt Text:

4) The Bureau of Land Management is failing to take a hard look at the proposed actions effect upon the quality of the human environment by excluding use of areas, either for sustenance or recreational means, as required by 40 USC Sec. 1500.2 and 40 USC Sec. 1508.14. These roads are important to me and my family for recreation and enjoyment of the federally managed public lands. Life experiences shared with

family and friends today and into the future depend solely on access to these areas being closed. Entire social and cultural structures will be lost when access to these areas are taken away.

5) The Bureau of Land Management is failing to take a hard look at Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". State wide the average number of people living below the poverty level is 15 %, while the poverty rate in the three directly affected counties is Baker 20%, Harney 19%, Malheur 25% and Lake 17%. This plan will have a directly disproportionate negative effect on these communities to supplement their home heating and food cost due to lack of open access to the forest.

6) The Bureau of Land Management is failing to take a hard look at Executive Order 12898, in regards to "Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action. These factors should include the physical sensitivity of the community or population to particular impacts; the effect of any disruption on the community structure associated with the proposed action; and the nature and degree of impact on the physical and social structure of the community." For this reason I ask that the project be remanded

7) The Bureau of Land Management is failing to take a hard look at the "composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area effected by the proposed action, and if so whether there may be disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or Indian tribes."; Pursuant guidance from Executive Order 12898.

Comment Number: OR-GRSG-0192-3

Comment Excerpt Text:

9) The Bureau of Land Management has not taken a hard look at the direct impacts on local communities to partake in traditional and cultural uses, limiting their access to traditional cultural places, which by NHPA are any areas historically tied to rural communities. Many families in the affected area are 5th and in some cases 6th generation families accustomed to engaging in these as part of their culture and heritage.

Comment Number: OR-GRSG-0199-15

Comment Excerpt Text:

I. Economic Impacts and Environmental Justice Deserve More Focus and Attention.

While the Grant County Court appreciates that the RMPA/EIS discloses estimated economic and social impacts that would result from choosing Alternative D, the County is concerned that the impacts may be understated. Moreover, in evaluating the significance of the economic and social impacts, the BLM appears to have ignored its duty to evaluate the significance of impacts based on "context and intensity" pursuant to 40 C.F.R. § 1508.27.

When you consider that Grant only has approximately 7,300 residents, that the County has a disproportionately high unemployment rate compared to the rest of the State, that the County has a disproportionately low median income compared to the rest of the State, and that nearly two-thirds of the County is owned and managed by the BLM-and that several of the other counties subject to the RMPA/EIS find themselves in a similar situation-every single lost job and any reduction in median income represents a significant impact on these rural economies and the quality of life of the citizens subject to the RMPA/EIS. The BLM's proposed RMPAs threaten to reduce livestock production in Grant County, as well as economic development opportunities relating to energy, development and infrastructure. These factors weigh heavily against taking all but the most absolutely necessary measures to prevent an ESA listing-highlighting the importance of the BLM carefully reassessing the purpose and need. The Grant County Court appreciates that an ESA listing could have far greater economic consequences than the RMPAs

currently under consideration but that does not relieve the BLM from its responsibility to carefully consider and fully disclose the economic and social impacts of the proposed actions.

The Grant County Court requests that the BLM reevaluate and fully disclose the economic and social impacts of the proposed alternatives based on the context and intensity framework required by NEPA.

Comment Number: OR-GRSG-0200-17
Comment Excerpt Text:
While the Grant County Court appreciates that the RMPA/EIS discloses estimated economic and social impacts that would result from choosing Alternative D, the County is concerned that the impacts may be understated. Moreover, in evaluating the significance of the economic and social impacts, the BLM appears to have ignored its duty to evaluate the significance of impacts based on "context and intensity" pursuant to 40 C.F.R. § 1508.27.

When you consider that Grant only has approximately 7,300 residents, that the County has a disproportionately high unemployment rate compared to the rest of the State, that the County has a disproportionately low median income compared to the rest of the State, and that nearly two-thirds of the County is owned and managed by the BLM-and that several of the other counties subject to the RMPA/EIS find themselves in a similar situation-every single lost job and any reduction in median income represents a significant impact on these rural economies and the quality of life of the citizens subject to the RMPA/EIS. The BLM's proposed RMPAs threaten to reduce livestock production in Grant County, as well as economic development opportunities relating to energy development and infrastructure. These factors weigh heavily against taking all but the most absolutely necessary measures to prevent an ESA listing-highlighting the importance of the BLM carefully reassessing the purpose and need. The Grant County Court appreciates that an ESA listing could have far greater economic consequences than the RMPAs currently under consideration but that does not relieve the BLM from its responsibility to carefully consider and fully disclose the economic and social impacts of the proposed actions.

The Grant County Court requests that the BLM reevaluate and fully disclose the economic and social impacts of the proposed alternatives based on the context and intensity framework required by NEPA

Comment Number: OR-GRSG-0204-1
Comment Excerpt Text:
Topic: VG2 - Conservation focus

Direct: not sure what "-" means but assuming it is agreeing with Alt B. This action could cooperative multiple funding and action on private/public land and provide economic opportunities to local contractors. We should attempt to determine how much opportunity there is and add it to the impacts. On the + side of the analysis.

Topic: VG4 - Avoid management during nesting

Direct: Too much exclusion timing over a year might negatively impact the advantage described immediately above. Needs to beconsidered in the whole if analyzed, add the cumulative result of VG 2 and 4 in the final economic consideration.

Comment Number: OR-GRSG-0204-2
Comment Excerpt Text:
Topic: VG16 - Livestock water

Direct: unknown for D but just the inclusion of Alternative C makes it necessary to analyze this topic. Cost to agency for moving of water needs to be considered as well as the potential impacts to the permit holder. Permit holder impacts here could range from additional costs of hauling water, providing larva ides to existing water and even as comprehensive as making an allotment not viable. All could have significant impacts economically

Comment Number: OR-GRSG-0204-3
Comment Excerpt Text:
[Refering to Wildland Fire Management] Social Impacts: Great opportunity to discuss community

involvement particularly considering the local Harney County success from last years fires by working with ranchers, Ag Research, BLM, RFPA and etc. Could increase trust? Additionally the County Wide Community Wildfire Protection Plans should be mentioned in this section and this is a great place to tie community and agency together and to discuss coordination of planning efforts

Comment Number: OR-GRSG-0204-4
Comment Excerpt Text:
[Reference to Topic: LG/RM 1 - Closing RNAs]

Direct: turnout timing may impact an allotment's value. This needs to be analyzed.

Comment Number: OR-GRSG-0204-5
Comment Excerpt Text:
Topic: 10 - Drought

Direct: drought conditions are already a significant economic impact to rural communities and permit holders. This action coupled with drought impacts could be very significant and needs to be analyzed.

Comment Number: OR-GRSG-0204-6
Comment Excerpt Text:
Topic: 15 - Timing of Grazing

Direct: timing of cattle movement can come with a cost. This addition cost will need to be analyzed

Comment Number: OR-GRSG-0204-7
Comment Excerpt Text:
Topic: 24 - New construction

Direct: "new" structural components or placement of supplement blocks. This action requires new designs, construction techniques and post construction monitoring. While important each indicates significant costs, needs analyzed

Comment Number: OR-GRSG-0204-8
Comment Excerpt Text:
Topic: LR12

Direct: this action advocates the acquisition of private and state lands without any consideration of local input or local economic impacts. This action could result in significant impacts to private land economic viability and to taxing entities in the various counties. (schools, health districts, county and etc.) an obvious economic impact needing to be considered

Comment Number: OR-GRSG-0204-9
Comment Excerpt Text:
Topic: ML actions through MSE actions

Direct: actions further indicate a prohibition on split estate mineral rights. This directly impacts private land owners and their opportunities, an analysis of the 2.6 million acres of split estate will need to be done considering the future impacts

Comment Number: OR-GRSG-0220-23
Comment Excerpt Text:
Notwithstanding the intent to require removal, burying or modifying of existing power lines, the economic analysis does not discuss the economic impact. The RMPA/EIS merely states:

"[m]anagement actions that affect development of infrastructure could have effects on the growth of the economic activity in the area. Limiting new ROW's for power lines, pipelines, and access routes or restrictions to route construction and to travel on existing roads could increase the cost of new economic investments. It could even make them no longer economically viable." (RMPA/EIS/p.4-274)

While this statement is made in the context of new power lines etc., it is equally true of the various alternative's impacts on the existing transmission lines. This is both a significant social as well as economic issue. As Harney Electric Cooperative noted to its members:

"[i]n the long term, the effects could reach $500 million in power relocation costs; a drastic reduction

in ranch business profitability in Harney and Malheur counties, with a potential economic impact of $70 million per year; loss of businesses in both Burns and Hines, with a likely commensurate reduction in population."

Comment Number: OR-GRSG-0224-3

Comment Excerpt Text:

This may be a fundamental flaw when considering the social and economic consequences of the proposed actions within the preferred alternative. Recreation and Travel management are just two examples of this (Table 2-6 specifically, pages 2-87 through 2-90). Changes and limitations in the allowances provided SRPs (Special Use Permits) and restrictions placed on roads will drive interest away from federal lands adjacent to these communities.

Comment Number: OR-GRSG-0226-9

Comment Excerpt Text:

The data in Table 3-57, 3-155 clearly shows the negative direction rural Oregon is trending. Total employment, related non-services, farming, forestry, construction, manufacturing, information and retail trade have all had significant declines in employment over the last decade. Table 3-57, p 3-156 shows an absolute correlation with decreasing income. Of note is the substantial loss of income in the entertainment and recreation sector -24%. This figure is quite contrary to the assertion that recreation jobs will provide alternative employment options in lieu of a resource based economy. (Headwaters Economics 2012).

Comment Number: OR-GRSG-0228-2

Comment Excerpt Text:

Additionally, there are number of other non-grazing economic impacts that affect our county Farm Bureau Members. For example, the proposed RMPA would likely increase power costs in Harney County, if burying transmission lines during permit renewal is a required mitigation. Harney Electric Cooperative has estimated that cost to be as much as $400,000.00 per co-op member, which none could afford. This alone would destroy the economy of Harney County. This impact should be considered in the economic analysis.

Comment Number: OR-GRSG-0229-1

Comment Excerpt Text:

Retail services for travelers through this part of the State would be terribly affected. It would be nearly impossible to offer many of the needed amenities a traveler would need. If our local community is not here to support us, we can't keep the doors open for the occasional traveler. Tourism would follow right in line with the traveler. There are those that like to point to a beautiful landscape without cattle as a tourist attraction, but reality is 'no infrastructure to survive, equals no service for the tourist'. You can't have both in this situation.

Comment Number: OR-GRSG-0281 (FrmLtr11)-2

Comment Excerpt Text:

An economic analysis conducted at the scale of this plan is not likely to show locally significant economic impacts. The document recognizes the reality that site specific characteristics at the scale of an ecological site is not well represented in a landscape assessment. This is no different than recognizing that a significant local economic effect would not be represented by the broad scale of this report. For example statements stating that AUM loses will require the identification of replacement forage is dismissive and simplistic. It is very likely that an economic forage source is not available and that the economic impact will be significant locally. The report needs to address and clarify this very real economic impact.

Comment Number: OR-GRSG-0302-1

Comment Excerpt Text:

History and Culture

KBR was founded in 1910 in Plush, Oregon by our grandfather James Kiely, who emigrated to Lake County from County Waterford, Ireland. Our mother, Bridie Kiely (neé Shine) herself emigrated to Lake County from County Cork, Ireland in the 1950s. She followed her brother, John Shine, who emigrated from County Cork to herd sheep for the MC Ranch

in Adel, and subsequently founded the Shine Ranch, which is currently operated by our cousin, George Shine.

It is important to recognize that the majority of the ranches in the Warner Valley (Adel and Plush) were founded over the last 120 years by Irish immigrants, and a number of the ranching families are interrelated. As a fundamentally Irish community, we still observe many of the "old country" traditions brought over by our parents and grandparents. Moreover, numerous Adel and Plush residents return periodically to Ireland to visit family. Our very recent Irish heritage creates a unique identity and culture for ranches in this region. Indeed, Lake County is one of only four counties West of the Mississippi with an ethnic majority of Irish ancestry.[1]

In addition to our Irish background, the Plush / Adel community sustains a highly traditional, authentic approach to the craft of cowboying and ranching. While in some parts of the West, ranching is becoming increasingly motorized and mechanized, Warner Valley ranchers persist in preserving the tradition of using horses as the primary means of working cattle. Passing through our community, summer tourists are astonished and delighted to see "real cowboys" (many of which, by the way, are women) trailing cattle down the highway, or working cattle in corrals along the roadside. We have all been videoed, interviewed, and have had our picture taken countless times. Clearly, the public cherishes and values the fact that we are keeping a piece of American history alive out here on the range. We would appreciate it if the BLM afforded our culture the same recognition and respect.

Our community also maintains the traditions of vaquero-style roping, training stock horses, making handmade cowboy gear out of rawhide, cowboy poetry, leatherwork, stockmanship, the training and use of draft horses, and many other skills, crafts, and folk arts that are a part of the unique Great Basin cowboy tradition.

That none of these important socio-cultural facts were given even passing mention in the RMPA is an inexcusable omission, and testimony to the tendency of that document to trivialize our historically rich culture. Passing references to ranching "custom and culture" in the RMPA were quickly glossed over, and given no in-depth analysis. We believe the failure to do so makes the RMPA inadequate, and represents a failure of the BLM to fulfill its responsibilities under NEPA.

Comment Number: OR-GRSG-0302-7

Comment Excerpt Text:

Economic Facts and Impact

The above actions proposed in the RMPA will undoubtedly have a negative economic impact on the KBR, on our neighbors, and on the Warner Valley Community.

Today, KBR operates both in Plush and Adel, Oregon. Our ranch's income supports three owner families: KBR revenue provides the sole income for my brother Tom's family; primary income for my family; and supplementary income for my brother Richard's family. Further, KBR employs two fulltime workers, and also provides extensive employment to independent contractors in our community: day-working cowboys, farm hands, equipment operators, welders, mechanics, consultants, and a host of others. Our records show that we employed the services of 19 independent contractors in our community over the course of the last year. We would like to point out that these independent contractors include Hispanics and Native Americans.

Additionally, our ranch has for three generations patronized local businesses (the Adel Store, Hart Mountain Store, veterinarian, tractor and equipment dealership, tire dealership, auto parts, hardware, etc.) for goods and services. Although Lake County welcomes recreationists and visitors, it is clear that the significant majority of dollars going through our community is not coming from tourists, but from year-round local clients like ranches.

We find the RMPA's discussion of the economic impacts to ranches, and to ranching communities, to be entirely insufficient. On p. 5-68, the RMPA claims that under Alternatives A, B, D, and E, "employment would increase by 11 percent" across the seven counties in the planning area over the next six years, with four jobs lost annually as a cumulative impact of the RMPA. The conjecture that the outright closure of over 118,000 acres of RNAs, coupled with the additional closures that implementing the HAF standard would likely trigger will result in a loss of four jobs per year across the entire planning area, is insupportable. In our community alone, the RNA closures would result in some 51,000 acres lost to grazing, resulting in the significant downsizing of several ranches. The projected annual loss of four jobs would be more appropriately applied to our community alone than across the seven-county planning area.

We recommend that the final RMPA include a complete and accurate discussion of the economic impacts of the various alternatives. This discussion should include loss of property value to ranches that lose AUMs, additional expenses of leasing pasture and transporting livestock, and loss of income due to downsizing. The RMPA should also discuss the economic impact to jobs in the community that depend on ranches as their primary clients.

Comment Number: OR-GRSG-0307-2

Comment Excerpt Text:

Loss of AUM from grazing can and does lead directly to an economic impact to our veterinary providers, feed stores, fuel suppliers, parts stores, implement dealers, medical and dental services, and all other retail businesses. The DEIS only lists an impact to a few jobs from limited reductions on AUM's. In reality the document analyzed a large range of management actions which could limit, reduce or even eliminate grazing. The social/economic analysis included in the draft EIS is well short of analyzing the range of potential impacts. The full impacts should be analyzed and provided to the public for their review prior to the release of the final EIS.

Comment Number: OR-GRSG-0309-14

Comment Excerpt Text:

On page 2 – 134, table 2 – 7 Summary of Environmental Consequences shows that under alternative D, up to nine grazing related jobs in the primary study area would be lost. Ranchers in the Adel area of the Lakeview District feel that they will lose at least nine jobs just in that area alone.

Reports from Malheur County Chamber of Commerce and Baker County Chamber of Commerce showed that in 2009, cattle dollars multiplied seven times in the local economies. Based on the size of these rural communities, that equates to a significant dollar figure. With the loss of this revenue to the cattle industry in Eastern Oregon under alternative D, towns such as Lakeview and Burns will see a reduction in agribusiness related revenue.

Comment Number: OR-GRSG-0332-1

Comment Excerpt Text:

The economic impact associated with the BLM-preferred Alternative D is severe. In the long term, the effects could reach $500 million in power relocation costs; a drastic reduction in ranch business profitability in Harney and Malheur counties, with a potential economic impact of $70 million per year; loss of businesses in both Burns and Hines, with a likely commensurate reduction in population.

Comment Number: OR-GRSG-0333-17

Comment Excerpt Text:

J. Economic Impacts and Environmental Justice Deserve More Focus and Attention.

While the Malheur County Court appreciates that the RMPA/EIS discloses estimated economic and social impacts that would result from choosing Alternative D, the County is concerned that the impacts may be understated. Moreover, in evaluating the significance of the economic and social impacts, the BLM appears to have ignored its duty to evaluate the significance of impacts based on "context and intensity" pursuant to 40 C.F.R. § 1508.27.

When you consider that Malheur only has approximately 31,000 residents, that the County has a disproportionately high unemployment rate compared to the rest of the State, that the County has a disproportionately low median income compared to the rest of the State, and that approximately two-thirds of the County is owned and managed by the BLM- and that several of the other counties subject to the RMPA/EIS find themselves in a similar situation-every single lost job and any reduction in median income represents a significant impact on these rural economies and the quality of life of the citizens subject to the RMPA/EIS. The BLM's proposed RMPAs threaten to reduce livestock production in Malheur County, as well as economic development opportunities relating to energy development and infrastructure. These factors weigh heavily against taking all but the most absolutely necessary measures to prevent an ESA listing-highlighting the importance of the BLM carefully reassessing the purpose and need. The Malheur County Court appreciates that an ESA listing could have far greater economic consequences than the RMPAs currently under consideration but that does not relieve the BLM from its responsibility to carefully consider and fully disclose the economic and social impacts of the proposed actions.

Comment Number: OR-GRSG-0335-1

Comment Excerpt Text:

The environment impact statement is flawed because it fails to adequately consider economic effects of losses in grazing, economic losses to the increased costs of fire suppression due to restrictions in grazing, and economic effects of removal of access to mineral wealth.

Comment Number: OR-GRSG-0335-2

Comment Excerpt Text:

Comment 2. The communities in Malheur County, Harney County, Lake County and adjoining counties are clearly disadvantaged and are among the poorest on a per capita basis in Oregon. These counties are losing employment, losing residents, suffering high rates of poverty, falling behind other areas of the state and nation in income growth, and losing value of their property tax base. The declining property values challenge the Malheur County government, the cities, school districts, and other taxing districts with extreme financial challenges. The Plan fails to adequately address the economic disadvantages faced by these communities. It is incumbent on federal agencies to take actions that stimulate economically disadvantaged communities and avoid actions that reduce economic activity and aggravate poverty and unemployment. In direct contradiction to the federal responsibility, the Plan does the following:

A. Comment 3. The Plan fails to make a realistic evaluation of the negative effects of the loss of grazing to ranching profitability and community income. The Plan also fails to make a realistic evaluation of the negative effects of the future economic uncertainty due to the increased uncertainty about the availability of future grazing.

B. Comment 4. The Plan includes an inaccurate reference to increases in protected land being economically advantageous through tourism and a tourist economy. In direct contradiction to the supposition of enhanced tourism income, the counties in SE Oregon and SW Idaho which have very large areas of protected federal land or that have recently received substantial increases in protected federal land find themselves with no incremental improvement in economic condition. Examples are Idaho County and Owyhee County, Idaho and Harney County, Oregon. Populations continue to decline, per capita income is low, and poverty is high.

Comment 5. The reasons that many SE Oregon and SW Idaho counties are not able to benefit economically through tourism from increases in federally protected land are complex. These counties are not in a competitive position with other parts of the country to attract the construction of second homes by affluent citizens elsewhere in the country. The counties in the area of the Plan also lack federal and state investments in recreational infrastructure near protected land and lack paid federal and state recreational professionals, all of which would otherwise contribute to local income. It currently

seems unlikely that the federal government will invest in paved access roads, paved turn outs, visitor centers, access trails, and extensive camping facility developments that surround other federal recreation and protected areas that contribute overwhelmingly to protected areas having positive economic effects through tourism. Comment 20. As written, the Plan would preclude the construction and operation of such facilities due to the Plan's requirements for little disturbance of the landscape. Without attractive land converted to housing and federal investment in recreational infrastructure, protected lands in the area of the Plan will not become economic engines of employment and prosperity through tourism.

C. Comment 6. The Plan removes much of the mineral wealth from future use. The economic effects of the removal of the mineral wealth must be estimated but are not estimated in the Plan. Although the potential mineral wealth on federal land has largely been mapped, the Plan does not integrate the areas of mineral wealth with the proposed areas where future mining would be restricted. At the public meeting at Ontario to review the Plan, BLM was asked specifically about the integration of mineral wealth with the mapping of areas to be restricted. BLM said that this was not done. Consequently there was no way for either the agency personnel or the public to grasp or comment on how the Plan's restrictions could impact future economic opportunities related to mining.

D. Comment 7. The Plan would require substantial expenditure of BLM resources for monitoring and administrative activities. These public costs were not estimated by the Plan. There was no evaluation of whether additional funds would be available from the federal government or whether other valuable activities would have to be sacrificed to implement the Plan. Our evaluation is that the Plan would obligate the BLM to assume many underfunded functions, thereby opening the agency to endless additional litigation for failing to follow its established procedures.

Comment Number: OR-GRSG-0356 (FrmLtr07)-22

Comment Excerpt Text:

Social and economic conditions identified in Table 2-7 (page 2-133) include economic hardships to ranching, renewable energy development, and recreational users, but does not indicate the potential economic hardships to rural utility providers and their clients, Costs to HEC, which would in tum be reflected on rate payers, to bury all infrastructure within Preliminary Priority Management Areas (PPMA) and Preliminary General Management Areas (PGMA) would be in excess of $400,000,000, Assuming energy sales stayed the same as before the increase, HEC rate payer's electrical bill would see an increase of approximately 246% (however rate changes like this lead to drastic conservation and an increase in the order of 350% may be required), Such hardships which may be directly caused by action alternatives in the DEIS must be recognized in the document

Comment Number: OR-GRSG-0357 (FrmLtr08)-11

Comment Excerpt Text:

Further, the economic analysis does not account for the economic benefits to the rancher or the BLM of using grazing as a tool to manage sage-grouse habitat. This can reduce rancher's costs by providing additional forage, and reduce BLM's cost by requiring less artificial measures (i.e., spray) and reducing firefighting and prevention costs (grazing reduces fire risks by reducing fuel loads).

Comment Number: OR-GRSG-0357 (FrmLtr08)-12

Comment Excerpt Text:

the RMPA does not address the fact that canceling AUMs reduces the availability of forage on the marketplace – thereby driving up the cost of pasture and feed. The Amendment does not address the disproportionate, localized economic effects of excluding/reducing grazing on the ACECs/RNAs. Overall, it is also true that reductions in grazing will impact ranching communities by removing important agri-business customers

Comment Number: OR-GRSG-0366-1

Comment Excerpt Text:

Currently, our ranch holds 5800 AUM's in the Prineville BLM District. One hundred percent of my allotment appears to cover priority and/or general habitat. Like many Oregon ranches, grazing cattle on public lands is an integral part of our family business operation. Without this range or with reduced access to this range our ranch will have to reduce our cow herd to fit whatever our reduction in AUMs will be.

We have six families working on our ranch; five of these families have ownership in the cattle. With a reduced cowherd, we could no longer support six families, therefore some would have to find work in other area perhaps even having to move elsewhere. Prineville has 11.2% unemployment. The Spotted Owl hit our area hard and timber is no longer number one in the employment, mills and logging are no longer in existence.

Comment Number: OR-GRSG-0369-1

Comment Excerpt Text:

When I asked my question, I really didn't expect an answer. But, to my surprise the answer was "No, we did not do a study on the effects of this plan on Veterans, but the impact on low-income people would be negative" Wow, so now we see a plan, no matter which plan use A, B, C, D, ect. ,that is going to affect an already dressed economy, in an area of the State that never has recovered from shutting down the National Forests, and now we find that it will have a negative impact on low-income people. Adding to this mix is veterans are some of the people with the lowest employment rate.

Comment Number: OR-GRSG-0378-12

Comment Excerpt Text:

Based on the current demand for energy in the western United States, the benefits of transmission lines outweigh impacts associated with the construction, operation and maintenance of the proposed lines, particularly since efforts will be made to avoid, minimize, and mitigate impacts as appropriate. MidAmerican recommends that the BLM revise the socioeconomics section of the DEIS to include a discussion of the benefits of enhancing the reliability and redundancy of high-voltage transmission in the west

Comment Number: OR-GRSG-0379-1

Comment Excerpt Text:

Social and economic conditions identified in Table 2-7 (page 2-133) include economic hardships to ranching, renewable energy development, and recreational users, but does not indicate the potential economic hardships to rural utility providers and their customers. Costs to MEC, which would in turn be reflected on rate payers, to bury all infrastructure within Preliminary Priority Management Areas (PPMA) and Preliminary General Management Areas (PGMA) would be in excess of $115,000,000. To cover such large expenses, MEC rate payer's electrical bill would see an increase of approximately 33.7%. Such hardships which may be directly caused by action alternatives in the DEIS must be recognized in the document.

Comment Number: OR-GRSG-0382-3

Comment Excerpt Text:

Loss of AUM from grazing can and does lead directly to an economic impact to our veterinary providers, feed stores, fuel suppliers, parts store, implement dealers and all other retail businesses. The DEIS only list all impact to a few jobs from limited reductions on AUM's. In reality the document analyzed a large range of management actions which could limit, reduce or even eliminate grazing. The social/economic analysis included in the draft EIS is well short of analyzing the range of potential impacts. The full impacts should be analyzed and provided to the public for their review prior to the release of a final EIS.

Comment Number: OR-GRSG-0386-3

Comment Excerpt Text:

We would like to comment on the economic impact on rural communities in Oregon, and especially Harney County, if the sage-grouse should be listed as endangered. Several years ago USFWS listed the spotted owl as an endangered species. The logging in Harney County was brought to a standstill. This

impacted the livelihood of so many, as we lost funding for the operation of our County. Schools were no longer receiving forest receipts making it very difficult to keep our schools open and operating. Now scientific evidence shows it was not the logging that was ruining the spotted owl population and habitat. logging has ceased and the Spotted Owl population is still decreasing.

Comment Number: OR-GRSG-0396-2

Comment Excerpt Text:

Stewart Allen, BLM social scientist/economist, spoke about the economic ramifications the listing could have. I'm skeptical that the BLM has examined all the negative effects this listing could have on rural communities. These communities were heavily impacted by the anti-logging regime that took place about 20 years ago. I didn't see in the BLM information the number of students enrolled in K-12 that would be reduced. Was reduced school funding considered or the reduction of educators and the trickledown effect of their employment loss?

An example is our small community of Paisley population less than 300. When there was a sawmill here, the population was about 100 more residents than current. When the mill went out, the reduced number of families left made it difficult to operate the school. Paisley School became a Charter School in order to survive, built a dorm and educates foreign exchange students to increase revenue. This county is over 85 percent publicly owned land and with the tax-in-lieu funds drastically cut it has put an even heavier burden on the few taxpayers left to support public services and schools.

Paisley formerly had two grocery stores and now has one. Years ago there were two gas stations and today just one. Paisley like other small communities including Lakeview are barely hanging on by a thread as is noticed driving down any business street where storefronts are vacant. The sage grouse listing could be the death of rural communities in the West. People who live in rural communities often do so because of the low housing costs - they can't afford to live in a city. Where are they going to live?

Comment Number: OR-GRSG-0396-3

Comment Excerpt Text:

Were actual numbers used to calculate the jobs lost? I doubt this area could support the number of veterinarians it currently has if grouse are listed and ranches are no longer able to operate. People who provide feed, equipment, supplies, and services to ranchers who graze will be adversely affected and probably would no longer be able to operate. If these people go out of business, it will be even more expensive for the remaining ranches to operate because of transportation costs and time. Ranches cannot operate without desert grazing. When they go out of business, who will buy the ranch if grazing is not available? Their values will be substantially reduced netting an even bigger tax burden on a smaller number of people. It will be impossible for the cities and counties to have any assemblance of their present infra-structure with a listing. The local hospital carries a heavy tax burden - will it be able to operate if the taxpayers can't pay the bill? The economic impact of reducing grazing will be catastrophic. People with expertise in the field in the local area need to be consulted.

Comment Number: OR-GRSG-0433-21

Comment Excerpt Text:

ECONOMIC CONDITIONS AND IMPACT ANALYSIS

BLM must include additional data and analyses of the economic impacts of the proposed plan amendments. Economic values of conservation actions should be estimated explicitly, with known methodologies, and compared more directly to values associated with other land uses. Adjustments should be made to the economic study area and additional data regarding income and low-income populations needs to be provided. Clarification of the finding of high and adverse impacts disproportionately impacting low-income populations must be included.

BLM management actions for sage-grouse and other resources in eastern Oregon have direct and measurable impacts on economic activity. Almost all discussions of the greater sage-grouse recognize that

its wide distribution across most western states links its status, and the status of the extensive sagebrush ecosystem in which it lives, to the ecological, economic and social futures of the communities in those states (Wambolt et al. 2004). One common assumption may be that managing for sustainable sage-grouse populations will have negative impacts on the small, rural economies of eastern Oregon. Perhaps it is more accurate to say that if no action is taken to protect sage-grouse, the economic effects could be even greater in the long-term. The DEIS must discuss the benefits and costs of changes to land uses in the planning area compared with similar benefits and costs for sage-grouse conservation outcomes in the planning area. Only after a full accounting of all costs and benefits stemming from the proposed action should BLM compare economic impacts among the alternatives or calculate whether adverse economic impacts will result for populations in the study area.

Efforts to protect sage-grouse habitat and populations prior to the USFWS listing decision are having both positive and negative effects on the study area economy and will continue to do so as economic uses of the public lands change to adapt to an uncertain and rapidly changing regulatory environment. Land use decisions promulgated at federal, state and local levels will alter certain land uses while voluntary actions, such as candidate conservation agreements (CCA) and candidate conservation agreements with assurances (CCAA) measures, will alter private land use practices. Each of these decisions and actions may change economic activity in the study area. Cumulatively these changes may be significant. Accurately assessing baseline levels of economic activity may be difficult given rapid changes to land use practices resulting from efforts to preclude an endangered species listing. The DEIS utilizes employment, income and demographic data from 2001 – 2011, with much of the data from the year 2010. While utilizing decennial census data may be standard for this type of analysis and relatively easy to obtain, it must be pointed out that 2010 data is unlikely to reflect some of the possibly significant changes to the baseline economic picture in the three-plus years since that data was collected.

Significant new information regarding sage-grouse populations, habitat and conservation, such as the Oregon Assessment and Strategy, National Technical Team Report and Conservation Objectives Team Report, have been published during the last three years describing some of the chief threats to sage-grouse in Oregon (Hagen, 2011; USFWS, 2011; USFWS 2013). Collaborative efforts to identify management changes, such as SageCon and processes to create CCA/As, are underway and deeply involved in identifying regulatory and voluntary changes to benefit the species. All of these changes impact the baseline scenario to be used for analysis and may therefore impact the accuracy of that analysis. Such changes may also occur following a listing. Findings from the recent listing process for the Gunnison Sage-grouse are instructive:

The use of regional input-output models in an analysis of the impacts of species and habitat conservation efforts can overstate the long-term impacts of a regulatory change. These models provide a static view of the economy of a region. That is, they measure the initial impact of a regulatory change on an economy but do not consider long-term adjustments that the economy will make in response to this change. For example, these models provide estimates of the number of jobs lost as a result of a regulatory change, but do not consider re-employment of these individuals over time or other adaptive responses by affected businesses. In addition, the flow of goods and services across the regional boundaries defined in the model may change as a result of the regulation, compensating for a potential decrease in economic activity within the region. (USFWS, 2013b).

BLM should consider the need to more accurately depict the current study area economy and to do so in light of current and pending regulatory changes in order to increase the accuracy of the analysis.

The findings from the Gunnison Sage-grouse listing process regarding the accuracy of input-output models are also relevant for the DEIS. Use of the IMPLAN model for the analysis must be more clearly explained in the DEIS and results for all relevant sectors must be included in the document. The DEIS appears to show IMPLAN results only for grazing and wind energy leaving the public unable to compare impacts to employment and earnings for other sectors or for the regional economy as a whole (DEIS at 4-266 and 4-273). The methodology used to employ the IMPLAN model is similarly unclear. The explanation in Appendix R of the assumptions and methods used for the grazing and wind energy provide some understanding of the analysis for those sectors, but the explanation of how IMPLAN was used for other sectors is lacking and must be improved.

The explanation of IMPLAN methods in Appendix R suggests that the analysis was conducted on 16 economic sectors where direct changes were involved as well as changes in an unspecified number of other sectors due to the "ripple effect" (DEIS at R-2). Results are shown for only two of those 16 sectors in the text of Chapter 4. The DEIS should include the full set of results as well as summary data for all impacted sectors. Appendix R also suggests that analysis was conducted on jobs and income generation in both the primary and secondary study areas (DEIS at R-2), yet little or no discussion of impacts to the secondary study area is included in the DEIS. If the IMPLAN model coefficients were based on factors in both the primary and secondary study areas the DEIS should include results and discussion for both areas to allow understanding of the economic interactions between these areas.

Inclusion of the full analysis would also provide an opportunity to more clearly explain how uncertainty regarding regulatory changes and relocation of various land uses were considered in the analysis. The DEIS description of baseline economic conditions examines trends for the period between 2000 and 2010. This period of time is deemed an acceptable baseline from which to present impacts (DEIS at 3-154). This truncated view of trends is not explained or justified in the DEIS and may not adequately reflect historic patterns of population, employment or income for the study area. The DEIS should include a 20 or 30 year period of time for baseline data. The DEIS should also include a table detailing total per capita income by county. This table is critical to an accurate understanding of the economic impacts.

The DEIS should use the entire Ontario Micropolitan Study Area in defining the economic study area and in its analysis of effects. Excluding Payette County and portions of Ada County based on the notion that most labor inflow would not be impacted by alternative management actions is an unsupported assertion (DEIS at 3-148). Excluding one portion of a recognized economic study area may inaccurately skew results of the analysis or inflate the significance of changes to other sectors. Even if a determination is made not to include Payette and portions of Ada County in the primary study area they should be included as a service area economy in a similar fashion to Deschutes County. Including this information would allow a more complete understanding of the regional economy.

BLM should consider further comparison of sage-grouse conservation values and values associated with other land uses. The analysis of economic impacts for each plan alternative should consider not only anticipated expenditures (market transactions), but where feasible, the anticipated consumer surplus generated by the proposed activity, as determined by estimates of willingness-to-pay (non-market values) (BLM H-1601). The DEIS does not attempt to quantify and compare the values of the entire variety of resource uses of public lands, citing uncertainty in existing studies and differences between actual and stated willingness to pay (EIS at 4-276). This approach is contrary to agency guidance. The DEIS should instead be consistent in its treatment of market and non-market values and present low and high impact scenarios for sage-grouse conservation activities in a manner similar to the analysis of impacts to livestock AUMs and wind energy development (DEIS at 4-266 - 272). Following a scenario-based analysis of impacts

to conservation values, the DEIS should compare impacts to conservation values with impacts to other land uses.

The analysis of impacts suggests that there would be reductions in tax revenues for local communities where grazing is a major basis of the local economy (DEIS at 4-276). These potential impacts are not quantified or supported with specific information. The DEIS should include a quantification of local government tax impacts based on scenarios used to analyze economic impacts for specific land uses/sectors. Only with specific estimates of the tax impacts for each alternative should the analysis make determinations about the magnitude of effects to local tax revenues. Similarly, the degree of impacts to payments to states and counties can't be reasonably compared without additional scenario based estimates of those changes and the DEIS should provide additional analysis of government revenue changes.

The DEIS should also provide further evidence and discussion to support the finding that impacts on grazing under Alternatives C and F would have high and adverse impacts that would disproportionately impact low-income populations (DEIS at 4-281). The analysis should include data showing scenario-based (low and high) changes to total per capita income by county resulting from changes to grazing management under all alternatives. The analysis should also include changes to per capita income from impacts to other land uses, including sage-grouse conservation activities. The determination of high and adverse impacts to low income communities should be based not only on changes to grazing management and impacts to farm employment and income, but on cumulative impacts to total employment and income resulting from all DEIS decisions.

Comment Number: OR-GRSG-0434-55

Comment Excerpt Text:

One common assumption may be that managing for sustainable sage-grouse populations will have negative impacts on the small, rural economies of eastern Oregon. Perhaps it is more accurate to say that if no action is taken to protect sage-grouse, the economic effects could be even greater in the long-term. The DEIS must discuss the benefits and costs of changes to land uses in the planning area compared with similar benefits and costs for sage-grouse conservation outcomes in the planning area. Only after a full accounting of all costs and benefits stemming from the proposed action should BLM compare economic impacts among the alternatives or calculate whether adverse economic impacts will result for populations in the study area.

Comment Number: OR-GRSG-0434-57

Comment Excerpt Text:

Use of the IMPLAN model for the analysis must be more clearly explained in the DEIS and results for all relevant sectors must be included in the document. The DEIS appears to show IMPLAN results only for grazing and wind energy leaving the public unable to compare impacts to employment and earnings for other sectors or for the regional economy as a whole (DEIS at 4-266 and 4-273). The methodology used to employ the IMPLAN model is similarly unclear. The explanation in Appendix R of the assumptions and methods used for the grazing and wind energy provide some understanding of the analysis for those sectors, but the explanation of how IMPLAN was used for other sectors is lacking and must be improved.

The explanation of IMPLAN methods in Appendix R suggests that the analysis was conducted on 16 economic sectors where direct changes were involved as well as changes in an unspecified number of other sectors due to the "ripple effect" (DEIS at R-2). Results are shown for only two of those 16 sectors in the text of Chapter 4. The DEIS should include the full set of results as well as summary data for all impacted sectors. Appendix R also suggests that analysis was conducted on jobs and income generation in both the primary and secondary study areas (DEIS at R-2), yet little or no discussion of impacts to the secondary study area is included in the DEIS. If the IMPLAN model coefficients were based on factors in both the primary and secondary study areas the DEIS should include results and discussion

for both areas to allow understanding of the economic interactions between these areas. Inclusion of the full analysis would also provide an opportunity to more clearly explain how uncertainty regarding regulatory changes and relocation of various land uses were considered in the analysis.

Comment Number: OR-GRSG-0434-60

Comment Excerpt Text:

BLM should consider further comparison of sage-grouse conservation values and values associated with other land uses. The analysis of economic impacts for each plan alternative should consider not only anticipated expenditures (market transactions), but where feasible, the anticipated consumer surplus generated by the proposed activity, as determined by estimates of willingness-to-pay (non-market values) (BLM H-1601). The DEIS does not attempt to quantify and compare the values of the entire variety of resource uses of public lands, citing uncertainty in existing studies and differences between actual and stated willingness to pay (EIS at 4-276). This approach is contrary to agency guidance. The DEIS should instead be consistent in its treatment of market and non-market values and present low and high impact scenarios for sage-grouse conservation activities in a manner similar to the analysis of impacts to livestock AUMs and wind energy development (DEIS at 4-266 - 272). Following a scenario-based analysis of impacts to conservation values, the DEIS should compare impacts to conservation values with impacts to other land uses.

Comment Number: OR-GRSG-0434-61

Comment Excerpt Text:

The analysis of impacts suggests that there would be reductions in tax revenues for local communities where grazing is a major basis of the local economy (DEIS at 4-276). These potential impacts are not quantified or supported with specific information. The DEIS should include a quantification of local government tax impacts based on scenarios used to analyze economic impacts for specific land uses/sectors. Only with specific estimates of the tax impacts for each alternative should the analysis make determinations about the magnitude of effects to local tax revenues. Similarly, the degree of impacts to payments to states and counties can't be reasonably compared without additional scenariobased estimates of those changes and the DEIS should provide additional analysis of government revenue changes.

Comment Number: OR-GRSG-0434-62

Comment Excerpt Text:

The DEIS should also provide further evidence and discussion to support the finding that impacts on grazing under Alternatives C and F would have high and adverse impacts that would disproportionately impact low-income populations (DEIS at 4-281). The analysis should include data showing scenario-based (low and high) changes to total per capita income by county resulting from changes to grazing management under all alternatives. The analysis should also include changes to per capita income from impacts to other land uses, including sage-grouse conservation activities. The determination of high and adverse impacts to low income communities should be based not only on changes to grazing management and impacts to farm employment and income, but on cumulative impacts to total employment and income resulting from all DEIS decisions.

Comment Number: OR-GRSG-0437-2

Comment Excerpt Text:

Although the BLM has undertaken a cursory assessment of potential impacts, it has underestimated the economic impact of the preferred alternative. Any modifications to grazing will have a direct impact on ranchers' ability to stay in business. As noted above, the loss of even a few ranching jobs in my district would have a markedly greater impact on local communities, schools, and families, than an equivalent loss of jobs in larger cities. Additionally, future economic growth will be significantly curtailed due to the 3 percent disturbance cap proposed by the agency. These effects should be calculated and reported to the affected public.

Recommendation: The DEIS should include a complete economic analysis of the preferred

alternative, including secondary impacts on the surrounding community.

Comment Number: OR-GRSG-0438-1

Comment Excerpt Text:

Social and economic conditions identified in Table 2-7 (page 2-133) include economic hardships to ranching, renewable energy development, and recreational users, but does not indicate the potential economic hardships to rural utility providers and their clients. Costs to OTEC, which would in tum be reflected on rate payers, to bury all infrastructure within Preliminary Priority Management Areas (PPMA) and Preliminary General Management Areas (PGMA) would be in excess of $100,000,000. To cover such large expenses, OTEC rate payer's electrical bill would see an increase of approximately 22%. Such hardships which may be directly caused by action alternatives in the DEIS must be recognized in the document.

Comment Number: OR-GRSG-0447-4

Comment Excerpt Text:

In Alternative D, in primary habitat the BLM would identity existing power lines which should be buried, modified, or relocated. If it is determined to help the bird, when the power line permit is up for renewal this can be required. It was stated that it should be buried under or near a road. The economic impact associated with Alternative D is severe. Harney Electric Cooperative estimates its costs could reach $500,000,000 in power relocation costs. They do not have these kinds of funds. There would be a drastic reduction in ranch profitability in Harney and Malheur Counties causing loss of business in both Burns and Hines likely bringing a reduction in population.

Comment Number: OR-GRSG-0450-6

Comment Excerpt Text:

The BLM has failed to do a complete economical analysis of implantation of the RMPA. The reduction or exclusion of grazing to any permittee will impact the whole community with the trickle down effect. It is pretty basic, if we can't run the number of cattle, we can't afford to hire help, there is loss of jobs, loss of students in schools, loss of money spent in our community, and resulting in devastation of our rural Communities.

Comment Number: OR-GRSG-0475-2

Comment Excerpt Text:

The socio-economic analysis in the DEIS is woefully inadequate. Other groups can provide more thorough recommendations, but the livestock industry, which depends on BLM-managed lands to thrive, is crucial for providing food for people in the United States and throughout the world. Society can continue without fossil fuels, electronics, etc., but not without food. Very simply, an AUM puts roughly $500/year into economies of rural areas. A calf will gain 60 lbs/month, at a value of $2/lb. Approximately 80% of that money ($96) goes into the local economy, where it will turn over 3.5 – 7 more times. Thus, reduction of AUMs by 8993 in the preferred alternative would cost rural economies in Eastern Oregon $4,496,500 annually.

Comment Number: OR-GRSG-0489-17

Comment Excerpt Text:

BLM failed to adequately analyze the economic impacts of Alternative D in the DEIS. Harney Electric Cooperative estimates that in the long term, power relocation costs could reach $500 million. These costs would be crippling to local economies.

Comment Number: OR-GRSG-0497-3

Comment Excerpt Text:

Comment 16. As stated above, the communities in Malheur County, Harney County, Lake County and adjoining counties are clearly disadvantaged and are among the poorest on a per capita basis in Oregon. These counties are losing employment, losing residents, suffering high rates of poverty, falling behind other areas of the state and nation in income growth, and losing value of their property tax base. The declining property values challenge the Malheur County government, the cities, school districts, and other taxing districts with extreme financial challenges. The Plan fails to adequately address the economic disadvantages faced by these communities. It is incumbent on federal agencies to take actions that stimulate economically disadvantaged

communities and avoid actions that reduce economic activity and aggravate poverty and unemployment. In direct contradiction to the federal responsibility, the Plan does the following:

A. Comment 17. The Plan fails to make a realistic evaluation of the negative effects of the loss of grazing to ranching profitability (Rimbey et al. 2003; Torell et al. 2002) and community income. The Plan also fails to make a realistic evaluation of the negative effects of the future economic uncertainty due to the increased uncertainty about the availability of future grazing.

B. Comment 18. The Plan includes an inaccurate reference to increases in protected land being economically advantageous through tourism and a tourist economy. In direct contradiction to the supposition of enhanced tourism income, the counties in SE Oregon and SW Idaho which have very large areas of protected federal land or that have recently received substantial increases in protected federal land find themselves with no incremental improvement in economic condition. Examples are Idaho County and Owyhee County, Idaho and Harney County, Oregon. Populations continue to decline, per capita income is low, and poverty is high.

Comment Number: OR-GRSG-0497-4

Comment Excerpt Text:

C. Comment 21. The Plan removes much of the mineral wealth from future use. The economic effects of the removal of the mineral wealth must be estimated but are not estimated in the Plan. Although the potential mineral wealth on federal land has largely been mapped, the Plan does not integrate the areas of mineral wealth with the proposed areas where future mining would be restricted. At the public meeting at Ontario to review the Plan, we asked specifically about the integration of mineral wealth with the mapping of areas to be restricted. BLM said that this was not done. Consequently there was no way for either the agency personnel or the public to grasp or comment on how the Plan's restrictions could impact future economic opportunities related to mining.

Comment Number: OR-GRSG-0532-113

Comment Excerpt Text:

The State requests that a socioeconomic impact analysis be required for all NEPA analyses performed with respect to evaluating the "no grazing" option proposed for grazing permit and lease renewals within PPMA boundaries. There is limited socioeconomic analysis in the draft RMPA/EIS. We anticipate significant impacts, not only directly to farmers and ranchers, but also to the support and service industries in rural communities throughout eastern Oregon that could result from proposed management changes and other restrictions. The analysis should consider, at a minimum, the following socioeconomic issues/impacts: local availability and rental price of grazing lands, transportation costs to move livestock to grazing lands outside the area if none are available locally, availability and price of hay, foregone income if ranchers have to reduce animal numbers due to lack of grazing land, and rural utility costs where mitigation is required for transmission lines/pipelines.

Comment Number: OR-GRSG-0532-52

Comment Excerpt Text:

At present, each alternative in the DEIS, other than the no-build alternative, calls for some level of closure of aggregate material source sites (though site specific application is unclear). Closure would cause a significant impact to road-maintenance and road-building work. Such actions should be required to avoid PPH where possible, but a complete exclusion is not workable. The highway system is considered critical infrastructure by the federal government and the state. ODOT needs access to aggregate material source sites located on BLM land to ensure a safe transportation system in Oregon. This includes the ability to access the source location via roads and also to mine/extract and stockpile material. Rock material is necessary for road building and the routine maintenance of the highway (including paving, shoulder building, and erosion repair), as well as capital improvements that may expand the highway footprint. These impacts should be addressed through the mitigation framework and with a disturbance threshold.

Comment Number: OR-GRSG-0532-53

Comment Excerpt Text:

ODOT invests significant funds in the development of viable material sources. Such investments on BLM land will be wasted if existing source sites are closed. Local sources that provide quality rock typically are used until the source is depleted. More than 65% of ODOT material source sites located in south central and south eastern Oregon occur on BLM land and in areas that provide sage grouse habitat with varying degrees of quality. Deeming these material sites inaccessible will increase costs to the point that highway maintenance and improvements could become cost prohibitive, ultimately reducing the highway level of service. Rock sources are localized and limited. State highways require chip sealing (relatively low cost) on a 7-10 year cycle to prevent pavement deterioration to the point that a full structural pavement overlay (much higher cost) is required. Normally, pavement deterioration to the point that a full structural overlay is required takes only 15 years in the absence of chip sealing. In most of the area covered by this RMP, ODOT estimates the cost to haul rock at $0.25 per cubic yard, per mile. Typical pavement overlay projects require 50,000 cubic yards of rock. This equates to a haul cost of $12,500 per mile.

Based on these calculations, if material sources in a particular area were closed and new sources were allowed to open, ODOT will see very substantial project cost increases for one way haul / round trips as follows:

- ?10 miles increase x $12,500 = $125,000 / $250,000 round trip
- ?20 miles increase x $12,500 = $250,000 / $500,000 round trip
- ?30 miles increase x $12,500 = $375,000 / $750,000 round trip
- ?40 miles increase x $12,500 = $500,000 / $1,000,000 round trip

Substantially increasing haul costs for aggregate by restricting access to existing and/or new material sources on BLM land would be cost prohibitive for ODOT to continue to maintain and improve the existing highway infrastructure in the areas subject to this RPM. Alternate material sources on nonfederal land frequently are not available within reasonable proximity of a highway project to minimize the financial impacts that will results from inaccessible BLM sources.

Comment Number: OR-GRSG-0532-54

Comment Excerpt Text:

Pg. 4-107 - All alternatives would limit, to some degree, development of new material source sites in GRSG habitat. The State (ODOT) will require development of new material source sites in the future based on need. A process must be identified or a placeholder provided for the identification and allocation of new material source sites, including sites located in GRSG habitat. Material sources are becoming depleted due to years of extracting rock—many ODOT controlled sites are 50-plus years old and are nearing the point where extraction of remaining resources is not cost effective. Rock sources will always be needed as long as the highways are open and therefore new material source sites must be identified, secured, and used. A significant portion of the land and viable material source sites occur on BLM-administered land that contains varying degrees of quality GRSG habitat. If such land became off-limits for future production it would be cost prohibitive for ODOT to continue to maintain and improve the existing highway infrastructure.

Comment Number: OR-GRSG-0532-55

Comment Excerpt Text:

Since the BLM is the primary landowner/manager in SE Oregon, it is critical that the BLM consider the need for development of new material sources. Quality rock is not evenly distributed through the planning area so the proposed closure of nearly 7 million acres of PPMA to mineral material development could be very limiting. The State proposes that PPMA lands in the draft BLM RMP/EIS be identified as avoidance areas verses "exclusion areas" for mineral material development. This would allow BLM the flexibility to consider the development

of new material sites when ODOT would make such a request.

Comment Number: OR-GRSG-0532-56

Comment Excerpt Text:

Pg. 4-169 Highway Operations: The State must be able to conduct activities necessary to ensure that existing highways and associated infrastructure are adequately maintained and meet safety standards; these actions include routine maintenance, operation, and capital improvements. Routine highway maintenance needs are well documented and include activities such as vegetation management (for fire control breaks, clear zones or recovery zones, site distance requirements, prevention of snow drifts, noxious weed control), shoulder building/blading, ditch cleaning, paving/patching, hazard tree removal, and winter maintenance/snow removal. Capital improvements or highway betterments include infrastructure enhancements and safety improvements such as curve-straightening, shaping back cutbanks, providing pullouts and chain-up areas. Capital improvements may require additional right of way outside the current federally appropriated footprint. All DEIS alternatives appear to allow continued highway maintenance within the 'right of way.' It is critical that highway right of way be defined to include all property that is necessary to maintain, operate, and improve the highway system. It is also important that the term 'maintenance' include all activities necessary for the safe operation of the highway, for example sign installation, in addition to providing pullouts and chain-up areas, shaping cut banks, and straightening curves. All highway safety activities should be allowed without the need for further environmental review and without mitigation requirements associated with the GRSG

Comment Number: OR-GRSG-0532-59

Comment Excerpt Text:

Pg. ES-12 - "Reasonably foreseeable development scenarios were not completed for mineral potentials and developments in Oregon". It appears that the economic and social impacts of restricting access or development of minerals on BLM-administrated GRSG habitat (something every alternative proposes to a greater or lesser degree) has not been fully evaluated. Reasonably foreseeable development scenarios, including updated mineral resource assessments, are necessary to properly evaluate the impacts to mining and socio/economic well being of Oregon. Mining is the #3 economic driver for the area.

Comment Number: OR-GRSG-0557-4

Comment Excerpt Text:

Baker and Malheur Counties are poor counties, and jobs are scarce. BLM must take into account the disproportionately high adverse impact to low income populations in the Planning Area and throughout Eastern Oregon, as a result of restrictions and prohibitions to locatable mineral development, or by redesignating sage grouse areas from general habitat to priority habitat. These restrictions could result in decreased revenues generated directly from mining operations and other revenue that is created from the indirect economic benefits associated with mining activities. These are important revenue sources to the counties where mineral production occurs.

Comment Number: OR-GRSG-0589-1

Comment Excerpt Text:

The BLM has failed to complete an economic analysis of the proposed RMPA. Modifications to cattle grazing can have a very negative impact on a ranching operation, and hence, the rancher's ability to stay in business.

Comment Number: OR-GRSG-0607-2

Comment Excerpt Text:

Finally, it doesn't appear that BLM has provided a complete economic analysis of implementing the proposed RMPA, nor has BLM considered the consequences and impacts on rural communities. Our district also recommends that BLM provide full consideration of the economic impacts of the proposed alternatives.

SECTION 22.4 - CUMULATIVE IMPACT ANALYSIS

Comment Number: OR-GRSG-0025-17

Comment Excerpt Text:

More specifically, the incremental socioeconomic impacts of the proposed action and each alternative should be evaluated in the cumulative effects section of the EIS. Therefore, the final EIS should address the local, regional, and national socioeconomic effects related to wind energy on:

1) Employment;

2) Economic Development; and

3) Taxable Income.

Comment Number: OR-GRSG-0026-28

Comment Excerpt Text:

In the cumulative effects section for socioeconomic analysis, the BLM analysis simply sums up the estimated job losses from grazing, wind energy development, and geothermal development. It is likely, however, that the cumulative effects of multiple changes would be more than additive in nature, particularly where impacts are large such as for Alt. C. Thus, the cumulative effects of each Alternative are most likely understated. We ask that the BLM revise the cumulative effects analysis.

Comment Number: OR-GRSG-0093-33

Comment Excerpt Text:

DEIS Did Not Evaluate the Cumulative Impacts of the Economic or Social Effects of the RMPA.

Page 1-22 states: "The RMPA will be developed using an interdisciplinary approach to prepare reasonable foreseeable development scenarios, ensure cooperating agency review of the proposed alternatives, and analyze resource impacts, including cumulative impacts on natural and cultural resources and the socio-economic environment".

This was not done as noted above. BLM had the information to develop the cumulative ranch impacts from different reductions in BLM AUMs and did not use that information. In addition to the reference to cumulative effects above and the likely impact on the IMPLAN model, there are additional cumulative impacts that should be disclosed.

The additional cumulative impacts on ranches would be the loss of value of the ranch and the probability that some ranches would go out of business. Torell et al. (2002) used a modelling approach to predict that probability. An updated study should be available in a very short time frame and before the Final EIS and RMPA are published. Torell et al (2014) (in press). This cumulative impact should be accounted for and analyzed in the DEIS.

Comment Number: OR-GRSG-0093-35

Comment Excerpt Text:

BLM has not considered the cumulative impact of its alternatives on private lands. It also did not consider the "private actions" that will result from the BLM alternatives. The fact that ranchers will have to adjust their management on private lands is only briefly mentioned and is not analyzed.

Comment Number: OR-GRSG-0093-36

Comment Excerpt Text:

Impacts to family, community, and identity each need to be addressed, as was well-documented in Wulfhorst (2003). Changes and difficult situations added to by the RMPA cumulatively cause significant effects to family, community, and identity.

The losses associated with DEIS/RMPA, indeed just the implementation of another change or perceived change, will have significant and measurable impacts on ranchers and rural communities. This is documented in studies such as J. D. Wulfhorst, Neil Rimbey and Tim Darden (2006) Sharing the Rangelands, Competing for Sense of Place, American Behavioral Scientist 2006 50: 166, DOI: 10.1177/000276420629063l (found online at ttp://abs.sagepub.com/content/50/2/166).

Comment Number: OR-GRSG-0152-22

Comment Excerpt Text:

As stated in 4.19.2, "the main economic impacts derived from changes in resource management are reflected in changes in local employment and

earnings, costs incurred by the private sector, fiscal revenues, and regional growth prospects." We would add that implications of proposed actions on the agency's budget need to also be considered. Yet the analysis only addresses employment and earnings, and largely ignores the other aspects of the impacts. For example, only a cursory discussion of impacts on state and local tax revenues is provided on p. 4-277, which includes no quantitative assessment of impact. Thus it is impossible for the reader to evaluate the significance.

The analysis of the impacts from Management Actions Affecting Grazing Allotments (beginning on p. 4-265), the analysis of Alternative D focuses solely on the impact of eliminating grazing on approximately 118,000 acres of Priority RNAs. The analysis concludes that the impact of Alternative D amounts to a loss of up to 9 jobs, $0.8 million in output, and $0.3 million in labor earnings.

Yet, Alternative D contains 33 separate Actions related to livestock grazing and range management. Many of these have foreseeable impacts on the elements of the economy noted above from 4.19.2. Several of the actions appear to add costs to the private sector and/or the agency, including new costs at renewal of grazing permits and leases, completing land health assessments, Habitat Assessment Framework analyses, relocating fences, changes to season or timing of use, changing irrigation systems from flood to sprinkler irrigation, adjustments to the number and types of livestock permitted, extended rest or temporary closures, and additional permanent closures, to name just a few.

While some of these impacts considered individually may not amount to much, we are concerned that the cumulative impacts of all of the possible additional reductions in grazing allotments, added costs, and layers of regulation may lead to a much larger reduction in livestock grazing, on private as well as public lands, than is anticipated in the simplified analysis provided in the DEIS. If livestock grazing becomes uneconomical, the impact on our already fragile frontier economies would be devastating

Comment Number: OR-GRSG-0152-40

Comment Excerpt Text:

However, impacts on employment should be considered cumulatively when forming a conclusion about overall high and adverse impacts. Moreover, what about the trickle-down multiplier impacts on service jobs, etc.? Were these included? This is particularly relevant in an Environmental Justice analysis in which 'other factors' such as geography are arguably a factor that could amplify effects so as to disproportionately impact low-income communities.

In particular, it is hard to see how the potential impact on Harney County from prohibition of wind energy projects under Alternatives B, C, and F would not be high and adverse and to disproportionately impact low-income populations.

The minimal description of this aspect of the analysis is insufficient to allow the public to understand the analysis process

Comment Number: OR-GRSG-0382-2

Comment Excerpt Text:

The BLM has failed to assess the economic impacts associated with the proposed alternatives within the Oregon Sub-Region. This is an important issue for the residents of Harney County in that we cannot knowingly comment on the connected and cumulative impacts associated with the various alternatives without this information being disclosed on a localized basis.

SECTION 23 - SOIL

SECTION 23.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0093-141

Comment Excerpt Text:

This analysis recognizes that rangeland health evaluations, rangeland monitoring studies, and rangeland health standards are used to assess rangeland condition and help to identify where a change in livestock grazing would be beneficial. page 4-230 The discussion of Alternative A also recognizes that management of grazing under RHSA and other management evaluations would provide for the health

of rangeland vegetation that also supports GRSG page 4-24. Yet, the analysis concludes that the more acres grazed by livestock, the greater the probability grazing standards would not be met; thereby subjecting soil resources to the possible impacts of livestock grazing. This assumption is applied within "Impacts from Livestock Grazing/Range Management" for each Alternative: Pages 4-232, 4-234, 4-236, 4-238, 4-240, and 4-242.

According to Page 4-143, "The Fundamentals of Rangeland Health regulations require that BLM must revise livestock grazing management "as soon as practicable," and in any event no later than the start of the next grazing season, upon making determinations that the fundamentals of Rangeland Health Standards and Guidelines are not being met upon an allotment due to livestock grazing." Page 4-24 confirms that management under the rangeland health regulations provides for the health of rangeland vegetation that supports GRSG.

Page 3-39 also confirms the premise that current range management policies are effective in managing the environmental consequences on riparian areas and the associated soil and water resources from livestock grazing. "Proper Functioning Condition (PFC) assessments have been conducted on many of the streams within the planning area showing improved conditions; 83% were found to be properly functioning or upward trend in PPH; and 82% properly functioning or upward trend in PGH. Photo Trend Monitoring shows an increase in native riparian vegetation (including willows, sedges and rushes), stream channel narrowing and deepening, and increases in streambank stability."

The RMPA does not have an adequate basis to assume that the more acres grazed by livestock, the greater the probability grazing standards would not be met; thereby subjecting soil resources to the possible impacts of livestock grazing. The correct assumption should be that, "short-term (as defined on Page 4-5), site-specific impacts could occur if grazing was not in compliance with the terms and conditions within the grazing permit."

Comment Number: OR-GRSG-0093-142

Comment Excerpt Text:

Impacts Common to All Alternatives

Page 4-231 Wild Horses and Burros. The environmental consequences to soils from wild horses and burros are not similar for all alternatives. Alternative C proposes to remove water developments. According to Page 4-15, the removal of water developments will impact the distribution of wild horses, shifting yearlong use to riparian areas. This could increase the probability of possible impacts under Alternative C "through trampling or removing vegetation and compacting soils near water sources around which wild horses may congregate for water and shade." Page 4-232. This environmental consequence should be inserted under Alternative C for Soil Resources

Comment Number: OR-GRSG-0093-143

Comment Excerpt Text:

Page 4-236 The DEIS/RMPA states that "This would completely remove the potential for improper livestock grazing and the associated impacts on soil resources, including vegetation clearing, and soil trampling or compaction." This must be consistent with the language on Pages 4-229 and 4-230. In addition, at a minimum, "vegetation clearing" is only found within the section discussing impacts from mining and mineral activity, and is not associated with grazing. Please also remove the phrase "improper livestock grazing" and replaced it with, "This would eliminate the possibility of the short-term, site-specific impacts from livestock grazing."Insert also: The retirement of grazing permits would result in the loss of cooperative weed agreements, increasing the spread of invasives." Page 4-12.

Comment Number: OR-GRSG-0093-66

Comment Excerpt Text:

Page 3-131 states: "In areas where biologic soil crusts have been lost, there is a greater risk of annual grass (or other invasive) invasion than in areas with intact crusts. Biologic soil crusts are found throughout the planning area."

There is no body of research to support this speculative conclusion. Cracks within biological crusts provide a safe site for annual grasses.

Comment Number: OR-GRSG-0281 (FrmLtr11)-53

Comment Excerpt Text:

7. Comment: Vol 1, page 3-131: In areas where biologic soil crusts have been lost, there is a greater risk of annual grass (or other invasive) invasion than in areas with intact crusts. Biologic soil crusts are found throughout the planning area.

Solution: Delete the sentence above. There is no body of research to support this speculative conclusion. Cracks within biological crusts provide a safe site for annual grass.

SECTION 24 - TRAVEL MANAGEMENT

SECTION 24.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0002-2

Comment Excerpt Text:

Board Recommendation 1-2: According to the plan, Research Natural Areas (RNAs) will be closed to grazing for five (5) years. However, private land exists within those RNAs. Access to, and use of, those private lands are an issue that needs resolved in order to eliminate the devaluation of those lands and economic loss to the landowner, this school district, and Lake County

Comment Number: OR-GRSG-0006-1

Comment Excerpt Text:

None of the alternatives restrict motor vehicles, ATVs and dirt bikes to designated routes. That failure will lead to continued degradation of sage-grouse habitat, as ATVs and dirt bikes roam, creating still more routes that subdivide blocks of habitat. "Existing routes" in many cases are excessive routes, including unplanned and redundant ORV tracks. Some should be closed to prevent further degradation of habitat. BLM should establish areas where all travel would be required to remain on designated routes and the plan should also require all subsequent land use planning and travel planning efforts in Eastern Oregon to designate such routes

Comment Number: OR-GRSG-0039-5

Comment Excerpt Text:

BLM's preferred alternative would restrict all mechanical travel in PPMA to existing roads and travels. It does not clarify if there are any exceptions

Comment Number: OR-GRSG-0047-5

Comment Excerpt Text:

ATVs: The DEIS suggests that ranchers would be able to continue the use of ATV'S for administrative purposes. BLM should clarify this language so that permittees and lessees are allowed that use on all allotments subject to the RMPA.

Comment Number: OR-GRSG-0060-1

Comment Excerpt Text:

First, the transportation portion does not address the importance of keeping all roads open for fire-fighting.

Comment Number: OR-GRSG-0062-1

Comment Excerpt Text:

Limits on road construction in PPMA would result in a long-term reduction in new opportunities for motorized recreation. This could result in localized congestion and user conflicts if motorized travel were to increase in popularity. BRC believes that "trail" construction or reconstruction should be allowed to address environmental or recreational needs as they arise.

Comment Number: OR-GRSG-0062-4

Comment Excerpt Text:

BRC also believes that agency should clarify the RMP revision/amendment process, travel and transportation area decisions (open, limited, or closed) would be revisited at the local level based on existing inventory information associated with a myriad of resources and resource uses.

Comment Number: OR-GRSG-0062-5

Comment Excerpt Text:

BRC believes that an Alternative (Modified Alt. D?) should be created that empowers local land managers the ability to grant special recreation permits.

Depending on need and other factors, mitigation or restrictive measures could be placed on types, locations, and timing of activities to ensure consistency with the related management objectives. Group events could be subject to seasonal or timing prescriptions, which could limit the ability of some participants to attend. For example, many recreation events for which permits are issued on public land take place in June. In June, the grouse are on nests and brood rearing. If the proposed activity poses a threat, the event may be moved or timing changed in order to reduce impacts during this period. It is possible that organizers may decide not to hold their event if they cannot hold the event at a particular time. This would represent a reduction in opportunity for participants who would otherwise have been attending such events each year. Regardless, it is essential that these factors be evaluated and decisions ultimately made at a site-specific level, and not through some broad criteria that cover all public lands

Comment Number: OR-GRSG-0062-6

Comment Excerpt Text:

Between March 1 and May 15, prohibit OHV events from using routes that pass through an active lek. Impose a time of day restriction (after 10 a.m.) for routes that pass within ¼ mile of an active lek.

Comment Number: OR-GRSG-0068-9

Comment Excerpt Text:

ATVs: The DEIS suggests that ranchers would be able to continue the use of ATV's for administrative purposes. BLM should clarify this language so that permittees and lessees are allowed that use on all allotments subject to the RMPA. For ranches like ours, ATV's are essential tools for the proper management of livestock on the range. ATV's save time and effort. We can move "trained" cattle to new pastures, fix fences, and maintain springs and troughs all within a single trip with an ATV.

Recommendation: Please clarify that permittees and lessees are allowed to use ATVs for administrative purposes on BLM lands subject to the RMPA and ensure maintained access for livestock and land management.

Comment Number: OR-GRSG-0093-113

Comment Excerpt Text:

The BLM has not demonstrated that the limited travel associated with grazing permit administration and management is harmful to GRSG. Further, the BLM has not confirmed the presence of leks. If roads are of concern, they should be dealt with based on site-specific information, including validation of the presence of an active lek during the time of the restriction. The DEIS directives on roads will put an undue administrative burden on field staff to inventory existing routes, roads, and trails. BLM staff are already generally unable to complete the duties already required of them.

Comment Number: OR-GRSG-0093-78

Comment Excerpt Text:

The RMPA/DEIS addresses access on Pages 2-21, 2-89 and 2-90 (Actions TM 1-7), and Page 4- 145. However, the DEIS does not sufficiently explain that permittees and the BLM should have reasonable and effective access to grazing allotments.

Comment Number: OR-GRSG-0093-87

Comment Excerpt Text:

Page 2-21 The second bullet point (Infrastructure) states with regards to motorized travel that "Exceptions would be granted for administrative access and other specifically exempted uses." The RMPA needs to be clear that grazing permittees will have motorized access to allotments for all necessary and reasonable management activities. Further, routes, roads, and ways must be sufficiently maintained to provide good, reasonable, and travelable access routes. Permittees need to have access via well-maintained routes to move livestock, maintain water sources, maintain fences, place mineral blocks, and otherwise manage their allotments to meet the rangeland health standards and other valid requirements placed on them under their grazing permit terms.

Comment Number: OR-GRSG-0095-21
Comment Excerpt Text:
i. Management inside SGCAs in sage-grouse habitat

§? All travel must be on designated open roads and trails, subject to seasonal restrictions.

§? Seasonal restriction should include the periods of courtship, nesting and early brood raising, as well as times when the grouse are on wintering habitats.

§? No new trail construction within 7.6 km of active leks.

§? Close existing trails and roads to achieve an open road and trail density not greater than 1 km/km².248

§? During travel management planning evaluate the closure of secondary and primary roads in the SGRA.

§? Seasonally prohibit camping within 7.6 km of active leks.

§? Allow no commercial or special use permitted activities in SGRAs unless there is a demonstrated beneficial affect for the grouse.

248 Knick et al. 2013.

ii. Management outside SGCAs in sage-grouse habitat

§? All travel must be on designated open roads and trails, subject to seasonal restrictions.

§? Seasonal restriction should include the periods of courtship and nesting, as well as times when the grouse are on wintering habitats.

§? No new trail construction within 6.4 km of active leks.

§? Seasonally prohibit camping within 6.4 km of active leks.

Comment Number: OR-GRSG-0118-3
Comment Excerpt Text:
Travel in PPMAs would be restricted to Off-Highway Vehicle (OHV) use, although the extent of use would need to be assessed prior to BLM's writing the final Travel Management Plan. Without the assessment and subsequent stipulations in place, it is impossible to determine the impact of reduced or eliminated travel access to ranchers, utilities, recreation, etc,

Comment Number: OR-GRSG-0118-4
Comment Excerpt Text:
While the Plan posits there would be a continuation of OHV use for administrative use, this language should be clarified so that permittees and lessees are explicitly included. For many operations, OHVs are essential to the proper management of livestock. In addition, they are necessary to navigate difficult topography or seasonally impassable terrain which, in turn, is in the best interest of sage grouse conservation

Comment Number: OR-GRSG-0118-5
Comment Excerpt Text:
Alternative D-VG 41 states: "Minimize cross-country vehicle travel through invasive plant infested areas during emergency and planned operations, such as during wildfire response, spot applying herbicides to invasive plants, conducting vegetation inventory and so forth."

It is important to point out that D-VG 41 does not address another potentially required entrance into invasive plant-infested areas, that of emergency response to a medical issue or a Search and Rescue emergency. The Plan needs to clarify that although all reasonable precautions may be undertaken during these emergencies, access shall not be limited, nor real-time authorizations required, under any circumstances with known or potential life-threatening emergencies. In addition, emergency response personnel cannot be excluded from the scene of life-threatening emergencies because of gates locked by BLM.

Comment Number: OR-GRSG-0145-5
Comment Excerpt Text:
Ranchers' Use of ATVs

While the DEIS posits there would be a continuation of ATVs for administrative use. This language should

be clarified so that permittees and lessees are explicitly included. For many operations, ATVs are essential to the proper management of livestock. This is in the best interest of sage grouse conservation and livestock operations.

Comment Number: OR-GRSG-0149-2

Comment Excerpt Text:

Agency fails to address seasonal restriction to mechanical travel off road and trails in primary habitat. Breeding and nesting are critical times in sagegrouse life cycle for survival (march1-june 30th) closure to off road travel during this season would provide adequate protection for the bird. The agency also fails to address seasonal closure of roads or trails within close (.6 mile) vicinity of known leks. Exceptions for emergency, required livestock management and administrative use could be provided.

Comment Number: OR-GRSG-0199-14

Comment Excerpt Text:

The BLM should not amend the RMP to prohibit new road construction and limit travel to "existing roads, primitive roads and trails." This concept has been implemented on portions of BLM lands in Oregon and had very negative consequences. It has the potential to impose a substantial administrative burden on field offices to inventory existing route networks and expose those processes to expensive, time-consuming litigation. This concept also has the potential to limit or preclude use of historic routes that may not be obviously discernible on the landscape but nonetheless are invariably needed for use for grazing administration, fire management and/or other land management activities. The Grant County Court urges the BLM to not adopt a road construction prohibition and "existing" -route travel management strategy.

Comment Number: OR-GRSG-0200-16

Comment Excerpt Text:

Prohibiting the Construction of New Routes and Limiting Motorized Travel to "Existing" Roads, Primitive Roads, and Trails Would be Unwise and Has the Potential to Unlawfully Interfere With Historic Routes Needed for Grazing Administration.

The BLM should not amend the RMP to prohibit new road construction and limit travel to "existing roads, primitive roads and trails." This concept has been implemented on portions of BLM lands in Oregon and had very negative consequences. It has the potential to impose a substantial administrative burden on field offices to inventory existing route networks and expose those processes to expensive, time-consuming litigation. This concept also has the potential to limit or preclude use of historic routes that may not be obviously discernible on the landscape but nonetheless are invariably needed for use for grazing administration, fire management and/or other land management activities

Comment Number: OR-GRSG-0265-1

Comment Excerpt Text:

We writing this letter in concern about the response at the February 10 meeting, concerning the access for EMS and Search and Rescue, under the current DEIS regulations. It didn't appear to have been addressed in the document at all. Can you clarify this? I have been a volunteer First Responder for the last 20 years. Your response “there's usually a road nearby”, just doesn't cut it. I have yet to see a patient who has been hurt on a road. They are or have been on the side of a mountain, a half mile up a steep hill from a road, or twelve miles by snowmobile for a critically injured man. Can something be added to the document to ensure delay of medical treatment doesn't happen? I know I would appreciate knowing there wouldn't be any delays in getting help just because permission has to be granted first!

Comment Number: OR-GRSG-0276-31

Comment Excerpt Text:

Text: Pg. 2-52, Table 2-5

According to Table 2-5, no cross-country travel would be allowed in PPH/PPMA/Core area habitats.

Comment: Idaho Power uses cross country travel within our ROWs and at times, to gain access to our ROWs, when existing roads are not available and are

not necessary. We typically access our lines one to two times per year for inspections and as needed for operation and maintenance activities (this can typically be another one to two trips per year). Because we have relatively few trips to our facilities, we do not create roads unless they are needed for safe equipment access and operation. The prohibition on cross country travel would have the unintended consequence of encouraging us to create more roads not fewer roads.

Comment Number: OR-GRSG-0333-16

Comment Excerpt Text:

The BLM should not amend the RMP to prohibit new road construction and limit travel to "existing roads, primitive roads and trails." This concept has been implemented on portions of BLM lands in Oregon and had very negative consequences. It has the potential to impose a substantial administrative burden on field offices to inventory existing route networks and expose those processes to expensive, time-consuming litigation. This concept also has the potential to limit or preclude use of historic routes that may not be obviously discernible on the landscape but nonetheless are invariably needed for use for grazing administration, fire management and/or other land management activities. The Malheur County Court urges the BLM to not adopt a road construction prohibition and "existing" -route travel management strategy.

Comment Number: OR-GRSG-0356 (FrmLtr07)-12

Comment Excerpt Text:

While the Plan posits there would be a continuation of OHV use for administrative use, this language should be clarified so that permittees and lessees are explicitly included. For many operations, OHV s are essential to the proper management of livestock

Comment Number: OR-GRSG-0356 (FrmLtr07)-13

Comment Excerpt Text:

Alternative D-VG 41 states: "Minimize cross-country vehicle travel through invasive plant infested areas during emergency and planned operations, such as during wildfire response, spot applying herbicides to invasive plants, conducting vegetation inventory and so forth."

It is important to point out that D-VG 4 J does not address another potentially required entrance into invasive plant-infested areas, that of emergency response to a medical issue or a Search and Rescue emergency. The Plan needs to clarifY that although all reasonable precautions may be undertaken during these emergencies, access shall not be limited, nor real-time authorizations required, under any circumstances with known or potential life-threatening emergencies. In addition, emergency response personnel cannot be excluded from the scene of life-threatening emergencies because of gates locked by BLM

Comment Number: OR-GRSG-0356 (FrmLtr07)-20

Comment Excerpt Text:

HEC recommends that all roads which may be utilized to access their infrastructure remain open. This will allow emergency responders to utilize main access roads before branching off onto secondary roads directly to the problem area. This approach greatly reduces vehicle travel through all sage grouse habitat. BEC requests to be a permitted user or declared an "essential service" that has all scason access to all roads for line maintenance, inspection, repair and replacement

Comment Number: OR-GRSG-0356 (FrmLtr07)-21

Comment Excerpt Text:

At a minimnm, HEC requests that a clause be placed into all alternatives that would allow closed roads to be accessed in an emergency situation, such as a transmission or distribution line failure, or a wildfire threatening a power line.

Comment Number: OR-GRSG-0356 (FrmLtr07)-25

Comment Excerpt Text:

Alternative B (Action B-TM 4) states "In PPMA, travel management should evaluate the need for permanent

or seasonal road or area closures." Seasonal or permanent road closures may limit HEC's ability to quickly and efficiently access their distribution and transmission infrastructure for maintenance and emergency repairs. State and federal laws require electrical utilities to inspect all facilities at a minimum of once a year. HEC must retain the ability to travel all roads for such inspections. HEC opposes the closure or restriction of any road currently used to access its infrastmcture. At a minimum, HEC requests that a clause be placed into Alternative B that would allow closed roads to be accessed in an emergency situation, such as a transmission or distribution line failure or a wildfire threatening a power line.

Comment Number: OR-GRSG-0356 (FrmLtr07)-31

Comment Excerpt Text:

Alternative F (Action F-TM I) states "in occupied habitat, limit motorized travel to existing roads and trails," This statement is unclear regarding what access wonld remain available to HEC in order to access their infrastructure. HEC has many miles of infrastructure which is not located along established roads and trails, Action F-TM I would greatly limit HEC's access to its infrastructure and potentially eliminate access altogether, HEC would strongly oppose any measures of Alternative F whieh would limit access to infrastructure in authorized ROW

Comment Number: OR-GRSG-0357 (FrmLtr08)-8

Comment Excerpt Text:

ATVs: The DEIS suggests that ranchers would be able to continue the use of ATV's for administrative purposes. BLM should clarify this language.

Recommendation: Please clarify that permittees and lessees are allowed to use ATV's for administrative purposes on BLM lands subject to the RMPA and ensure maintained access for livestock and land management.

Comment Number: OR-GRSG-0357 (FrmLtr08)-9

Comment Excerpt Text:

RMPA will create access issues by eliminating roads and trails that are important; by possibly limiting use of ATVs for livestock management purposes; and by restricting road construction, improvements, and maintenance. This will also impact the ability to fight fire and carry out habitat improvement projects. The BLM should not amend the RMPs to prohibit new road construction nor limit travel to "existing roads, primitive roads and trails." This concept has been implemented on portions of BLM lands and had very negative consequences.

Recommendation: Remove language proposing to remove important roads or road maintenance that contribute to rangeland management and fire suppression.

Comment Number: OR-GRSG-0433-27

Comment Excerpt Text:

Roads, routes and trails result in the fragmentation and loss of sage-grouse habitat, cause sagegrouse to avoid surrounding areas, lead to the introduction and spread of invasive plant species, and facilitate increased predation. Roads and trails are pervasive in portions of the planning area, impacting large areas of sage-grouse habitat. The DEIS must include clear limitations on travel through sage-grouse habitat including modern –era prescriptions for areas open, limited and closed to travel and specific prescriptions for the development, use and closure of roads, routes and trails.

Comment Number: OR-GRSG-0433-30

Comment Excerpt Text:

Alternative D has several prominent shortcomings, including far too many areas left open to cross-country travel, failing to designate a specific, mapped system of roads and trails and closing too few acres of the most sensitive habitat areas to travel. Seasonal restrictions on travel are also absent from the preferred alternative and can be an effective means of protecting sage-grouse habitat without complete closure of an area.

Comment Number: OR-GRSG-0433-32

Comment Excerpt Text:

the preferred alternative fails to adhere to basic BLM travel guidance by leaving large swaths of the planning

area open to cross-country travel. Areas designated as "open" are intended for intensive OHV or other transportation use areas where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342. Because of significant increases in OHV use on public lands and the development of new vehicle technologies, the designation of large areas that remain open to unregulated cross-country travel is no longer a viable management strategy.

Comment Number: OR-GRSG-0433-33

Comment Excerpt Text:

Alternative D limits travel on only 1,205 acres of general sage-grouse habitat, leaving more than 2.9 million acres of sage-grouse habitat open to all forms of cross-country travel. BLM's own policy states clearly that leaving large areas open to unregulated cross-country travel is no longer a viable management strategy (BLM 2012).

Comment Number: OR-GRSG-0433-34

Comment Excerpt Text:

We note too that BLM is under a legal obligation pursuant to a 2010 ONDA-BLM settlement agreement to consider meaningful alternatives with respect to OHV designations on the Vale and Lakeview districts. ONDA v. BLM, 03-cv-1017-JE & ONDA v. Gammon, 06-cv-523-HO, Settlement Agreement (Dkt ## 130 & 99, respectively).

Comment Number: OR-GRSG-0433-35

Comment Excerpt Text:

BLM policy also is clear that impacts to wildlife habitat must be considered in the decision to close or limit travel (BLM 2012). Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats 43 C.F.R. § 8342.1.

Comment Number: OR-GRSG-0433-36

Comment Excerpt Text:

The DEIS prescribes a "limited to existing" designation that is insufficient. BLM must improve and clarify the limited travel designation and how it will be implemented. BLM policy acknowledges that there is little distinction between designated and existing routes for the purposes of impacts analysis and that designated routes provide more long-term management flexibility to add, delete or relocate routes (BLM 2012). Given these advantages and the need to protect sage-grouse habitat BLM should characterize the route system in the proposed action as a system of designated routes. The proposed "limited to existing" system will simply allow for new user-created routes to take hold due to illegal offroute travel and route pioneering. Only a fixed in time set of routes, delineated on a map will be able to begin to limit new road disturbance in important sage-grouse habitat (USFWS 2010, Forman et al. 2003, Gelbard and Belnap 2003, Reed et al. 1996).

Comment Number: OR-GRSG-0433-37

Comment Excerpt Text:

BLM must also identify areas closed to OHV travel. Existing closed areas, areas with exceptional sage-grouse habitat values, areas with research and restoration potential and areas where travel is inconsistent with existing designations should all be closed. Specifically BLM should close ways within Wilderness Study Areas that are also within PPMA. See, e.g., 43 C.F.R. § 8342.1(d) ("Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established."). BLM should also close all RNAs with sage-grouse as a resource value and maintain all existing closures from Alternative A.

Comment Number: OR-GRSG-0433-38

Comment Excerpt Text:

Contrary to BLM planning policy, the DEIS fails to limit travel to designated routes over large swaths of

the planning area, does not provide any map of a preliminary road and trail network, lacks any description of the called for travel management planning process, does not distinguish OHV travel restrictions from travel for permitted or authorized uses and includes no short term guidance for road and trail use in the interim. BLM must include additional travel management provisions in the DEIS to meet minimum requirements of agency policy and to put in place effective baseline protections for sage grouse.

Ultimately, BLM must ensure that areas and trails "shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability" and "shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats." 43 C.F.R. §§ 8342.1(a), (b). The preferred alternative does not meet these requirements.

Comment Number: OR-GRSG-0434-47

Comment Excerpt Text:

Once the full extent of existing roads and routes has been accurately described, the DEIS must identify effective and lasting travel management designations to eliminate or minimize impacts to sagegrouse habitat. The preferred alternative in the DEIS fails to accomplish the level of protection necessary to effectively protect sage-grouse habitat. Alternative D has several prominent shortcomings, including far too many areas left open to cross-country travel, failing to designate a specific, mapped system of roads and trails and closing too few acres of the most sensitive habitat areas to travel. Seasonal restrictions on travel are also absent from the preferred alternative and can be an effective means of protecting sage-grouse habitat without complete closure of an area.

Comment Number: OR-GRSG-0434-48

Comment Excerpt Text:

Alternative D limits travel on only 1,205 acres of general sage-grouse habitat, leaving more than 2.9 million acres of sage-grouse habitat open to all forms of cross-country travel. BLM's own policy states clearly that leaving large areas open to unregulated cross-country travel is no longer a viable management strategy (BLM 2012). We note too that BLM is under a legal obligation pursuant to a 2010 ONDA-BLM settlement agreement to consider meaningful alternatives with respect to OHV designations on the Vale and Lakeview districts. ONDA v. BLM, 03-cv-1017-JE & ONDA v. Gammon, 06-cv-523-HO, Settlement Agreement (Dkt ## 130 & 99, respectively).

Comment Number: OR-GRSG-0434-49

Comment Excerpt Text:

BLM policy also is clear that impacts to wildlife habitat must be considered in the decision to close or limit travel (BLM 2012). Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats 43 C.F.R. § 8342.1. It is incomprehensible, and inconsistent with policy and law, that BLM would identify any alternative leaving 2.9 million acres of sage-grouse habitat open to cross-county travel. The DEIS must limit motorized travel to designated roads, routes and trails in the vast majority of the planning area, considering the designation of open areas only for specific recreation uses in appropriate, non-habitat areas where travel will not have a significant effect on sagegrouse. Such areas should support existing intensive OHV use in areas that will not be unduly impacted by such use.

Comment Number: OR-GRSG-0434-50

Comment Excerpt Text:

The DEIS prescribes a "limited to existing" designation that is insufficient. BLM must improve and clarify the limited travel designation and how it will be implemented. BLM policy acknowledges that there is little distinction between designated and existing routes for the purposes of impacts analysis and that designated routes provide more long-term management flexibility to add, delete or relocate routes (BLM 2012). Given these advantages and the need to protect sage-grouse habitat BLM should

characterize the route system in the proposed action as a system of designated routes. The proposed "limited to existing" system will simply allow for new user-created routes to take hold due to illegal offroute travel and route pioneering. Only a fixed in time set of routes, delineated on a map will be able to begin to limit new road disturbance in important sage-grouse habitat (USFWS 2010, Forman et al. 2003, Gelbard and Belnap 2003, Reed et al. 1996).

Comment Number: OR-GRSG-0434-51

Comment Excerpt Text:

BLM must also identify areas closed to OHV travel. Existing closed areas, areas with exceptional sage-grouse habitat values, areas with research and restoration potential and areas where travel is inconsistent with existing designations should all be closed. Specifically BLM should close ways within Wilderness Study Areas that are also within PPMA. See, e.g., 43 C.F.R. § 8342.1(d) ("Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established."). BLM should also close all RNAs with sage-grouse as a resource value and maintain all existing closures from Alternative A.

Comment Number: OR-GRSG-0434-52

Comment Excerpt Text:

The DEIS fails to include required transportation system management decisions. In addition to management provisions for OHV, the DEIS must also designate areas and limitations for transportation facilities, including roads. The DEIS must:

- Identify land areas available or suitable for transportation facilities.
- Identify types of transportation facilities that are appropriate for the planning area.
- Identify limitations, if any, on the types or locations of facilities for specified areas.
- Identify the area(s) having in-place transportation facilities that should be removed.
- Identify road repair, road rehabilitation, road construction, and maintenance standardsappropriate to specific areas.
- Identify limitations, if any, on road repair, road rehabilitation, road construction, andmaintenance actions.
- Identify limitations, if any, on road density (i.e., miles/section) for specific areas.

(BLM 2005).

When identifying sideboards for the use, management and maintenance of the road network the DEIS should avoid the construction of new roads in PPMA and connectivity habitat and prescribe habitat-driven restrictions on road development in PGMA. The DEIS must also establish or carrythrough road maintenance levels and ensure that all maintenance levels are appropriate to the road and sage-grouse habitat needs. The DEIS should also establish provisions for the reclamation of unnecessary or redundant routes, including allowing routes to naturally reclaim.

Comment Number: OR-GRSG-0434-53

Comment Excerpt Text:

travel and transportation are critical issues for these land use plan amendments. Enacting reasonable OHV area designations consistent with current policy is a critical first step in this process. Identifying and designating a system of roads and trails to limit the footprint of impacts on sage-grouse is another key, missing, component in the DEIS. Roads and trail designations can help protect large, roadless areas that are critically important for sage-grouse. Finally, clear parameters for road maintenance activities may help limit the spread of invasive species and reduce impacts to sage-grouse habitat.

Comment Number: OR-GRSG-0434-64

Comment Excerpt Text:

Additionally, the BLM must provide specific guidance about the process for managing motorized vehicle

access for authorized, permitted, or otherwise approved vehicles for those specific categories of motorized vehicle uses that are exempt from a limited OHV designation (BLM 2012).

Comment Number: OR-GRSG-0436-3

Comment Excerpt Text:

All action alternatives include the potential to permanently or seasonally close roads throughout the planning area. Seasonal or permanent road closures may limit the ability of electric co-ops to quickly and efficiently access their distribution and transmission infrastructure for maintenance and emergency repairs. It is also important to note that the Oregon PUC requires safety inspections to 100 percent of the system every two years and detailed inspections of 100 percent every ten years. At a minimum, ORECA requests that a clause be placed into all alternatives that would allow closed roads to be accessed in an emergency situation such as a transmission or distribution line failure, a wildfire threatening a power line, or conducting inspections as mandated by federal and state laws

Comment Number: OR-GRSG-0456-1

Comment Excerpt Text:

The DEIS suggests that ranchers would be able to continue the use of ATV's for administrative purposes. BLM should clarify this language so that permittees are allowed that use on all allotments subject to the RMPA. On our ranch the ATV is an essential tool for effect management by allow to check fences, to dispense salt for better distribution of livestock, to monitor grass utlilization, and sometimes even to move livestock

Comment Number: OR-GRSG-0532-56

Comment Excerpt Text:

Pg. 4-169 Highway Operations: The State must be able to conduct activities necessary to ensure that existing highways and associated infrastructure are adequately maintained and meet safety standards; these actions include routine maintenance, operation, and capital improvements. Routine highway maintenance needs are well documented and include activities such as vegetation management (for fire control breaks, clear zones or recovery zones, site distance requirements, prevention of snow drifts, noxious weed control), shoulder building/blading, ditch cleaning, paving/patching, hazard tree removal, and winter maintenance/snow removal. Capital improvements or highway betterments include infrastructure enhancements and safety improvements such as curve-straightening, shaping back cutbanks, providing pullouts and chain-up areas. Capital improvements may require additional right of way outside the current federally appropriated footprint. All DEIS alternatives appear to allow continued highway maintenance within the 'right of way.' It is critical that highway right of way be defined to include all property that is necessary to maintain, operate, and improve the highway system. It is also important that the term 'maintenance' include all activities necessary for the safe operation of the highway, for example sign installation, in addition to providing pullouts and chain-up areas, shaping cut banks, and straightening curves. All highway safety activities should be allowed without the need for further environmental review and without mitigation requirements associated with the GRSG

Comment Number: OR-GRSG-0532-67

Comment Excerpt Text:

Dispersed Recreation

Oregon is concerned over the impacts of dispersed recreation and routes (some planned and unplanned) to GRSG habitat. The DEIS indicates the planning area contains some 8,700 miles of roads on BLM lands. The majority of sage-grouse habitat is within 2.5 km of a mapped road (Knick et al. 2011). Oregon is interested in whether the above figure includes all actual routes that may have disturbance or other impacts upon GRSG and their habitat (e.g., unplanned, user-created routes)? Given the impacts routes and dispersed recreation can have as a disturbance vector (noise, soil, etc.) and in adding to fire, invasive weed invasion, and habitat fragmentation potential, Oregon recommends a conservative approach to this issue. The BLM appears to intend to address the issue later in time through a Travel Management Plan process separate from this DEIS.

Oregon is not confident that this process will occur and conclude in a timely manner. Therefore, Oregon desires to work with BLM on an approach to managing this issue in a manner that reduces GRSG habitat impacts as a precautionary matter within areas important to GRSG. This would involve considerations of closures to cross country travel in GRSG habitat and closures of certain routes in specific proximity to occupied GRSG habitat during periods of critical importance to GRSG. Closures would not include use of routes for emergency purposes (e.g., fire) and for use related to authorized, non-recreational activities such as livestock operations.

Comment Number: OR-GRSG-0532-76

Comment Excerpt Text:

Pg. 2-89 - Under Alternative B "During activity level planning, where appropriate, manage routes in PPMA with current administrative/ agency purpose and need as administrative access only." Should this alternative be preferred, the State requests that the BLM clarify whether this would give State agencies access through BLM-administered land to access State lands.

Comment Number: OR-GRSG-0532-77

Comment Excerpt Text:

Road closures, even seasonal closures, of access roads could have detrimental effects to the State's ability to access State Trust Lands which would have a negative effect on management and monitoring activities. Road closures could require the State to force entry through "easement(s) of necessity". Such closures could also prevent lessees of State Trust Lands from accessing their leaseholds and potentially from accessing their own private lands. Even given the value of seasonal closures to GRSG during important periods of their lifecycle, the State recommends exceptions for State Trust Land management activities and private land access during any such closures.

Comment Number: OR-GRSG-0532-78

Comment Excerpt Text:

Pg. 2-90, Travel/Access Restrictions (Actions D-LR 1, D-TM4) - The State requests clarification on what is considered a "feasible" alternate route (i.e., number of miles considered acceptable to re-route rural residents). Ranchers need continued access to areas that require infrastructure maintenance and repair (e.g., fences, cattle guards, corrals, troughs, pipelines, wells, reservoirs and access roads). Under the Lands and Realty Right of Way section, BLM states that if feasible, the landowner would be required to take an alternate route not through the PPMA, thus, a clarification on "feasible" with respect to alternate routes is needed.

Comment Number: OR-GRSG-0547-6

Comment Excerpt Text:

Under "Impacts from Management Actions Affecting Land and Realty and Travel Management" (page 4-275) most alternatives propose some level of travel restrictions. The BLM alternative (D) even proposes elimination of all off-road travel in the study area. Since the majority of recreational activity in the study is disperse activity (hunting, fishing, off-road exploring and rock hounding), there is no way that prohibiting cross-country travel would not significantly impact overall recreational activities in the study area. But since no definitive discussion or data regarding dispersed recreation is presented in the DEIS, factually based conclusions are impossible. The BLM has never demonstrated the validity or justification for proposing prohibiting all cross-country travel in Alternative D. The proposed management decision is arbitrary and not based on any reasoned analysis of impacts.

Comment Number: OR-GRSG-0591-65

Comment Excerpt Text:

BLM should also apply a maximum road density, no more than 0.7 linear miles per square mile within 2 miles of leks within Priority and General Habitats (after Holloran 2005).

SECTION 24.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0026-23

Comment Excerpt Text:

Traffic counts do not support the BLM's estimates of recreational visits. For some permanent counters located on highways, one would have to assume the largest portion of traffic is non-local visitors whereas we believe the bulk of traffic is local. In addition, traffic counts on many rural eastern Oregon highways are trending down over time. For example, the average daily traffic count on Highway 20 west of Burns declined 15% between 2002 and 2011.

Comment Number: OR-GRSG-0193-7

Comment Excerpt Text:

The GRSG Plan states that road and OHV closures are needed to decrease soil compaction and erosion yet the document does not document the amount of compaction or erosion that would occur in the future or to what extent compaction, erosion, stream sediment and vegetative damage would occur .

Comment Number: OR-GRSG-0193-8

Comment Excerpt Text:

The GRSG Plan maintains that road closures are needed yet fails to numerically document the effects of leaving existing roads open.

This is further substantiated by the ODFW 2011 study that "Road density nor distance to nearest roads were significant factors in the long-term persistence of sage-grouse across the range (Aldridge et al, 2008)."

Comment Number: OR-GRSG-0281 (FrmLtr11)-32

Comment Excerpt Text:

Comment, Vol 1, page 3-88, Section 3.7.2, Travel Management section, Table 3-33: It is unclear if the DEIS is or is not covering the Baker District area. This table has the open, closed, and limited travel for Baker, but as shown on page 3-78 Baker is missing.

Solution: Fix the DEIS to either fully include the Baker Resource area or explain why it is not being included.

Comment Number: OR-GRSG-0433-29

Comment Excerpt Text:

he DEIS describes the planning area as containing some 8,700 miles of roads on BLM lands alone. This tabulation of system roads, designated routes, trails and other known travelways appears to be based on assumptions that have been applied to data from the 2013 USGS analysis of travel routes across the range of sage-grouse (Manier et al. 2013). The DEIS contains no description of the accuracy of this information for the planning area and offers no comparison to the BLM Oregon GTRN database. The figures seem to underestimate total mileage of roads and trails in the planning area and BLM should present more accurate data and maps to depict the actual extent of existing roads, routes, trails and other travelways in the planning area. Absent a complete description of existing roads BLM lacks a sufficient baseline for analysis and cannot accurately portray the magnitude of impacts from travel management decisions.

Comment Number: OR-GRSG-0433-40

Comment Excerpt Text:

Over the past decade, ONDA has inventoried more than 10 million acres of BLM-administered public land in eastern Oregon, surveying these lands' route networks and wilderness characteristics

(ONDA 2007, ONDA 2006, ONDA 2005, ONDA 2004, ONDA 2002b, ONDA 2002a). ONDA has documented many, vast roadless areas—areas that are unroaded from a wilderness perspective and that also therefore are relatively unfragmented, high-value habitat from a sage-grouse conservation perspective.

For example, during the Andrews-Steens RMP planning process, ONDA voiced concern that BLM had not inventoried lands with wilderness characteristics since the agency's initial wilderness inventory in the 1970s. ONDA asked BLM to update its wilderness inventory and consider the plan's

impacts to wilderness and roadless areas on Steens Mountain. When BLM refused to collect new wilderness data outside of existing Wilderness and WSAs, ONDA undertook its own wilderness survey (ONDA 2002a, ONDA 2002b).

In a 2,335-page report, ONDA documented changes that had occurred on the landscape since November 1980 when BLM completed its field inventory for its original wilderness recommendations (ONDA 2002a, ONDA 2002b). See also ONDA, 625 F.3d at 1106–07 (explaining same, for ONDA's Vale District report (ONDA 2004) for the Southeastern Oregon RMP).

In that report, like in each of the others, ONDA focused on surveying current route conditions throughout the Andrews Resource Area, see Or. Natural Desert Ass'n v. McDaniel, No. 3:09-cv-369-PK, 2011 WL 1654265, *2 (D. Or. Apr. 28, 2011), because "BLM has long treated the presence of roads as cancelling out any other wilderness characteristics an area might otherwise have, as they defeat the 'natural conditions' wilderness characteristic." ONDA, 625 F.3d at 1107; see also 43 U.S.C. § 1782(c) (providing that the § 603 review should focus on roadless areas). In its planning, BLM distinguishes "roads" and "ways": The word "roadless" refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of a vehicle does not constitute a road.

(BLM 2001, BLM 1978) (also explaining that this language is Congress's from FLPMA's legislative history); see also McDaniel, 2011 WL 1654265 at *14 n.6 (comparing the 2001 handbook definition to the identical definitions used by Department of the Interior in other versions of BLM's wilderness inventory handbooks). "The presence of ways [does] not render an area roaded so as to eliminate that area from further evaluation as wilderness." 625 F.3d at 1107 (internal quotes omitted). As you are aware, much of the legal inadequacy of the Steens Mountain Travel Management Plan ("TMP") at issue in McDaniel flowed from this critical distinction between the two types of routes.13 13 "Route" is a universal term meaning any linear ground transportation feature such as a way or road.

The ONDA reports document that many routes BLM had previously identified as "roads" in the 1970s inventory had reverted to "ways" over the years (ONDA 2007, ONDA 2006, ONDA 2005, ONDA 2004, ONDA 2002b, ONDA 2002a). See, e.g., McDaniel, 2011 WL 1654265, at *2; ONDA, 625 F.3d at 1107. For example, of about 750,000 acres of public land inventoried in the Andrews Resource Area, ONDA identified about 545,000 acres that possess the statutorily defined characteristics of wilderness (ONDA 2002b, ONDA 2002a). ONDA also documented high-quality sage-grouse seasonal habitats as a "supplemental" wilderness value in almost every roadless unit identified in the report. Although BLM did not agree that these areas possessed the other characteristics of a wilderness, the agency agreed that most of the areas were indeed roadless. See Attachment E (summary of BLM wilderness findings for the ONDA-proposed roadless units).

In 2003, ONDA surveyed over 2.2 million acres of public land in the Vale District (ONDA 2004). Of that area, ONDA identified 1.3 million acres either wholly or partially in the Vale District as having wilderness qualities (ONDA 2004). ONDA again urged BLM to consider those wilderness characteristics during its land use and project planning. As noted above, in 2010 BLM agreed, in a court approved settlement, to revisit its wilderness decisions via land use plan amendment. In some areas, such as the Jordan Resource Area, BLM and ONDA are mostly in agreement as to which areas outside of existing WSAs possess outstanding wilderness character. In 2004, ONDA surveyed more than 2.6 million acres of public land in the Lakeview District (ONDA 2005). Of that area, ONDA documented 19 large roadless areas totaling 1.7 million acres as having wilderness qualities (ONDA 2005). ONDA again urged BLM to consider those wilderness characteristics during its land use and project planning. As noted above, in 2010 BLM agreed, in a court approved settlement, to

revisit its wilderness decisions via land use plan amendment. BLM's wilderness determinations on the Lakeview District are drastically different from, and inconsistent with, its conclusions on the Vale District.

In 2005, ONDA surveyed more than 335,000 acres of public land in the Prineville District's lower John Day River basin (ONDA 2006). Of that area, ONDA documented 13 large roadless areas totaling 175,063 acres as having wilderness qualities (ONDA 2006). During the John Day Basin Resource Management Plan process, ONDA urged BLM to recognize and protect those wilderness characteristics. Although BLM recognized some of the areas, important roadless areas remain unrecognized.

During 2005 and 2006, ONDA surveyed another 1.5 million acres of public land in the Three Rivers Resource Area. Those surveys revealed 14 large roadless areas totaling more than 731,000 acres (ONDA 2007). ONDA again identified important sage-grouse habitat as a supplemental wilderness value in nine of the areas (ONDA 2007). In its 2007 Three Rivers Wilderness Report, ONDA asked BLM to amend the Three Rivers RMP to incorporate this new information into that outdated plan (ONDA 2007). Among other concerns, the Three Rivers RMP, like the Andrews Management Unit RMP, does not have a travel plan, nor is there any separate, stand-alone travel plan for that resource area. BLM has not yet amended the Three Rivers RMP; nor has it prepared a travel plan for the Three Rivers Resource Area or the AMU.

Comment Number: OR-GRSG-0434-46

Comment Excerpt Text:

The DEIS describes the planning area as containing some 8,700 miles of roads on BLM lands alone. This tabulation of system roads, designated routes, trails and other known travelways appears to be based on assumptions that have been applied to data from the 2013 USGS analysis of travel routes across the range of sage-grouse (Manier et al. 2013). The DEIS contains no description of the accuracy of this information for the planning area and offers no comparison to the BLM Oregon GTRN database. The figures seem to underestimate total mileage of roads and trails in the planning area and BLM should present more accurate data and maps to depict the actual extent of existing roads, routes, trails and other travelways in the planning area. Absent a complete description of existing roads BLM lacks a sufficient baseline for analysis and cannot accurately portray the magnitude of impacts from travel management decisions.

SECTION 24.5 - MITIGATION MEASURES

Comment Number: OR-GRSG-0122-4

Comment Excerpt Text:

A contractor bidding work would have no idea of the amount of mitigation required by the permitting agency. We would like some more definition of ratios of mitigation to be in this document. Who would take responsibility for the mitigation and/or set a directive on how the mitigation should be done. For example, with our OHV group, we are not wildlife biologists. The responsibility should not be placed on groups such as ours.

SECTION 25 - TRIBAL INTEREST

SECTION 25.1 - CONSULTATION REQUIREMENTS

Comment Number: OR-GRSG-0183-1

Comment Excerpt Text:

The Fort McDcrmitt Paiute and Shoshone Tribe demand to have meaningful consultation and the OR-BLM has consulted with the Tribe on matters related to Sage Grouse.

SECTION 25.4 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0367-1

Comment Excerpt Text:

It is clear from the DEIS that there will be severe and irreparable environmental impacts from the proposed project that would affect our Tribe. As such, our Tribe has significant concerns about the proposed degradation of cultural resources and losses to our living community.

All these Sage Grouse have spiritual and cultural significance to the Tribe. Tribes are a living culture still using traditional ceremonies. We are here for the preservation and protection of all sensitive cultural concerns.

The position of the Tribe: It has no resources or federal aid to promote habitat conditions in these very remote areas of the Reservation. The Sage-Grouse played a major part in the American Indians creation. Teachings and manner of conduct are taught to native children centering around sage-grouse. Military fly-over's and wild fires pose threats to habitat security in the Idaho, Oregon, and Nevada areas, along with habitat destruction, climate change, and drought, the numbers will decl ine. Native habitat consists of shrub-steppe and high brush canopies for nesting. An adequate supply of water is needed as water supports and promotes life. The natural predators of the sage-grouse should also be addressed.

We ask for government appropriations to aid in habitat restoration and better fire protection to lessen acreages burned and a means to grow sagebrush high enough to transplant for a guaranteed establishment of the sagebrush. If you do not want to list it completely let the tribe manage the hunting of the bird under the traditional time to harvest that bird that requires special means

SECTION 26 - VEGETATION SAGEBRUSH

SECTION 26.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0002-3

Comment Excerpt Text:

The goal of the Plan calls for a "no net loss" of sagebrush habitat. Sagebrush communities exist on private lands. The Plan must stipulate that no private lands will suffer condemnation, restrictions of use or loss of value. Any agreements between the BLM and private landowners must be on a voluntary basis with a willing landowner.

Comment Number: OR-GRSG-0048-2

Comment Excerpt Text:

Oregon NRCS is treating tens of thousands of acres of juniper on private land each year; treatments on a landscape level are not simply a possibility but are actually occurring. Why then, does none of the alternative in this EIS focus on increasing these treatments on land managed by the BLM? An increase in these activities on BLM land would move toward containing juniper encroachment saving hundreds of thousands of acres of suitable sage-grouse habitat.

Comment Number: OR-GRSG-0061-6

Comment Excerpt Text:

Text: Action D-VG 12: Priorities for sagebrush treatment are:

- Large contiguous areas of Class 5 sagebrush in Cool-Moist Sagebrush or Class 4 sagebrush in Warm-Dry Sagebrush
- Crested/desert wheatgrass seedings
- Lower quality brood-rearing habitat
- Lower quality nesting habitat
- Lower quality connectivity habitat
- Sites with minimal presence of invasive species or low probability of colonization by invasive species

An individual site may fall into a single priority or in multiple priorities listed. All other sagebrush sites are of lower priority for restoration.

All areas should have minimal presence of invasive plant species and low probability of colonization from invasive plant species.

Coordinate restoration activities with adjacent landowners/land managers as opportunities arise.

Comment: What is sagebrush treatment?

Why mess with large contiguous area of late seral sagebrush? Isn't this good for Greater Sage grouse?

We are left to guess whether "sagebrush treatment" is removal of sagebrush, planting of sagebrush, burning of sagebrush or what.

What "restoration activities"? This whole DEIS lacks transparency, clarity, and clear descriptions.

Comment Number: OR-GRSG-0074-15

Comment Excerpt Text:

In the RMPA Vol. 1, Table 2-4, pg. 2-44, Objective D-VG1 States that the objective is "to treat approximately 30% of GRSG habitat over the next 10 years with the expressed purpose of reducing the probability of large homogeneous burn patterns and unacceptable wildfire effects, to limit juniper encroachment, and to control invasive species." How did BLM develop this objective without a cohesive assessment of the issues? What is the supporting data for this determination? Why didn't the BLM provide some information on funding and strategies so the public would see what was possible at different levels of treating these threats? Does this level of treatment prevent further loss of GRSG habitat? How would BLM allocate between different treatments to have the most impacts to prevent further habitat loss? In my review, I could only determine that BLM did not analyze these issues except what they could discuss as generic regulatory measures. Therefore in chapter 4 tables 4-3 &4-4 show little to no effects in habitat trends under all alternatives 10 & 50 years in the future and chapter 5, pg. 5-30 provides a summary of continuing loss of habitat. The current RMPA analysis ignores any proactive approach to the problems and rightly assumes if we continue what we are doing we can expect similar results.

Comment Number: OR-GRSG-0093-100

Comment Excerpt Text:

Page 2-65 Action VG 27: Alternative D needs to be refined for clarity. Restoration seeding should occur in pre-treatment areas where there are less than 2 bunchgrass plants in a 10 square foot area, as estimated from a rigorous, replicated, statistically valid sampling method.

Comment Number: OR-GRSG-0093-101

Comment Excerpt Text:

Page 2-67 Action VG 38, VG 39, and VG 40: Alternative D is not workable, practical, or feasible everywhere all the time. These actions should be reframed to require the listed actions where feasible and practicable, given all necessary considerations in wildfire situations.

Comment Number: OR-GRSG-0095-20

Comment Excerpt Text:

At higher and cooler elevations, changes in fire frequency and intensity have come at the expense of sagebrush ecosystems in a different manner. Under pre-European settlement conditions, wildfires and indigenous planned fires kept western junipers confined to areas where fires would not typically reach – mainly rocky terrain where the fuels needed to carry the fire were patchy and disjunct. Once modern settlers arrived in the mid-1860s, with their domestic livestock, this pattern changed. Heavy livestock grazing initially greatly reduced the fine fuels needed to carry fires that kept western juniper in check, and later active human intervention suppressed fires. As a result, western juniper were able to establish seedlings in grass and shrubland areas where formerly fires would have eliminated them. This then was the beginning of the woodland expansion into sage-grouse habitat that continues today.237 238 Prior to 1860 two-thirds of the landscape was treeless and occupied by sagebrush-steppe communities. Today, less than one-third of the landscape remains treeless and more than 90 percent of the trees have established since the 1860s. These data support the need for active management in tree removal. In the absence of disturbance, woodlands will continue to expand, mature, and close.239

237 Miller And Taush 2001.

238 Miller et al. 2008.

239 Ibid.

Management Prescriptions:

i. Management inside of SGCAs in sage-grouse habitat

Restoring sage-grouse habitat that is degraded or fragmented might be useful tool for the benefitting the species. However, these programs are likely to be both difficult and expensive, and may take centuries to achieve a complete restoration of a functioning system of sagebrush habitats within a landscape mosaic.240 The obvious and best way to provide for the species at least in the short to intermediate term is to protect the remaining existing habitat, which is the intent of the Center's proposed conservation reserve system.

240 Miller et al. 2011.

§? Where it will achieve sage-grouse habitat objectives, passive restoration approaches should be favored over active methods.

§? Any vegetation treatment plan must include pretreatment data on wildlife and habitat condition, establish non-grazing exclosures, and include long-term monitoring of treated areas.

§? Ensure that vegetation treatments create landscape patterns which most benefit sage---grouse. Only allow treatments that are demonstrated to benefit sage-grouse and retain sagebrush height and cover consistent with sage-grouse habitat objectives (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve sage---grouse habitat).

§? Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.241 Prioritize restoration in seasonal habitats that are thought to be limiting sage---grouse distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

§? Restrict activities in SGCAs that facilitate the spread of invasive species, including recreational and commercial use by off-road vehicles.

§? Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.

§? Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage---grouse habitat and conserve habitat quality for the species.

§? Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.

§? In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed "fire condition class", where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types, but are places where trees have been an important stand component for several hundred years.242

§? In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

§? Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.

241 Meinke et al. 2009.

242 Romme, et al. 2011.

ii. Management outside SGCAs in sage-grouse habitat

§? Where it will achieve sage-grouse habitat objectives, passive restoration approaches should be favored over active methods.

§? Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.243 Prioritize restoration in seasonal habitats that are thought to be limiting sage---grouse distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

§? Restrict activities in SGCAs that facilitate the spread of invasive species.

§? Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.

§? Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage---grouse habitat and conserve habitat quality for the species.

§? Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.

§? In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed "fire condition class", where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types, but are places where trees have been an important stand component for several hundred years.244

§? In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

§? Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.

243 Meinke et al.2009.

244 Romme et al. 2008.

Comment Number: OR-GRSG-0134-6

Comment Excerpt Text:

The plan should protect a subset of priority habitat areas as sagebrush reserves with the primary purpose of conserving and restoring sagebrush habitat and sage-grouse populations.

Conservation biology recommends protecting habitat reserves to conserve sensitive species (Rodrigues and Gaston 2001). A system of reserves should be large enough to achieve the goals of biological representation, and ecological redundancy and resiliency within an ecosystem (Svancara et al. 2005). The size of individual areas and the reserve system should be determined by the biological requirements of the species of concern (e.g., Haight et al. 2002).

A reserve system for sage-grouse should protect centers of abundance, seasonal habitats and connectivity, and be large enough to achieve the goals of biological representation, and ecological redundancy and resiliency on the landscape (Svancara et al. 2005). The commonly cited goal of conserving 10 percent of a given landscape lacks basis in science (Soulé and Sanjayan 1998; Svancara et al. 2005). Much larger areas may be necessary to conserve biodiversity and ecosystem integrity (Soulé and Sanjayan 1998). Doherty et al. (2010b) found that, while sage-grouse occupy large areas, their breeding distribution is aggregated in relatively small areas. Areas representing 25 percent of the known sage-grouse population were 3.9 percent of the species range, and 75 percent of sage-grouse were within 27 percent of the species range (Doherty et al. 2010b).

Comment Number: OR-GRSG-0152-6

Comment Excerpt Text:

Managing juniper is a key aspect to limit increases in grouse vulnerability as raptors are using the juniper

for perches as well as for nesting structure. The increased presence of juniper in nesting habitats allows the hawks and ravens to invade grouse habitat and increase their hunting success.

EOCA requests that the BLM should examine its current juniper management strategies to assess the impact of juniper on sage-grouse and develop a common element in all alternatives to adopt a more aggressive approach to juniper control

Comment Number: OR-GRSG-0164-7

Comment Excerpt Text:

- With respect to alleviating the threat of fire, we prefer Alternative D's explicit guidance for fire suppression policies. To improve on Alternative D's guidance, we recommend that the Final RMPAIEIS address desired conditions for juniper and crested wheatgrass seedings. Addressing desired conditions for juniper and crested wheatgrass seedings could increase the likelihood that restoration activities and invasive plant management is conducted in a way that maximizes benefits to GRSG.
- While we appreciate that Alternative D's Invasive Plant Species guidance is more specific than the other action alternatives, we are concerned that the lack of grazing utilization levels, " ... may be insufficiently protective of GRSG,,,4 We recommend that Final RMPAIEIS include additional information addrcssing this potential area of insufficient GRSG protection.

Comment Number: OR-GRSG-0210-2

Comment Excerpt Text:

Juniper encroachment is identified as a top-three threat to the GSG; however, the BLM's RMPA has no funded plan to address juniper encroachment. Juniper encroachment in wilderness and other special designation areas (e.g. WSAs) is not addressed, and existing funded juniper control efforts already do not keep up with the pace of encroachment.

Comment Number: OR-GRSG-0281 (FrmLtr11)-3

Comment Excerpt Text:

Alternative D should be deleted down to: Create a mix of sagebrush classes by sagebrush type as measured at the 5th field hydrologic unit scale (Table 2-2). Classes are defined in GRSG Conservation Assessment and Strategy for Oregon, page 73 and Appendix II (Hagen 2011) and BLM Tech Note 417 (Karl and Sadowski 2005). These sagebrush classes can be adjusted for ecological sites at the mid-scale fine- scale work for the District RMPs, GMA plans, and AMPs.

Comment Number: OR-GRSG-0324-1

Comment Excerpt Text:

BLM's preferred Alternative D tried to capture this goal by saying that the "primary objective is to maintain or enhance GRSG habitat… so as to provide a sustainable habitat for the GRSG." It also established a mitigation program that will have a "no net loss" standard and include certain areas that will have a "net gain" standard. These goals will not be achieved with the current plan under Alternative D. One of the reasons why is

because the loss of sagebrush habitat due to fire, weeds, and further juniper encroachment will not be included in the three percent disturbance cap, nor will that loss require direct mitigation. Over time, these three disturbances will likely remove more sagebrush habitat from Oregon than any other kind of development Alternative D will monitor. If it does not become BLM's policy to respond to all three of these things with equivalent actions that will directly replace sagebrush loss, not just follow best management principles, the sage-grouse will be listed.

The only way to truly maintain the amount of sagebrush cover present today, with no loss over time, is to establish an overarching "no net loss" program that applies to all management decisions in priority and general habitat, and develop an updated inventory and tracking system for sagebrush cover and class. BLM's current data sets for sagebrush cover are, in most places, not current and vague. BLM proposes to use a 2006 data layer of Existing

Vegetation Type under LANDFIRE as their baseline, which is both an incomplete starting point and not detailed enough to assess changes in health and extent of cover. Over time, BLM states they will fill in LANDFIRE data gaps with new types of vegetative assessments, which will create an uncertain baseline to determine mitigation needs. A new inventory establishing the current state and health of sagebrush cover, including the recovery potential of areas recently burned, is necessary to set up this program.

Comment Number: OR-GRSG-0409-10

Comment Excerpt Text:

Recommendation: The Proposed Alternative in the FEIS should include a modified action based on E-VG 26, to identify where broadcast burns would be appropriate to control juniper encroachment and enhance fire maintained habitat characteristics.

The Nature Conservancy supports the actions related to Conifer encroachment proposed in Actions DVG 23-27. In addition we recommend that Proposed Alternative in the FEIS include a modified Action based on E-VG 26, to identify where broadcast burns would be appropriate to control juniper encroachment and enhance fire maintained habitat characteristics. Criteria for locating appropriate areas and setting prescribed fire parameters should be determined in the collaborative strategic planning recommended above which should incorporated best available science (examples include Miller et al. 2005, and Sage-Grouse Conservation: Linking Practices to Habitat Metrics project (Footnote 3: NRCS Conservation Innovation Grant funded project (Sage-Grouse Conservation: Linking Practices to Habitat Metrics)).

Comment Number: OR-GRSG-0409-9

Comment Excerpt Text:

Recommendation: The BLM should complete a juniper treatment plan in cooperation with the SageCon stakeholders. Action D-VG 22 (p 2-64) should be modified in the Proposed Alternative in the FEIS to identify a time bound method for this coordinated planning for prioritizing Juniper treatments.

The State has already coordinated with the NRCS to prioritize investments of the Sage Grouse Initiative (SGI) funding juniper removal on private lands within the planning area (Footnote 2: Sage Grouse Initiative - Oregon Implementation Strategy 2013-2017. NRCS. Jeremey Maestas). We encourage an All Lands approach coordinating across all ownerships and including all stakeholders. Several newer data sets exist that provide the necessary science foundation for such a plan. We recommend that this effort utilize both the data available in the BLM Rapid Ecological Assessment for the Northern Great Basin, as well as newer data available from the assessment work being produced within the SageCon efforts, such as a new juniper canopy map and associated data set

Comment Number: OR-GRSG-0433-7

Comment Excerpt Text:

The DEIS must include clearer prioritization of sites to be treated for invasive species and the type of treatments planned for each site type should be described. Information similar to stepdown assessment data should be included in the proposed action to further clarify how restoration and prevention actions will be implemented.

The extensive invasion of invasive annual grasses in the planning area has led to a loss of biodiversity, extensive degradation of wildlife habitat, and changes in ecosystem function that require actions by BLM to restore them. Once introduced or established, weeds "alter plant community structure and composition, productivity, nutrient cycling, and hydrology and may cause declines in native plant populations through competitive exclusion and niche displacement, among other mechanisms" (USFWS 2010). Invasive plants reduce and eliminate vegetation that sage-grouse use for food and cover, and do not provide quality sage-grouse habitat (USFWS 2010). Weeds are spreading at a rate of 2,300 acres per day on BLM land and 4,600 acres per day on all public land in the West (USFWS 2010).

At the same time, some portions of the planning area remain largely intact providing functional sage-grouse habitat. For these communities to remain healthy into

the future, actions proposed in the DEIS cannot be limited to restoration of currently degraded landscapes. BLM must also prevent new invasions in vulnerable areas that will further alter fire frequencies and intensities or reduce sage-grouse populations. In other words, many plant communities in the planning area are still healthy and they should be managed in such a way as

(1) to prevent their conversion to weed-dominated communities, (2) to prevent loss of their biodiversity,

(3) to prevent changes in their fire frequencies and intensities; and (4) to prevent the conversion of grasslands to shrublands.

Prevention is as important as restoration, if not more so. In some cases, lands may become so degraded and species populations so low that they can never recover. Non-recoverable lands, often described as having gone over a "transition threshold" (Archer and Smeins1991), occur when valuable topsoil has been lost, when dominant species have become locally extinct, when introduced species have become so dense that they outcompete native species, and when fire regimes have become so altered weedy annuals become the local climax species (in the case of cheatgrass-dominated grasslands). Prevention is also important on moderately degraded communities, which can become even more severely degraded if prevention is not initiated. Consequently, prevention is important not only to protect well-functioning communities, but also to avoid moderately degraded ecosystems from converting into severely degraded communities and crossing transition thresholds. Restoration without prevention is a waste of agency time and money. Restoration and prevention processes may require different activities, first to restore damaged ecosystems and then to prevent the conversion of healthy ecosystems, moderately degraded ecosystems, or recently restored ecosystems into degraded ones. In some cases, the same activities are required for both restoration and prevention. Similar to the need to establish a priority list of habitat types for sagebrush treatment and restoration BLM should also develop a prioritized list in Action D-VG 32 of locations and habitat types for invasive species treatments. The non-prioritized list in the DEIS does not allow adequate understanding of where treatment resources will be allocated or how those action swill impact invasive species or other resources.

We also suggest that the DEIS include further detail describing where and how the allowable methods of invasive plant control identified in Action D-VG 33 will be utilized. The DEIS should include parameters for the use of each type of plant control based on habitat type and type of invasive species. The steps identified in Appendix H for the "stepdown assessment" of invasive species may be adequate, but the results of that assessment for invasive species are critical components of the DEIS and should be included in the proposed action.

Comment Number: OR-GRSG-0434-17

Comment Excerpt Text:

Identifying priority areas for restoring and maintaining the native sagebrush and bunchgrass communities necessary for sage-grouse is a critical concept for sage-grouse recovery and one that we strongly support. The DEIS addresses this need, in part, by identifying restoration opportunity areas that, after restoration, may provide better quality habitat and greater habitat connectivity for sage-grouse serving as buffers to protect higher priority focal areas. The DEIS also suggests that other considerations in selecting sites for restoration may include seasonal habitats, connecting corridors and burn areas among other locations (Action D-VG 1). This identification of priority areas is so broad that it is difficult to discern where restoration efforts would be focused or to understand what types of restoration

projects might take place in a given area.

BLM should include a prioritized list in Action D-VG 1 of locations and potential treatments to better aid managers when sagebrush treatment actions are being considered. We suggest the following priority order based on sage-grouse habitat needs:

- PPMA and Critical Connectivity Habitat (sites with higher probability of success) - Habitat treatments exhibit the best results in areas with minimal pre-existing disturbances (including exotics invasion and anthropogenic activities) (Aldridge et. al 2007).
- Seasonally limiting habitats (brood-rearing, wintering, nesting) –
  - Any habitat treatment should occur only after careful evaluation of seasonal sage-grouse habitat needs (Aldridge et. al 2007, Stringham 2010).
  - Nesting and wintering habitat should remain at sagebrush canopy cover levels =15% (Type 4 and 5 sagebrush shrubland), as any loss of critical wintering range can be detrimental to sage-grouse populations (Karl & Sadowski 2005, Stringham 2010).
  - Treatments to improve brood-rearing habitat should aim for a heterogeneous distribution of =15% grass and forb cover and 10-25% sagebrush canopy cover (Dahlgren et. al 2006Stringham 2010, Aldridge et. al 2007).
- Potential Connectivity Habitat- Habitat connectivity is especially important in smaller, isolated populations in order to avoid genetically deleterious effects. Corridor habitat should be closely monitored for exotic invasion and sage-grouse habitat indicative vegetative characteristics.
- PGMA - Lower quality habitats will not improve on their own, improving as much habitat as man-power and funding allows is critical to sustaining and maintaining suitable sage-grouse habitat and protecting from future environmental changes (Wisdom et. al 2002)
- Following stand replacement events - Although stand replacement events are rare in sagebrush today due to fire suppression, any such events should be immediately followed by restoration activities that include topsoil addition, reseeding and planting with native forbs, grasses, and the appropriate sagebrush type (Johnson 2000, Tirmenstein 1999, Steinberg 2002, Hemstrom et. al 2002). Such measures are especially important in lower elevation, drier habitats (Hemstrom 2002, Lesica 2006).

Comment Number: OR-GRSG-0434-18

Comment Excerpt Text:

The DEIS must be clearer about where restoration actions will occur and must reduce the confusion caused by utilizing both the ROAs and additional considerations in selecting restoration sites. Developing a map for restoration areas separate from the other types of sage-grouse focal areas would reduce this confusion. Additionally, delineating all lands prioritized for restoration on a map would further aid in selecting primary restoration sites. Connectivity habitat areas, discussed above, should be included in this map in addition to the restoration opportunity areas found in Figure 2-2 and the areas described by the criteria in Action D-VG 1. A more complete restoration areas map should be tied to specific actions in the DEIS.

Comment Number: OR-GRSG-0434-19

Comment Excerpt Text:

In addition to clearly identifying where restoration activities will take place it is also important to specify what restoration activities will take place. Table 2-6 includes contradictions and confused statements regarding vegetation management that must be clarified and improved. Action D-VG 6 lays out criteria for the use of native plant species in most restoration activities, but suggests the possibility of using non-native plant materials in certain circumstances. Action D-VG 9, on the other hand, requires natives in all restoration actions.

Comment Number: OR-GRSG-0434-20

Comment Excerpt Text:

As described in Action D-VG 6 the potential use of non-native plant materials for fuel breaks or to control invasive plant spread is ambiguous and not clearly tied to sage-grouse habitat objectives. Non-native plants can simply exacerbate long-term issues such as severe impacts from fire in monoculture vegetation which will, in turn, decrease plant diversity and related natural resilience. NTT guidance on the use of non-native seeds, included in the DEIS as Action B-VG 5, should be incorporated into any decision to allow the use of non-native vegetative materials.

Comment Number: OR-GRSG-0434-21

Comment Excerpt Text:

The DEIS is equally vague about the allowable methods and sites for treating sagebrush. Action D-VG 12 is not sufficiently specific about where sagebrush treatment may occur. Priority areas for sagebrush treatment should be identified on a map to correspond with criteria clearly intended to benefit sage-grouse habitat. There is uncertainty as to whether certain types of sagebrush treatment will improve certain habitat types and, in fact, some studies have shown negative impacts from sagebrush treatment on sage-grouse and their habitat (Davies et al. 2011) (Swenson et al. 1987).

Comment Number: OR-GRSG-0434-22

Comment Excerpt Text:

While some of the proposed treatment methods in Action D-VG 13 may be appropriate at specific times and locations in sagebrush habitat, no single treatment can or should be used to achieve all management goals. Each sagebrush type responds differently to various methods of treatment and may require different treatment approaches. Treatments should not occur on large spatial scales, instead specific treatment methods should be applied only in small patches in priority areas. Treatments in winter range have been shown to result in decreases in local sage-grouse populations (Swenson et al. 1987). Taken together Actions D-VG 12 and D-VG 13 suggest that any method of treating sagebrush could be allowed in a wide array of habitat types across the entire range of the species in Oregon. The DEIS must be far more specific about where treatments would be allowed and what the objectives for each habitat type and method of treatment are. Additional considerations for treatments that should be included in the DEIS include:

- Fire Treatments - Fire as a sagebrush treatment option should be discouraged. In any habitat grown over with a high density of exotics, fire should not be used in an effort to increase native herbaceous cover (Johnson 2000). In many cases, without proper post-fire rehabilitation, annual exotics, forbs, and grasses increase, while shrub cover decreases (Johnson 2000). Sage grouse avoid burned areas in sagebrush landscapes because habitat characteristics important for nesting, brood concealment, and food are destroyed by fire and have slow recovery rates (Connelly et al. 2000, Beck et al. 2009). Fire also facilitates invasion by cheatgrass and other nonnative plant species (Brooks et al. 2004). Fires, prescribed and natural, have long-term effects (>10 years), and sage-grouse may continue to avoid burned areas even after sagebrush has recovered (Nelle et al. 2000)."
- Biological Control - Basin big sagebrush has shown good promise for range restoration and soil stabilization, and may serve as more responsible choice than crested wheat grass seeding (Steinberg 2002). All sagebrush types may be seeded or planted as seedlings as part of restoration (Steinberg 2002, Johnson 2000, Tirmenstein 1999).

Comment Number: OR-GRSG-0434-23

Comment Excerpt Text:

Action D-VG 21 is ambiguous and must be far more specific in the proposed action. BLM must narrow the area where new restoration methods could be tested, provide a map of the allowable testing area and identify the criteria used to select that area. Testing new restoration methods should be done only in areas and habitat types that would pose little

risk to sage-grouse populations and with minimal or no impact to other resources. All testing of restoration methods should be based on peer-reviewed scientific research and results of testing on public lands should be made available to the public and submitted for peer review.

Comment Number: OR-GRSG-0434-24

Comment Excerpt Text:

Alternative D fails to include a provision requiring rest from grazing in restored areas. All vegetation treatments - whether for invasive annual grasses, juniper cutting or fire rehabilitation - should be rested from grazing to allow for vegetation recovery. In most circumstances restoration is unlikely to produce the desired results unless restored areas are rested from grazing for at least two full growing seasons. Two years rest from grazing is consistent with the findings of the NTT report (BLM, 2011) as well as other research on the effects of grazing. Cattle herbivory was found to be associated with reduced native bunchgrass abundance, shifts in bunchgrass composition to only the most grazingtolerant species and aggregated bunchgrasses beneath protective sagebrush canopies (Reisner et al 2013). Investment in sage-grouse habitat restoration must be accompanied by required rest from grazing.

Comment Number: OR-GRSG-0434-27

Comment Excerpt Text:

Action D-VG 22 describes priority areas for juniper treatment. While priority sites for treatment should be included in the DEIS, the priority areas should be reconsidered to avoid any treatment in Phase III juniper woodlands where juniper trees are the dominant vegetative component and the primary plant layer influencing ecological processes on the site. Phase III woodlands are very unlikely to be a recent conversion from formerly non-wooded vegetation types and have important ecological values that would be negatively impacted by treatment. Phase I juniper near priority leks and early Phase II juniper stands may be appropriate for treatment and restoration when tied to specific habitat objectives and accompanied by post-treatment monitoring.

Comment Number: OR-GRSG-0434-28

Comment Excerpt Text:

The DEIS must be more specific about the types of juniper treatment that would be applied in different age classes of juniper and different sage-grouse habit types. Juniper control with fire should not be conducted during lekking or nesting season (late February through mid-July). Fire should be considered only in areas more than 4 miles from leks and outside PPMA. In areas closest to leks and high density grouse habitat, hand treatment methods may be most appropriate. As with restoration seeding in other vegetation types, restoration seeding for juniper treatment areas should use native plant materials.

Comment Number: OR-GRSG-0434-29

Comment Excerpt Text:

Action E-VG-28 should be modified such that in any juniper treatment area at least one, and preferably two, seasons of grazing rest is required, with the re-start of grazing based on monitoring for specific sage-grouse habitat objectives.

Comment Number: OR-GRSG-0489-11

Comment Excerpt Text:

Conifers

Similar to my comments on fire and invasive species, the DEIS does not adequately describe the current extent of the juniper threat, and does not provide enough detail about treatment to analyze the impacts to sage-grouse habitat. The NRCS Sage Grouse Initiative Oregon Implementation Strategy (2013) has estimates of acres of early phase juniper encroachment, broken out by private and public lands and by ODFW sage-grouse Action Area. This may serve as a good resource for the BLM in further quantifying the extent of the threat.

BLM should set clear priorities for where juniper treatments will occur and set specific targets for how much juniper treatment will occur. For example, Objective D-VG 1 (Table 2-4, pg. 2-44) could be revised to establish separate objectives for fire

management, juniper control, and invasive species control.

Juniper treatment should be a high priority, especially in areas of Phase 1 and 2 juniper encroachment where the understory vegetation is largely intact. In these areas, sage-grouse habitat can be restored quickly and with high success rates simply by removing juniper mechanically. See Baruch-Mordo et al., 2013. Given limited resources, BLM should prioritize juniper treatments and strategies to prevent the spread of annual grasses over attempts to control and revegetate existing annual grass infestations.

Comment Number: OR-GRSG-0489-4

Comment Excerpt Text:

I encourage BLM to consider adopting the habitat models and conservation approach explained in the CCAA. The sagebrush classes identified in Table 2-2 of the DEIS essentially capture various phases within one ecological state. Unfortunately, this approach does not capture the other states which can occur on an ecological site, nor the transitional factors which move a plant community from one state to another. (See the Interagency Ecological Site Handbook for Rangelands (Caudle et al. 2013) for more information about state and transition models.) On the other hand, the approach set forth in the Harney County CCAA captures the various states that may exist on a site (including conifer encroachment, annual grasses, depleted understories) as well as information about community phases (e.g. States A and B in the low elevation model, pg. 15, HSWCD and USFWS, 2013). In addition, the habitat models contain management objectives and identify sage-grouse habitat threats for each state, which then point the user directly to an appropriate list of conservation measures to consider. I believe this approach would prove more efficient and effective for BIM staff when implementing the RMPA. Note that the information from Table 2-2 in the DEIS could conceivably be incorporated as community phases into the appropriate states in the habitat models from the CCAA.

Comment Number: OR-GRSG-0517-4

Comment Excerpt Text:

The general priorities to re-establish sagebrush cover (D-VG-2, page 2-58, D-VG 11, page 2-61) should be re-evaluated with "Recently burned native areas" receiving first consideration. The post-bum probability of expanding the range of invasive species or noxious weeds makes fire rehabilitation efforts a top priority

Comment Number: OR-GRSG-0517-5

Comment Excerpt Text:

The document has contradicting actions, Action D-VG 5 allows for the use of nonnative plant materials during for restoration/rehabilitation, and Action D-VG 9 states "Use native grass, forb and shrub species in all restoration actions" emphasis added, p 2-60).

Comment Number: OR-GRSG-0521-1

Comment Excerpt Text:

Alternatively the SWCD Community Alternative suggests using the State and Transition model (as is detailed in the Candidate Conservation Agreement with Assurances) for monitoring which would take into consideration both the specific site potential and whether the site was moving toward or away from it's potential. The State and Transition Model uses a modified "Pace 180" monitoring protocol as well as informed decisions made by the Range Technician to deduce this information.Therefore, the State and Transition model take approximately the same amount of time that is currently being spent on range monitoring, meanwhile providing an objective, repeatable, and transferable monitoring protocol from one location to another. Please consider incorporating the State and Transition model into your preferred alternative or explain you reasoning for not including it. Please elaborate on how the BLM will manage the extended workload of the HAF.

Comment Number: OR-GRSG-0532-15

Comment Excerpt Text:

Juniper Encroachment

Juniper encroachment severely impacts GRSG habitat in Oregon. For example, current estimates suggest

that approximately 2.4 million acres of GRSG habitat is affected by juniper encroachment in eastern Oregon (Hagen 2011). Further, a recent analysis conducted by NRCS-SGI (e.g., Falkowski and Evans 2012, Noone et al. In progress) found early phase conifer encroachment (<10% canopy cover) occurs across roughly 1,066,096 ac of Core and Low Density habitats. Juniper stands out-compete other desirable native and non-native vegetation, reducing plant diversity and creating large expanses of bare soil.

In Oregon, juniper encroachment has been identified as one of the significant threats to GRSG habitat. In the Conservation Objectives Team (COT) Report (pg. 47), the corresponding conservation objective states: " Remove pinyon-juniper from areas of sagebrush that are most likely to support GRSG (postremoval) at a rate that is at least equal to the rate of pinyon-juniper incursion."

The DEIS does identify as a goal; "… juniper treatment based on ecological and management characteristics" (pg. 2-43, Table 2-4, Goal D-VG 1). From this goal, it is not clear what ecological and management characteristics will be used to prioritize treatments. Further, the DEIS goal does not state if improving habitat for GRSG will be one of the primary "ecological" considerations. If GRSG are to benefit from juniper treatments, the enhancement of GRSG habitat must be explicitly stated in the goal. The State recommends that BLM adopt the above COT report (pg. 47) goal explicitly, use it to replace the current DEIS pg.2-45 Goal D-VG 1, and then document treatment strategies around it, as articulated below.

Treating juniper encroachment should be prioritized in those areas where GRSG are most likely to benefit. In Oregon, Baruch-Mordo et al. (2013:239) evaluated conifer cover within 1 km of active and inactive leks and found that "…no leks remained active at conifer cover of >4%". Also in Oregon, Freese (2009:84) evaluated GRSG habitat use based on areas with <5% juniper cover and areas with >5% juniper cover and found "Preferred cover types during the breeding season were low sagebrush/mountain big sagebrush with less than 5% juniper cover and low sagebrush with less than 5% juniper cover". For GRSG in the Bi-state Population Casazza et al. 2011:163 found "Strong evidence indicated that brood-rearing sage grouse avoided areas of pinyon-juniper encroachment at larger spatial scales".

For these reasons, the State recommends Alternative D be improved by specifically prioritizing juniper treatment in areas of known GRSG use, particularly lekking areas that are at high risk of being abandoned in the near future due to increased conifer cover. The BLM final EIS should commit to advancing treatments that would reduce juniper canopy cover to less than 4% in these areas (preferably eliminated entirely), with old-growth (pre-settlement) trees left uncut if present. Further, based on working with the State to identify such areas, BLM should set a goal for the amount of area to receive treatment annually or over a specified time horizon. In order to reduce the availability of perch sites for avian predators, BLM should prioritize and establish as a goal the removal of all standing and encroaching trees within at least 100 m of occupied GRSG leks and other habitats with known occupation (e.g., nesting, brood-rearing, and wintering).

The BLM could indicate that achievement of these goals is contingent upon available funding, however, having these areas, standards, and targets identified would at least better allow the State and other partners to work with BLM in achieving these goals. Such an approach will likely have the greatest immediate benefit for GRSG and is similar to the approach taken by the NRCS while implementing juniper treatments on private lands in Oregon under the Sage-grouse Initiative (please see:

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/or/programs/?cid=nrcs142p2_044324)

Comment Number: OR-GRSG-0532-16

Comment Excerpt Text:

The State supports Action D-VG 22 (pg. 2-64) and the prioritization given for the "phase" of juniper

encroachment to be treated. Phase I and II juniper invasions within priority GRSG habitat should have highest priority for treatment. However, we recommend additional prioritization be applied first to areas within 3 miles of known leks, particularly in those areas where the canopy cover will likely result in local extirpation in the near future. Further, the State recommends adoption of the following goals in order to achieve consistency in goals across public, state, and private lands:

- Remove all Phase I and II conifer encroachment (<10% canopy cover) in GRSG PACs and important areas of connectivity (yet to be designated) in Oregon in 10 years.
- Strategically treat Phase II-III conifer encroachment (>10% canopy cover) in GRSG PACs and where the greatest opportunities exist to restore connectivity, reduce risk of catastrophic fire, and create future GRSG habitat

Comment Number: OR-GRSG-0532-17

Comment Excerpt Text:

The State also supports Actions D-VG 24 and D-VG 25, which specifically describes how downed juniper will be mechanically treated and jackpot burned. However, the State has concerns about the use of broadcast burning for juniper control (e.g., D- WFM-1, pg. 2-69) and instead recommends incorporating E-VG-26 into alternative D.

The State also has concerns about D-WFM-14 - the use of naturally started wildfires for juniper control. Instead mechanical treatment is the State's preferred method for addressing juniper encroachment because it offers the greatest probability for recovery of suitable habitat.

Comment Number: OR-GRSG-0532-3

Comment Excerpt Text:

The State supports strategies and treatments to reduce the probability of adverse wildfire impacts, limit juniper encroachment, and control invasive plant species to benefit GRSG habitat. Our recommendation is to better establish clear strategies, goals, and standards that will allow for prioritization of funding and allocation of additional resources to treat more than the 3% of GRSG habitat proposed for annual vegetation management in the DEIS, as well as to increase Early Detection and Rapid Response (EDRR) efforts, as these actions are the most effective ways known to address the primary threats to GRSG habitat (see pg. 2-44, Table 2-6, Vegetation—D-VG 1).

Comment Number: OR-GRSG-0532-4

Comment Excerpt Text:

After ground disturbing activities such as juniper removal, management plans need to be implemented to allow for necessary re-seeding of desirable plants, treatment of invasive plants, and ongoing monitoring. The State recommends the BLM consider that more than 3% of the GRSG habitat needs be treated annually in order to make meaningful headway in addressing these major vegetation-based threats to GRSG viability and habitat health.

Comment Number: OR-GRSG-0532-5

Comment Excerpt Text:

Pg. 1-22 - The State supports the BLM's vegetation management objectives, however, these objectives should more explicitly include collaborating with adjacent landowners, especially private owners, Department of State Lands (DSL), and County Weed Management Areas. Such collaboration would increase the efficiency and effectiveness of vegetation management projects by sharing resources, leveraging additional resources, and promoting habitat improvements "across the fenceline". This concept is also mentioned in Action D-WFM 34 (pg. 2-76). As a neighboring landowner the State recommends an emphasis on communication and coordination regarding weed management.

Comment Number: OR-GRSG-0532-7

Comment Excerpt Text:

Crested Wheatgrass

Pg. 2-61, Table 2-6, Conservation Action D-VG 12 of the DEIS states as follows: "Priorities for sagebrush treatment are:

- Large, contiguous areas of Class 5 sagebrush in Cool-Moist Sagebrush or Class 4 sagebrush in Warm- Dry Sagebrush
- Crested/desert wheatgrass seedings "

It is not entirely clear what is meant by this proposed action, but the State believes sagebrush should not be removed in crested wheatgrass stands or other areas unless emergency conditions make it necessary (i.e., fire suppression). The BLM needs to provide justification for removing sagebrush in areas that contain and/or are returning to native plant composition, especially when sagebrush habitat has already been reduced or compromised and nearly a million acres of sagebrush habitat can be lost in a single year to wildfires. As further discussed below, crested wheatgrass should be considered an interim management option to stabilize soils and reduce risks of non-native annual grasses while aiding in the longer-term restoration of native vegetation and health GRSG habitat conditions. Crested wheatgrass should not be a management objective in and of itself, and sagebrush should not be removed in order to protect or advance crested wheatgrass for forage or other purposes.

Comment Number: OR-GRSG-0532-8

Comment Excerpt Text:

Pg. 2-74 - Use of native seed and restoration of native perennial vegetation should be the priority. However, with the current status and quantity of noxious weeds and invasive annual grasses in the planning area, it may be difficult to ensure native vegetation will successfully out-compete invasive, nonnative competition. Crested wheatgrass is very effective at establishing and out competing weedy species, especially invasive annual grasses. The State recommends BLM allow increased amounts (up to 50%) of non-invasive, non-native bunchgrass and forb species to be used in seed mixtures for restoration and rehabilitation after wildfires in certain circumstances. This would be allowed where pre-disturbance conditions contained high levels of invasive annual grasses and/or other noxious weeds or other situations where the threat of invasive weed infestations is probable following a disturbance event. NTT guidance on the use of native plan material (as mentioned in Action B-VG 5) should be incorporated into decision-making where use of non-native plant material is being considered.

Comment Number: OR-GRSG-0532-9

Comment Excerpt Text:

Action E-WFM 19 should be included in Alternative D in Action D-WFM 19 (pg. 2-74) as an available measure for site-specific situations where the probability of native plant restoration is low and exotic annual grass or noxious weed invasion is high. "If native plant and sagebrush seed is unavailable, crested wheatgrass can be planted in lieu of native species or as a mixture with native species, because it is readily available, can successfully compete with cheatgrass, and establishes itself more readily than natives. If crested wheatgrass is planted initially, specific efforts or plans are needed to interseed native grasses, forbs and shrubs in the rehabilitation area. This might include an initial seed-mix of 1 to 2 pounds per acre of crested wheatgrass mixed with natives. Use of crested wheatgrass is an intermediate step in rehabilitating disturbances to sagebrush habitats."

Comment Number: OR-GRSG-0558-2

Comment Excerpt Text:

The NRCS in Oregon is treating tens of thousands of acres of juniper on private land each year. Treatments on a landscape scale are not only possible, but occurring, so why is it that none of the alternatives really focus on increasing these treatments on BLM managed land? If the BLM would increase these activities, the way the NRCS has, they would be able to contain juniper encroachment and save hundreds of thousands of acres of suitable sage-grouse habitat.

Comment Number: OR-GRSG-0567-17

Comment Excerpt Text:

Furthermore, the draft EIS states in Section 3.3.2, page 3-32, Vegetation Trends: Juniper Woodland that" ... most of the current vegetation treatments are focused on reducing juniper: however, current treatment rates appear to be lower than the current

expansion rate, based on field observations." However, in section 4.2.3, page 4-20, Impacts Common to All Alternatives, Impacts from Vegetation Management, the draft EIS states that" ... Under all alternatives, the ELM would continue tofollow Integrated Vegetation Management Handbook (H-I740-2) policies for vegetation management. Application of these policies would control spread of invasive weeds, limit conifer expansion, restore sagebrush, and other activities which improve vegetation management in sagebrush habitat."

Based on these contradictory statements it is unclear how any of the action alternatives would differ from current management, which based on field observations is not addressing the threat. Please explain how any alternative would address the threat of conifer encroachment, if all alternatives will continue to implement H-1740-2, but the rate of expansion is greater than the rate of treatment.

Comment Number: OR-GRSG-0567-18

Comment Excerpt Text:

We recommend adding additional actions (e.g. better mapping of aroga moth outbreaks and connecting these outbreaks to potential wildfire to better prepare wildfire responses) in the final EIS to address loss of sagegrouse habitat via insect outbreaks like the aroga moth.

Comment Number: OR-GRSG-0567-23

Comment Excerpt Text:

Alternative D is not consistent with the COT report with respect to sagebrush removal and therefore we recommend providing an expanded explanation on how protecting both breeding and wintering habitats will occur.

Comment Number: OR-GRSG-0567-25

Comment Excerpt Text:

The use of fire for juniper control is noted in action D-WFM 1 (page 2-69)(fuel management to limit juniper encroachment) and Action D-WFM 14 (page 2-73)(use of naturally ignited wildfires to meet resource management objectives such as reducing juniper encroaclunent). We recommend that an additional action be inserted to describe appropriate methods to treat juniper and emphasizing that mechanical treatment is the preferred method. As noted in the COT report, this technique allows for more selective removal of invading plants, and more importantly allows understory habitats to remain intact. We also recommend the inclusion of Guidelines Jar Juniper Management: Oregon-Washington (Bureau of Land Management 2013) as guidance on treating juniper.

Comment Number: OR-GRSG-0567-26

Comment Excerpt Text:

An old growth exception to the conservation measure should be included, however, that is, if the lek is within 1 kilometer of an old growth juniper stand, the old growth should be retained for its value to the ecosystem and other species. Please include a management decision that describes the factors that will be used to determine what constitutes old growth juniper.

Comment Number: OR-GRSG-0567-49

Comment Excerpt Text:

Chapter 2, Action D-VG 6 (pages 2-59 to 2-60). States "Nonnative plant materials can be used as necessary to: Limit or control invasive plant spread or dominance and to create fuel breaks along roads and rights-of-way. "

- Dominance of invasives is mentioned in several places throughout the document. However, it is not clearly defined and could be interpreted differently by each reader. Please provide a clear definition of dominance in the above context and how implementation success, or failure, will be measured.

Comment Number: OR-GRSG-0567-50

Comment Excerpt Text:

We recommend that the BLM develop a framework similar to what was developed for the Harney Soil and Water Conservation District Candidate Conservation Agreement with Assurances to define

dominance of invasive annual grasses. These "Phases" were developed to correspond to the states in the "state and transition" models that were developed for the Candidate Conservation Agreements with Assurance. The phases are as follows:

- Phase I: Interspaces primarily bare ground (> 90 percent interspaces bare ground) and multiple bunchgrass age classes represented; generally associated with Ecological States A & B.
- Phase II: Exotic annual grasses present at intermediate levels in interspaces (< 50 percent interspaces occupied by exotic alillual grasses) and multiple bunchgrass age I classes represented; generally associated with Ecological States A & B that are at risk of conversion to Ecological States C & D.
- Phase III: Interspaces primarily occupied by exotic annual grasses (> 50 percent interspaces occupied by exotic annual grasses) and < I bunchgrass age class represented; generally associated with Ecological States C & D.

Comment Number: OR-GRSG-0567-51

Comment Excerpt Text:

Chapter 2, Action D-VG 6 (page 2-60). Also states "Seed mixes that include more than 2 pound, per acre of crested/desert wheatgrass shall not be considered "native" even when native plant materials are a majority of the mix. "

- We are concerned with using expensive, limited native seeds in mixes containing more than 1-2 pounds of crested or other wheatgrasses. If conditions warrant planting high levels (> 2 pounds per acre) of crested wheatgrass or other non-native perennials post-fire or other restoration efforts, we recommend that you only use crested due to the following guidance from the crested wheatgrass plant guide: "Crested and Siberian wheatgrasses establish quickly, with Hycrest and Vavilov" noted for their seedling vigor. They should not be seeded with native species, unless seeding rates are very low « 2 pounds per acre)." This comment also relates to D-VG 9 (page 2-60).

Comment Number: OR-GRSG-0591-38

Comment Excerpt Text:

BLM must abstain from vegetation treatments in Priority Habitats except where they are consistent with maintaining optimal sage grouse habitat. There is a growing scientific consensus that burns and mechanical treatments are deleterious to sage grouse. BLM should assess non-native seedings and restore them to native vegetation if this is the most optimal option for sage grouse habitat. BLM should also adopt the requirement for grazing exclosures and long-term monitoring following vegetation treatments. It is important to rest burned areas from livestock grazing for at least 2 full seasons following disturbance. The agencies should adopt the grazing response to drought from the Idaho – Southwest Montana RMP Amendment, which requires adjusting grazing management to provide adequate food and cover for sage grouse during drought.

Comment Number: OR-GRSG-0591-46

Comment Excerpt Text:

Juniper Encroachment

Some assert that junipers have been expanding into sagebrush habitats as a result of fire suppression and overgrazing over the past century. Blaming a lack of natural fire is a somewhat dubious claim, given that sagebrush also is eliminated by natural fire, and is contradicted by the management priority of suppressing natural fires in sagebrush habitat. Although natural fire may well have modified distribution of both sagebrush and juniper in pre-settlement times, such fires were infrequent (as noted elsewhere in these comments). In addition, BLM's presumed management strategy of mechanical removal of junipers, while perhaps beneficial to sage grouse if done in a non-invasive way (i.e., removal of the entire tree from the site), has no natural counterpart under reference conditions. Instead of focusing exclusively on fire as a mediator of juniper

spread, BLM should also examine the effects of radical increases in ungulate grazing that have occurred with the onset of large-scale ranching in this area, which could potentially confer competitive advantage on junipers through the removal of both grasses (cattle) and sagebrush (sheep).

Comment Number: OR-GRSG-0591-59

Comment Excerpt Text:

Livestock grazing also leads to cheatgrass invasion, as overgrazing eliminates native bunchgrasses and degrades biological soil crusts, both of which represent the ecosystem's natural defenses against this invasive weed (Reisner et al. 2013, Attachment 18). The plan amendment must implement measures that will reverse this trend with ironclad certainty. In order to minimize the spread of cheatgrass, livestock forage removal limits need to be set under the RMP amendment, allowing no more than 25% of the available forage to be consumed each year. Widespread devastation of rangeland (and more pertinently to this amendment, sage grouse habitat) and loss of habitat value can be wrought by this invasive weed. Importantly, "grazing utilization levels are not specified" under Alternative B. DEIS at 4-34. BLM must restore degraded habitats by managing for elimination of cheatgrass from the system.

The failure to recognize the key role of livestock grazing in cheatgrass-wildfire dynamics is a key 'hard look' problem with the Draft EIS. BLM asserts that livestock grazing can be used to reduce fine fuels and therefore be part of an overall fire suppression strategy. DEIS at 4-12. Conversely, the agency argues that livestock removal will increase fine fuels. DEIS at 4-40. In addition, BLM argues that grazing can reduce the spread of cheatgrass. DEIS at 4-13. BLM argues that elimination of livestock grazing would result in a buildup of fine fuels. DEIS at 4-14. However, under reference conditions (in the absence of livestock grazing), perennial bunchgrasses had much greater height and canopy cover (and thus more fine fuels were present), yet wildfires in sagebrush habitats were very rare (Baker 2007, 2011). BLM should redraft its analysis in light of the evidence that it is the type of fine fuels (cheatgrass/medusahead versus native perennials) that results in increased fire risk, not the quantity of fine fuels. Indeed, removal of livestock grazing, as discussed elsewhere in these comments, would result in a shift from highly combustible invasive grasses to native perennials that pose a very low fire risk.

Comment Number: OR-GRSG-0591-66

Comment Excerpt Text:

Crested Wheatgrass Seedings

Across the planning area, sagebrush habitats have been converted to crested wheatgrass seedings on 148,243 acres. DEIS at 3-14. These seedings have low ecological integrity and little value for wildlife. DEIS at 3-35. Reynolds and Trost (1980) found that crested wheatgrass plantings supported significantly fewer species of nesting birds than did sagebrush. Call and Maser (1985) reported that crested wheatgrass plantings are of little use to sage grouse. According to Connelly et al. (1991: 524), "conversion of large tracts of sagebrush habitat to other vegetation (e.g., crested wheatgrass [Agropyron cristatum]) will probably result in declining sage grouse populations because of reduced nesting success" (p. 524). BLM is currently doing little to restore crested wheatgrass seedings back to productive, native habitats (DEIS at 3-39); the RMP amendment should include strong provisions indicating that restoration of crested wheatgrass seedings back to native sagebrush steppe shall be pursued throughout the planning area.

Comment Number: OR-GRSG-0591-82

Comment Excerpt Text:

Minimizing the use of herbicides and insecticides inside sage grouse habitats, and using them as a last resort, is the proper approach for sage grouse Priority Habitats. We are concerned that aerial applications of herbicides are reasonably foreseeable in the planning area. According to BLM, herbicides were rarely used prior to October 2010 (DEIS at 3-21); the implication of this statement is that these chemicals are in relatively widespread use in the years since that date. According to Blus et al. (1989), insecticide spraying can be a significant cause of sage grouse mortality. Aerial herbicide and pesticide

applications should be precluded within one mile of sage grouse habitats to avoid inadvertent poisoning of sage grouse. Although the use of Plateau in heavily cheatgrass-infested areas might be allowed in cases where sage grouse are not using the treated habitats, aerial spraying of herbicides and insecticides over or within one mile of sage grouse habitats should not be allowed. Hand spraying might be accomplished by deliberately driving grouse off by teams on foot prior to treatment, and by treating from backpack units rather than aerial or truck/ATV application.

Comment Number: OR-GRSG-0606-11

Comment Excerpt Text:

In the BLM's own 2006 paper titled Review of Livestock Grazing Management Literature Addressing Grazing Management of Sage Grouse Habitat the BLM determined from its review of the literature that "No treatment should be considered where sagebrush cover is less than 20 percent or within 2 miles of breeding, nesting, or brood areas." This is echoed in a wide range of other research papers, a few of which we provide for your review as attachments. The other significant issue regarding such land manipulations is a high likelihood significant increases in invasive species. The DRMPA/DEIS does not adequately discuss where and when treatments will take place, and whether they will take place in areas such as these.

Comment Number: OR-GRSG-0606-21

Comment Excerpt Text:

For Actions VG 5, 6, 7, 8, 9, and 11: unless necessary for rehabilitation of previously-seeded exotic plantings or emergency stabilization, favor passive restoration over seeding. By far the cheapest and most cost-effective method to recover and restore plant communities is to remove livestock grazing and trampling disturbance. Seed only local native ecotypes. Even certified weed-free seed mixes contain invasive weed seeds. Under no circumstances seed with nonnative plants. Encourage development of native seed sources. Post-restoration management should ensure long-term persistence and in most cases will require rest from grazing of at least several years. See Beschta et al, 2004; Dwire et al, 2006.

Comment Number: OR-GRSG-0606-22

Comment Excerpt Text:

For Actions WFM 1-6, 29, 30, 34, 37, 38, 39 when evaluating any potential treatments, managers should weigh the certainty of increased habitat fragmentation from a proposed action against the potential for wildfire and the likelihood that fuelbreaks will be effective. BLM is not going to be able to prevent large wildfire. Fuelbreaks will not do that, and often promote the weeds that fuel frequent fires. If BLM attempts to engineer a massive series of fuelbreaks, it will only further fragment the sagebrush ecosystem and hasten its demise. As an alternative, BLM must manage lands to be in the best possible condition using native species. That way, if an area burns, it is naturally more resilient and better able to recover. Livestock grazing must be removed if recovery is to be effective, and to occur without significant risk of cheatgrass and other weeds. Removal of grazing also hastens the speed of recovery. By the same token, using livestock grazing to reduce fuel as fire prevention is a counterproductive, circular practice and should not be utilized. BLM should not create defensible space around private inholdings at the expense of impoverishing public lands by manipulating native vegetation.

SECTION 26.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0061-16

Comment Excerpt Text:

Text: 4-41: Alternative C habitat trends from VDDT vegetation modeling (Tables 4-3 and 4-4) are downward through year 50 for sub-populations 902 and 93. Habitat trends are upwards through year 10 and then downward through year 50 for sub-populations 904 and 906. Habitat trends are upwards through year 50 for sub-population P04 with the highest rate of change in the first 10 years. Overall, the habitat trend is upward through year 10 and then downward through year 50, likely due to a 0.1 percent annual expansion in invasive grasses.

Comment: I'd like to know the data and model assumptions going into this modeling, as they are probably biased to favor BLMs favored Alt D

Comment Number: OR-GRSG-0144-8

Comment Excerpt Text:

The BLM has jumped ahead of its own plans and goals. Juniper eradication was to help in the sage brush growth. As of date there has been no study or analyst of the effect taking out massive juniper groves has accomplished. I submit the BLM should look at the effectiveness of one plan before throwing together another.

Comment Number: OR-GRSG-0220-21

Comment Excerpt Text:

The RMPA/EIS notes that western juniper is a vegetative issue of concern in that it can reduce or eliminate sage-grouse food and cover, plus provides perch sites for avian predators. While the RMPA/EIS discusses the expansion over the last 120 years and reference a 433% increase between 1936 and 1988, it ignores that the published literature indicates that over half of the juniper forest as of 1999 became established between 1850 and 1900. As Gedney et al. in their 1999 USDA report noted:

"the juniper forest increased in density with the greatest increase occurring between 1879 and 1918. This rapid increase in juniper stand establishment occurred during a period of favorable climatic conditions (Footnote 25: This time period was essentially drought free (Gedney at p. 7)) and reduced fire frequency and intensity." (Gedney, Donald R., David L. Azuma, Charles L. Bolsinger, and Neil McKay, (1999) "Western Juniper in Eastern Oregon" General Technical Report PNW-GTR-464).

Comment Number: OR-GRSG-0281 (FrmLtr11)-27

Comment Excerpt Text:

Comment: Vol 1, page 3-39 Crested Wheatgrass seedings: Sagebrush cover continues to increase at varying rates within existing seedings, but increases in native grasses and forbs remain limited.

Solution: Ample research is available to know that weeds are more effective than native species at producing seeds/propagules, utilizing available resources and controlling site occupation. Weeds invasion can and does occur because of plant competition. The statement makes it sound hopeless that native grasses and forbs can be established where sagebrush exists. There are many pockets of deep soils and shallow soils where different grass species will grow on every site. Identification of the best sites for native species survival viewed as islands of seedings rather than wholesale seedings would provide a way to allow new seed sources to out compete some invasive species. A choice to focus on juniper areas because this other seems hopeless should be edited to reflect a better perspective.

Comment Number: OR-GRSG-0447-2

Comment Excerpt Text:

The threats to GRSG are needed to be addressed. One is juniper encroachment, but only vague reference as to a plan to achieve the goal to stop encroachment. Though at present Three Rivers has a prescribed fire to control expansion of juniper. Ranchers have partnered with NRCS to remove early-phase invading conifers and have contributed to the treatment of 200,000 acres oflands range-wide in core habitats. According to NRCS, in Oregon alone, 875,000 acres of conifers are found within three miles of GRSG leks. Altemative D, states "Use of approved herbicides, biocides, and bio-control is allowed on all land allocations currently providing or reasonably expected to provide GRSG habitat." Yet on Wilderness Study Areas neitller juniper nor invasive plant species can be controlled. Firefighters in active fire suppression cannot use all available tools and tactics as well as the use of mechanical application methods to apply herbicides, use fire, and use of grazing to treat invasives and noxious weeds because are not allowed in several different designated areas. Invasive plants or weeds can reduce and eliminate vegetation that GRSG use for food and cover. Until 2010 herbicides that could kill Medusahead Rye Grass were not allowed to be used on public land. In this time frame, acres upon acres of habitat were lost to Medusahead. Now the area and

acreage is so large the expense is enormous to try and reverse this trend and stop the takeover of Medusahead, but the spread should be attacked with vigor if habitat's condition is a concern. I saw nothing in the three volumes for a plan; just it was a problem and a biocide was needed.

Comment Number: OR-GRSG-0489-11

Comment Excerpt Text:

Conifers

Similar to my comments on fire and invasive species, the DEIS does not adequately describe the current extent of the juniper threat, and does not provide enough detail about treatment to analyze the impacts to sage-grouse habitat. The NRCS Sage Grouse Initiative Oregon Implementation Strategy (2013) has estimates of acres of early phase juniper encroachment, broken out by private and public lands and by ODFW sage-grouse Action Area. This may serve as a good resource for the BLM in further quantifying the extent of the threat.

BLM should set clear priorities for where juniper treatments will occur and set specific targets for how much juniper treatment will occur. For example, Objective D-VG 1 (Table 2-4, pg. 2-44) could be revised to establish separate objectives for fire management, juniper control, and invasive species control.

Juniper treatment should be a high priority, especially in areas of Phase 1 and 2 juniper encroachment where the understory vegetation is largely intact. In these areas, sage-grouse habitat can be restored quickly and with high success rates simply by removing juniper mechanically. See Baruch-Mordo et al., 2013. Given limited resources, BLM should prioritize juniper treatments and strategies to prevent the spread of annual grasses over attempts to control and revegetate existing annual grass infestations.

Comment Number: OR-GRSG-0497-2

Comment Excerpt Text:

Comment 11. We are concerned that the data used to establish ideal forage and range conditions around leks in the Vale District were was largely extrapolated from elsewhere. Does the "ideal" vegetation for sage grouse in the Plan reflect the actual vegetation in and near successful leks in the Vale District? The ideal vegetation height and composition for local conditions could be largely unknown.

Comment Number: OR-GRSG-0532-107

Comment Excerpt Text:

Pg. 4-41 - "…repeated mowing adversely affects vigor of native bunchgrass populations." If repeated mowing affects vigor of bunchgrass, then the BLM needs to explain why repeated grazing does not. Could there be mowing heights or time of mowing that would reduce impacts on bunchgrasses, not unlike utilization levels and season of use can mitigate impacts from domestic livestock grazing?

Comment Number: OR-GRSG-0532-143

Comment Excerpt Text:

Likewise, the State supports the establishment of vegetation management goals based on a mix of sagebrush classes, as it defines what the desired future condition is. However, the descriptioof existing conditions does not provide a clear picture of how much work is needed to achieve the desired future condition.

Comment Number: OR-GRSG-0532-6

Comment Excerpt Text:

Section 4.2.10 - The section indicates that the Oregon BLM Vegetation Management EIS has been completed and effective management of annual invasive grasses is able to occur on all districts. The State does not agree with this characterization. In fact, most districts have not completed their required vegetation management EA's and any treatment occurring only happens under project-specific EA's. At this time there is no vehicle to adequately respond to new infestations unless they happen to be found in a previously analyzed project. This issue should be recognized and priority given to get district vegetation management EA's completed, doing so in a manner consistent with GRSG objectives.

Comment Number: OR-GRSG-0532-75

Comment Excerpt Text:

Pg. 2-64, Table 2-6 - Conservation Action D-VG 24: states "leave no stumps more than four feet above the ground or one foot above the general height of sagebrush". Stumps should be cut as low to the ground as possible, and no more than 8 to 12 inches above the ground. Once the tree is felled, branches should be cut such that no branch extends more than 4 feet in height or more than 1 foot above the general height of sagebrush.

Comment Number: OR-GRSG-0567-21

Comment Excerpt Text:

We recommend the use of the 2012 "Sage-Grouse Specific Criteria for Post-fire Restoration" developed by Oregon's Technical Sage-grouse Team. This document contains Best Management Practices to assist in Emergency Stabilization and Rehabilitation development in sagebrush habitat. The document's recommendations include appropriate native seed mixes, seeding rates and densities, timing and application of seeds, deferred grazing, and controlled access to sensitive burned areas that are highly erosive and unstable, Additionally, it contains recommendations for both short and long term monitoring strategies, We are concerned with the quantity of non-native perennial grass seed used in combination with native perennial grass and sagebrush seed in past practices, BLM seed-mix ratios often exceed those recommended by seeding guides, We understand the need to re-establish perennial grasses to stabilize the soil and provide forage, However, we recommend that agreed upon criteria be developed to identify the circumstances for the use of non-native seed mixes.

Comment Number: OR-GRSG-0567-52

Comment Excerpt Text:

Chapter 2, Action D-VG 22 (page 2-64). For juniper treatments, add further prioritization to treatments to incorporate information presented in Baruch-Mordo 2013 that identifies juniper canopy cover values that preclude lek activity.

Comment Number: OR-GRSG-0606-8

Comment Excerpt Text:

Anderson and Inouye 34 found that viable remnant populations of native grasses and forbs are able to take advantage of improved growing conditions when livestock are removed. They found further that despite depauperate and homogenous conditions of permanent plots in 1950, after 45 years of no livestock grazing, vegetation had been anything but static, clearly refuting claims of long-term stability under shrub dominance. Mean richness per plot of ALL growth forms increased steadily in the absence of domestic livestock grazing. Grasses and forbs increased significantly. This information should be integrated into the "No Grazing" or Reduced Grazing" alternatives and, given these findings, the BLM should analyze the impacts of long-term authorized grazing and its impacts on sagebrush communities and obligates compared to the impacts of removing livestock and allowing these communities to recover naturally.

SECTION 26.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0027-5

Comment Excerpt Text:

In Section 4.6.7 Under Alternative D, like Alternative B's vegetation management would aim to improve GRSG habitat and prioritize restoration to benefit GRSG habitats. The BLM would require the use of native seeds and would consider changes in climate when determining species for restoration. The use of only native seeds is a mistake shown by many papers of research especially when dealing in areas infested with annual grasses in dryer precipitation zones. Davies (2010) in the paper Revegetation of Medusahead-Invaded Sagebrush Steppe states that large perennial bunchgrasses are critical to re-establish because they are the most competitive plant functional group. In many cases introduced bunchgrasses established on a site drastically better than native bunchgrasses which helped stop future invasion. There needs to be flexibility. In the paper Managing Complex Problems in Rangeland Ecosystems (Boyd & Svejcar 2009) they show that there are few windows for a greater opportunity for

restoration and that different options are needed for restoration cover crops, seed coatings, etc. They show that you need an advantage to occupy the site if annual species are present. We agree with Action D-VG 17: When seedings include nonnative plant materials, evaluate post-planting within 10 years to determine the need for interseeding or interplanting to increase native species populations or compositions to that more representative of the ecological site description and capability. This inclusion of nonnatives within the native mixes should be used to help with success of the rangeland in the fight against annuals and other weeds.

Comment Number: OR-GRSG-0074-15

Comment Excerpt Text:

In the RMPA Vol. 1, Table 2-4, pg. 2-44, Objective D-VG1 States that the objective is "to treat approximately 30% of GRSG habitat over the next 10 years with the expressed purpose of reducing the probability of large homogeneous burn patterns and unacceptable wildfire effects, to limit juniper encroachment, and to control invasive species." How did BLM develop this objective without a cohesive assessment of the issues? What is the supporting data for this determination? Why didn't the BLM provide some information on funding and strategies so the public would see what was possible at different levels of treating these threats? Does this level of treatment prevent further loss of GRSG habitat? How would BLM allocate between different treatments to have the most impacts to prevent further habitat loss? In my review, I could only determine that BLM did not analyze these issues except what they could discuss as generic regulatory measures. Therefore in chapter 4 tables 4-3 &4-4 show little to no effects in habitat trends under all alternatives 10 & 50 years in the future and chapter 5, pg. 5-30 provides a summary of continuing loss of habitat. The current RMPA analysis ignores any proactive approach to the problems and rightly assumes if we continue what we are doing we can expect similar results.

Comment Number: OR-GRSG-0074-3

Comment Excerpt Text:

In chapter 5 (Cumulative Effects) pg. 5-30 of the document it is explained, "Nevertheless, VDDT forecasting shows that overall trends toward habitat loss and fragmentation are likely to continue from the spread of invasive weeds, isolation, wildfire and conifer encroachment." The agency continues with its' explanation that "these threats can be limited only by vegetation management, These programs are limited to certain areas and is unlikely to approach the scope of the threats or prevent catastrophes such as large-scale wildfire. Thus, the major threats are likely to continue in management zones 4&5 under all alternatives". How can BLM draw these conclusions without analysis of wildfire, invasives and juniper encroachment? Does the BLM think they were not allowed to analyze vegetation management in this document? Vegetation management (habitat management) is a primary mission of the agency so why wouldn't you analyze strategic changes to address the threats to GRSG? This demonstrates the inadequacy of the document and the need for additional analysis in the draft RMPA.

Comment Number: OR-GRSG-0093-149

Comment Excerpt Text:

Insert discussions within the 5.1.7 Wildland Fire Management Cumulative Impacts Analyses (Page 5-36):

Section 5.1.7 did not discuss fine fuel buildup or increased weeds from reduced grazing.

Recommendation: Insert the following statement from page 4-12: Passive restoration techniques may result in increase of weed spread. Loss of integrated weed management through weed control cooperative range improvement agreements will result in an increase in invasive plant species Page 4-12.

Comment Number: OR-GRSG-0093-156

Comment Excerpt Text:

2. NRCS Sage-Grouse Initiative – has secured 208,000 acres. The DEIS does not discuss how many acres of these are within or adjacent to the planning

area. How will this initiative result in long-term benefits for vegetation, water, fish/wildlife and soil resources? Page 5-19, 4th paragraph.

Comment Number: OR-GRSG-0230-6

Comment Excerpt Text:

On p. 5-30, (Chapter 5, Draft RMPA) the agency states the following when addressing these threats. [The major threats] "can be limited only by vegetation management. These programs are limited to certain areas and is unlikely to approach the scope of the threats or prevent catastrophes such as large scale wildfire. Thus, the major threats are likely to continue in Management Zones 4 & 5 under all

alternatives". How did the agency arrive at this conclusion without a complete analysis and strategy of application of vegetation management to deal with these threats? Is part of BLM's primary mission to manage vegetation and habitat? As currently written, the Draft RMPA places BLM in the role of a regulatory agency and not a land management agency.

Comment Number: OR-GRSG-0281 (FrmLtr11)-39

Comment Excerpt Text:

Comment, Vol 2, page 4-10 to 4-15:

Comment, Vol 2, page 21: The VDDT modeling for a short to long term estimate of vegetation changes may need to have some on-the-ground testing to see if the assumptions used to run the model are valid. It seems unreasonable to state that none of the alternatives approach the 70% sagebrush cover of 10 to 30% with a one percent treatment rate. Is there a reason the Baker population was not modeled? If none of the alternatives produce the population levels the DEIS is planning then something is wrong in the model, in the population expectations, or in the BLMs level of understanding of the resources. The landscape is not static and the invasive species may not be invading sage grouse habitat at the rate this DEIS imagines.

Solution: Reference Section: The information identified in the reference section of Volume 2 relies heavily on government reports, manuals and synthesis documents. There are few if any information sources specific to individual Oregon RMPs. The range of documents need to be evaluated to determine if the literature contains intensive data, describes the accuracy and statistical confidence at the scale of the RMPs, and received a professional journal's review.Within cited the documents how did the authors distinguish between opinion and the data in their study to make conclusions? The authors, in several locations of this document, refer to 'best available information', best available science' and professional/biological judgment. How did the DEIS authors assess data quality given the various information sources implied by the use of best available information sources in the Oregon sub-region document? How was information ranked to separate professional opinion and experimental results, qualitative versus quantitative data, statistical confidence versus belief or assumption, etc?

Comment Number: OR-GRSG-0567-53

Comment Excerpt Text:

Chapter 4, Impacts from Vegetation Management, Alternative D, section4.4.7 (page 4-108). The draft EIS states that" ... Under Alternative D. vegetation management actions would prioritize Restoration Opportunity Areas (Section 2.5.6, Alternative D), throughout all occupied habitat thai have a high probability for success. These actions would increase special status wildlife habitat quality and protection relative to the no action alternative." Please explain what" ... have a high probability for success ... " means.

Comment Number: OR-GRSG-0591-60

Comment Excerpt Text:

For example, Alternative C eliminates livestock from Priority Habitats, yet BLM states that this alternative will result in greater spread of cheatgrass and "undesired levels of bunchgrass mortality following fire" (DEIS at 4-41), a nonsensical assertion in light of the available science. Please explain how an absence of domestic livestock results in bunchgrass mortality following fire.

Comment Number: OR-GRSG-0591-66
Comment Excerpt Text:
Crested Wheatgrass Seedings

Across the planning area, sagebrush habitats have been converted to crested wheatgrass seedings on 148,243 acres. DEIS at 3-14. These seedings have low ecological integrity and little value for wildlife. DEIS at 3-35. Reynolds and Trost (1980) found that crested wheatgrass plantings supported significantly fewer species of nesting birds than did sagebrush. Call and Maser (1985) reported that crested wheatgrass plantings are of little use to sage grouse. According to Connelly et al. (1991: 524), "conversion of large tracts of sagebrush habitat to other vegetation (e.g., crested wheatgrass [Agropyron cristatum]) will probably result in declining sage grouse populations because of reduced nesting success" (p. 524). BLM is currently doing little to restore crested wheatgrass seedings back to productive, native habitats (DEIS at 3-39); the RMP amendment should include strong provisions indicating that restoration of crested wheatgrass seedings back to native sagebrush steppe shall be pursued throughout the planning area.

Comment Number: OR-GRSG-0591-71
Comment Excerpt Text:
We conclude that by failing to produce results in accord with the best available science (or even BLM analyses elsewhere), the impacts analysis of the Oregon RMP amendment DEIS is fatally flawed with regard to its treatment of the impacts of grazing removal on the various alternatives. Reducing the probability of overgrazing had no effect on habitat trend outputs under the VDDT, and reducing the probability of fire also had no effect. DEIS at 4-61. What did have an effect on VDDT outputs? Please explain the inputs to the VDDT model that resulted in the opposite impact analysis to the Boulder Landscape Plan analysis, and please provide a critical test of its predictive power. BLM must examine the possibility that its VDDT analysis is in fact a worthless exercise, and if so, its tabular outputs should be removed from the EIS.

SECTION 27 - VEGETATION RIPARIAN

SECTION 27.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0093-99
Comment Excerpt Text:
Page 2-62 Action VG 16: Reject Alternative C. The reference to the Livestock Grazing/Rangeland Management section as a total is quite confusing. What is the actual alternative being offered for this action? This needs to be revised so that it can be understood for review and comment

Comment Number: OR-GRSG-0567-16
Comment Excerpt Text:
In general, the draft EIS describes the threat from conifer encroachment on priority sage grouse habitat as outlined in the COT report, and it describes the areas of sagebrush and juniper interface within the planning area (specifically Table 3-9). However, throughout Chapter 2 (description of the alternatives) and Chapter 4 (Environmental Consequences) there is a fundamental lack of detailed and specific information about how this particular threat will be addressed through the various alternatives. Without adequate descriptions of what management actions will be taken. when they will be taken, and where they will be taken, we are unable to determine with any certainty that the threat from conifers will be sufficiently addressed.

Comment Number: OR-GRSG-0591-51
Comment Excerpt Text:
Tamarisk is increasing in some riparian areas; we are concerned that this will also degrade brood-rearing habitats. What is the relationship between tamarisk invasion and livestock overgrazing in riparian habitats, and what does BLM propose to do to address the spread of this invasive tree?

SECTION 27.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0093-117

Comment Excerpt Text:

Riparian Areas and Water Quality

Riparian areas and wetlands are a small percentage of the planning area, though exactly what percentage needs to be clarified in the DEIS. The information provided in the DEIS indicates that these areas are either already in proper functioning condition or meeting riparian vegetation standards, or are in an upward trend. The BLM is required under the grazing regulations to make changes before the next grazing season where this is not the case. Many places in the DEIS correctly reflect this information. Other areas, however, are inconsistent with this information and need to be removed or replaced to provide consistency and an accurate evaluation of alternatives.

The following comments highlight many of these inconsistencies.

Section 3.3 Vegetation

Page 3-23 (3.3.1 Existing Conditions) 3rd Paragraph, 3rd sentence: "Although riparian area and wetlands cover less than 1 percent of the planning area…"

This statement conflicts with information provided on page 3-136, which says that "…riparian area and wetlands are 2.1 percent of the planning area…"

Comment Number: OR-GRSG-0093-118

Comment Excerpt Text:

Page 3-39 (3.3.2 Trends) In this discussion, the DEIS indicates that the Proper Functioning Condition of streams assessed within the planning area showed:

- PPH at 83% properly functioning or upward trend; 8% non-functional or downward trend
- PGH at 82% properly functioning or upward trend; 7% non-functional or downward trend
- Non-habitat rangeland: 75% properly functioning or upward trend; 11% non-functional or downward trend

However, the DEIS is less clear about this information in other places. As explained below, statements in the DEIS that do not clearly state or explain that riparian vegetation and wetland vegetation are in an upward trend or meeting standards and in proper functioning condition are inconsistent with other statements in the DEIS, do not appear to be supported by available information, and should be removed or replaced.

Page 3-39 (3.3.2 Trends): According to the DEIS, photo trend monitoring also shows an increase in native vegetation (including willows, sedges and rushes), stream channel narrowing and deepening, and increases in streambank stability. It is of note that the DEIS does not provide a reference to this data or a citation to where it can be found, or where it came from. Though we do not take issue with the conclusions drawn, the failure to provide the information hampers the ability of the public to review and provide comment to the RMPA. This is of interest to the OCA/OFB because the monitoring information may show that trends are in fact better than represented in the DEIS.

Recommendation: Include the photo trend monitoring reviewed in an appendix to the DEIS so that the public may conduct a review of the information relied on and supporting the DEIS statements.

Comment Number: OR-GRSG-0093-119

Comment Excerpt Text:

Page 3-136 (3.17.1, Existing Conditions, Riparian Areas and Wetlands) This page has a helpful discussion of PFC. However, the page also states, "the data for describing the planning area using PFC assessments is not sufficient to provide an accurate representation of the riparian environment, because the data is lacking for the greater proportion of the analysis area, predominately the Vale District. In addition, the use of PFC between districts was not

well coordinated and the interpretations cannot be generalized over this large planning area."

Please remove and replace the italicized statements above.

These statements are confusing and are in conflict with conclusions about the same PFC information on Page 3-39 (Section 3.3.2 Vegetation, Trends, Riparian and Wetlands). They also imply that riparian conditions are unknown. That statement is incorrect according to discussions n other parts of the DEIS. For example, the discussion on Page 3-61 (Section 3.4.2 Trends, Fish and Aquatic Wildlife) indicates that there have been successes at promoting riparian vegetation recovery and lakes and reservoir aquatic habitat through existing regulatory mechanisms and through fish habitat and streambank stabilization projects throughout the planning area. Further, as noted above, the prior discussion of PFC data indicates that the riparian and wetland areas are meeting or are in an upward trend toward proper functioning condition.

The discussion on Page 3-136 does not include an analysis that satisfies BLM's obligation to consider and assess available information.

Further, regarding the Vale District information discussed on page 3-136, Appendix N shows that 75 allotments have been through the rangeland health standards assessment process and demonstrates a high standard of compliance. This is even more remarkable given the BLM's directive to prioritize "problem" areas for its RHSA Only 6 of the 75 allotments on the Vale District failed to meet one or more of the rangeland health standards due to livestock grazing. Further, only four of those six did not meet the standard for Riparian and Water Quality. The other two allotments failed the Upland and Ecological standards so their status would not be germane to the riparian habitat discussion. Using this information, the project team can summarize the affected Riparian Areas and Wetland environment and to show that it is quite positive for the Vale District allotments where there is information available. A positive renference can also be drawn from this information given that the entire district is presumably being administered in accordance with the grazing regulations which require compliance with the rangeland health standards and in light of the directive to assess problem areas first. Further, for any allotment that does not meet the riparian and wetland rangeland health standard, grazing would be modified to address this circumstance within one grazing season under the grazing regulations. See Page 4-23 to 4-24. This means that concerns about riparian and wetland habitat are being addressed in an advanced fashion.

The discussion in this section is entirely lacking. The BLM fails to include and fully assess the information available to it about the riparian and wetland environments in the Vale District.

Moreover, it is unclear how a lack of data from the Vale District (a statement which as noted above appears to be contrary to the information provided) is a valid basis for discounting all information about PFC from the entire planning area. Further, the statement that PFC data is inconsistent across the districts is unclear and needs to be more thoroughly explained before the data is simply disregarded. PFC is a standard protocol, and the PFC information was evaluated across the planning area on Page 3-39 (Section 3.3.2 Affected Environment, Vegetation, Trends).

It is not clear how the information drawn from various PFC assessments would not be as available and valuable in this discussion as it was in a prior discussion in the same DEIS.

Comment Number: OR-GRSG-0093-120

Comment Excerpt Text:

Also, remove the statement from Page 3-136 that "the data for describing the planning area using PFC assessments is not sufficient to provide an accurate representation of the riparian environment, because the data is lacking for the greater proportion of the analysis area, predominately the Vale District." Instead, include statements that reflect an assessment

of the riparian areas and wetlands using existing data, including the rangeland health standards assessments and existing PFC information that is outside those assessments and information about successes and improvements as explained in Section 3.4.2.

Further, explain that riparian areas are in an upward trend or meeting standards throughout the planning area. Please also note that where riparian areas or wetlands are known not to be meeting standards, the BLM is required to implement changes to grazing to address those deficiencies prior to the following grazing season. Particularly where the rangeland health standards assessments are outdated, this last point is notable and must be explained

Comment Number: OR-GRSG-0093-121

Comment Excerpt Text:

Page 3-139 (3.17.2 Trends): In this section, the DEIS states "there are numerous examples of measurable changes in stream and riparian habitat qualities that indicate degraded conditions in the Malheur, Owyhee, and John Day river basins of eastern Oregon." This statement appears to be more of a characterization of historical conditions rather than current trends. It is also based on a singular, dated source that is a literature review as opposed to scientific research, namely Wissmar et al. 1994.

To the extent the section is trying to state that there is a current downward trend toward degraded conditions, the discussion and characterization of the planning area is inaccurate. Based on information included in the DEIS and current science and data, the planning area is showing measurable positive changes in stream and riparian habitat qualities. According to the DEIS, conditions are markedly improving or are in good or excellent conditions. See e.g. Page 3-39 (discussing trends in riparian areas). This result is expected under the current grazing regulatory regime, which implements and requires adherence to certain rangeland health standards and achieving proper functioning condition in riparian areas.

Comment Number: OR-GRSG-0093-122

Comment Excerpt Text:

It is also of note that landowners and grazing permit holders have invested significant resources along with state and federal partners in improvement projects throughout the planning area, which are expected to and are likely contributing to measurable improvements in stream conditions. Millions of dollars have been spent in Oregon under the Oregon Agriculture Water Quality Management Action and through the Oregon Watershed Enhancement Board and other such projects, to enhance riparian areas and grazing systems. Many of these projects have occurred in Eastern Oregon. According to the Oregon Department of Agriculture, over the past decade, the USDA Farm Service Agency alone has partnered with the state to restore nearly 40,000 acres of streamside areas along agricultural lands. Oregon Agriculture Water Quality Report (Sept. 2012), p. 2 (found at http://apps.oregon.gov/Applications/PDFDownload/ODA/water_qual_rpt2012.pdf). The BLM an and should present similar information for public lands in its discussion of trends. In any case, it is a misrepresentation to state or imply that streams in Oregon are on a downward trend.

Comment Number: OR-GRSG-0093-123

Comment Excerpt Text:

Page 3-140 This section discusses fish and aquatic habitat in a one sentence comment that relies on Beschta 1997. The BLM determined that it would not carry forward Fish and Aquatic Wildlife as a resource for consideration in the DEIS. Page 4-2, Table 4-1. In that light, and given the problems with reliance on Beschta 1997 noted below, the sentence at the end of the first full paragraph on page 3-140 should be removed from the DEIS/RMPA.

Beschta 1997 places undue focus on shade, ignoring science that demonstrates the influence of ambient air temperatures, elevation, stream flow, and many other variables that influence streams temperatures. Some scientific articles that address these factors include:

Edinger, John E., D.W. Duttweiler, J.C. Geyer. 1968. The response of water temperatures to meteorological conditions. Water Resources Research. 4(3); 1137-1143.

Kirkpatrick, Larry D., G.F. Wheeler. 1995. Physics a world view. Harcourt Brace College Publishers. Chapter 9: Thermal Energy. (The specific heat of water is numerically 1. The specific heat of air is 0.24. When two different materials are brought into thermal contact with each other, they reach thermal equilibrium, but do not experience the same changes in temperature because of their different specific heats and masses.

Larson, L. and P.A. Larson. 2001. Influence of thermal gradients on the rates of heating and cooling of streams. Journal of Soil and Water Conservation. 56:1:38-43

Mohseni, O. and H.G. Stefan. 1999. Stream temperature/air temperature relationship: a physical interpretation. Journal of Hydrology 218 (1999) 128-141.

In addition, there are a number of published articles that explain scientific research that account for the variety of response of fish to water temperatures. Those articles include:

Brett, J.R. 1971. Energetic Responses of Salmon to Temperature. A Study of Some thermal Relations in the Physiology and freshwater Ecology of Sockeye Salmon (Oncorhynchus nerka). Am.m. Zoologist, 11:99-113.

Cherry, D.S., K.L. Dickson, J.Cairns JR. 1977. Preferred, avoided, and lethal temperatures of fish during rising temperature conditions. J. Fish Res.Board Can. 34:239- 246.

Combs, Bobby D., R.E. Burrows. 1957. Threshold temperatures for the normal development of chinook salmon eggs. The Progressive Fish-culturist. 19:1:3-6.

Combs, Bobby D. 1965. Effect of temperature on the development of salmon eggs. Progressive Fish Culturist. 134-137.

Dickerson BR, Vineyard GL. 1999. Effects of high chronic temperatures and diel temperature cycles on the survival and growth of Lahontan cutthroat trout. Trans Am Fish Soc 128:516-521.

Fraser, N.H.C., N.B. Metcalfe, J.E. Thorpe. 1993. Temperature-dependent switch between diurnal and nocturnal foraging in salmon. Proc. R. soc. Lond. B 252: 135-139.

Konecki, J.T., C.A. Woody, T.P.Quinn. 1995. Temperature preference in two populations of juvenile coho salmon, Oncorhynchus kisutch. Environ. Biology of Fishes 44: 417-421.

Konecki, J.T., C.A. Woody, T.P.Quinn. 1995. Critical thermal maxima of coho salmon fry under field and laboratory acclimation regimes. Can J. Zool. 73:993-996.

McCauley RW, Elliot JR, L.A.A. Read. 1977. Influence of acclimation temperature on preferred temperature of rainbow trout, Salmo gairdneri. Trans Am Fish Soc 106:362- 365.

Olson, P.A., R.E. Nakatani, and T. Meekin. 1970 Effects of thermal increments on eggs and young of Columbia River Fall Chinook. Battelle Memorial Institute. USACE. Seattle, WA.

Beschta 1997 is an incomplete view of how riparian areas, temperature, and fish interact. The BLM has an obligation and duty to the public to use and rely on the best available science when managing the public lands and fish and wildlife found there. It should not rely on articles that are not sufficiently robust particularly where there are numerous peer reviewed scientific publications on this topic.

Recommendation: Delete the last sentence in the first full paragraph of Page 3-140. Rangelands and Livestock Grazing

Comment Number: OR-GRSG-0276-7

Comment Excerpt Text:

Mature trees can offer perch sites for raptors, so woodland expansion would also represent expansion of predation threat, similar to perches on power lines and other structures (Manier et al. 2013) – (Oregon RMPA/DEIS. Pg. 4-70).

There is no published information available documenting that conifer encroachment leads to increased avian predation risks of sage-grouse. Walters et al. (2014) reviewed the effect of tall structures on birds, primarily functional habitat loss due to avoidance. They did not detect any consistent response to tall structures and concluded that a structure's "tallness" could not be isolated from other factors associated with the development such as human activity. Avoidance behavior of sage-grouse in relation to tall structures has not been published in peer-reviewed literature (Messmer et al. 2013).

Comment Number: OR-GRSG-0535-4

Comment Excerpt Text:

Item 3. How and Where Key Species Vegetation Seed Will be Obtained

A discussion identifying the key species of vegetation that will be used to improve or restore valuable sage-grouse habitat and how and where the seed from these species will be obtained. Also, how conditions will he improved for higher productions and lower costs for seed of these species.

Further discussion of this key item is needed so all that are not familiar with this topic can be informed.

Unfortunately, too many people currently believe that obtaining seed for any land restoration project is a non-issue; you just go buy it, as it is readily available. All the many species, varieties, and ecotypes from numerous specific site origins are sitting in seed companies warehouse in sufficient amounts to accomplish any demand that may come along.

This belief is common, but naive. Sufficient inventory amounts of seed of the necessary species, varieties, ecotypes, and local origins used in western land improvement and restoration does not exist. Why not? Because the "produce it and the sales will come" does not work with the economics of the private seed industry. When the supply equals the demand to the highest degree possible, the economics work best, creating favorable prices and adequate supplies. Over the past 30 years, the supply and demand and thus prices have fluxuated considerably in regard to western land reclamation species. Market dynamics must be favorable for the private seed industry to be able to supply all the seed that will be needed. If these dynamics are met, the private seed industry is very willing and capable of meeting a greatly increased seed demand.

Comment Number: OR-GRSG-0591-49

Comment Excerpt Text:

BLM also notes deficiencies in its riparian and wetland surveys across the planning area, and does not present adequate summary statistics for acreage of sage grouse habitat that is not meeting Properly Functioning Condition ("PFC") criteria. While some statistics are presented (DEIS at 3-39), BLM inappropriately lumps categories meeting PFC with those that are not, based on whether trends are upward or downward. Please address this deficiency in baseline information, as riparian areas are crucial to sage grouse as brood-rearing habitats, and present this information in full in the FEIS in the form of categories separated into meeting PFC trending upward or stable, meeting PFC trending downward, not meeting PFC and trending upward, and not meeting PFC and trending stable or downward.

SECTION 27.4 - CUMULATIVE IMPACT ANALYSIS

Comment Number: OR-GRSG-0093-158

Comment Excerpt Text:

4. Continued improvements in riparian and upland trends. The cumulative impact discussions in these sections do not address the benefits from grazing, nor recognize grazing systems currently in places are protecting these resources. As described throughout these comments, according to Pages 3-39 and 3-61 and Appendix N, properly functioning or upward trends within riparian communities, stream channel

narrowing and deepening, and increasing stream bank stability would continue under existing RMPs to the benefit of vegetation, water, fish/wildlife, and soil resources. These are indications that grazing systems are currently protecting and improving these resources. The vegetation, water, and soil resource sections all use the inaccurate premise that the more grazing restrictions the greater the protection for these resources. Further, they ignore the benefits from grazing on noxious weeds, invasives, annuals, and wildland fire.

5. There is no discussion as to the beneficial cumulative impact of the renewal of 37 grazing permits on these resources. (Table 5-1, page 5-13) Permit renewal requires an Environmental Assessment if the allotment is not meeting standards and requires modification to the grazing system. Of the 48 allotments that missed RHS due to livestock grazing, 16 of these were located on the Prineville District (Appendix N). Although Table 5-1 does not list the specific allotment names, we could assume that most, if not all, of the allotments that missed standards on the Prineville District will be included in this new analysis. Permit renewals and the associated NEPA could result in new grazing strategies that will meet the RHS, benefiting vegetation, water, and soil resources.

Note: on Page 5-25, the Cumulative Impact for Sage-Grouse states "there are 37 grazing permit renewals that could affect GRSG in the Western Great Basin population area." The BLM should discuss how the permit renewals will it affect it.

SECTION 29 - WATER

SECTION 29.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0053-2

Comment Excerpt Text:

the RMPA should specify that BLM must replace water sources before any water source is removed, and only after verifying with grazing permittees that the new water source will act as an acceptable replacement. This process must also include obtaining the necessary state water right permits. If replacements are not put in place before removing existing water sources, lack of agency resources may delay replacements, which would be detrimental to cattle and wildlife.

Comment Number: OR-GRSG-0093-116

Comment Excerpt Text:

Page 2-132 Water Resources.

Alternative A

Replace current statement with: Alternative A provides protection of water resources. Riparian and wetland areas would be managed to maintain or attain proper functioning conditions. PFC is currently at 83% in PPH (Page 4-78). Current trends show an increase in native vegetation,stream channel narrowing and deepening, and increases in streambank stability (Page 3-39). Trend would be expected to continue to improve due to existing regulatory mechanisms and protections.

SECTION 29.2 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0281 (FrmLtr11)-35

Comment Excerpt Text:

Comment, Vol 1, page 3-137 Water Quality: Conditions that affect stream temperature can be summarized as amount of near-stream vegetation, channel shape, and hydrologic flow regime. Many of these conditions are interrelated and many vary considerably across the landscape. For example, channel width measurements can change greatly over even small distances along a stream. Some conditions vary daily and/or seasonally. Stream orientation from a north-south to an east- west can change solar heating considerably when stream width and vegetation type remain the same.

Removal of riparian vegetation and the shade it provides contributes to elevated stream temperatures (Rishel et al. 1982; Beschta 1997). Channel widening can similarly increase solar loading. The principal source of heat energy delivered to the

water column is solar energy striking the stream surface directly (Brown 1969). Exposure to solar radiation can cause an increase in stream temperature. The ability of riparian vegetation to shade the stream throughout the day depends on aspect and vegetation height, width, density, and positions relative to the stream, as well as aspect the stream flows (streamside vegetation provides less shade on a north or south flowing stream than on an east or west flowing stream).

Solution: Rishel et al. 1982; Beschta 1997 and Brown 1969 are early studies on the water energy exchange theories and mostly represent their personal perspectives about shade that do not match more recent research studies. The work is a very limited view of how earth's energy exchanges take place and fail to recognize that there are Physical Laws of the Universe that are well

understood. The DEIS must be edited in this section and with references from appropriate work on the topic. Hopefully the BLM has become familiar with other references that conflict with the cited studies above. See the attached Stream Temperature References.

…….. flows (streamside vegetation provides less shade on a north or south flowing stream than on an east or west flowing stream) This statement is misleading. It needs to be written to clarify that most streams have meanders and the north/south and east/west segments have similar temperatures. The statement is not clear at all and can be interpreted as being wrong.

Comment Number: OR-GRSG-0281 (FrmLtr11)-36

Comment Excerpt Text:

Comment, Vol 1, page 3-139, 3.17.2 Trends

There are numerous examples of measurable changes in stream and riparian- habitat qualities that indicate degraded conditions in the Malheur, Owyhee, and John Day river basins of eastern Oregon. Major habitat changes include the loss of riparian vegetation and increased canopy opening widths adjacent to stream channels; loss of riparian vegetation and decline of large woody debris in stream channels; increases in water temperatures from minimal shading by riparian canopies and shallow-sediment and debris-laden stream channels; accumulation of fine sediments and loss of gravel and pool attributes in stream channels because of land-uses that alter streamflow regimes and sediment budgets; and loss of water in stream channels and riparian areas because of water diversion practices (Wissmar et al. 1994).

Solution: This is an over-stated narrative that has no basis. Wissmar et al. (1994) provided a literature review of published manuscripts up to 1994. There are many newer studies available that are comprised of repeatable, statistically valid water monitoring data and ones conducted from a level of expertise the Trend section 3.17.2 does not reflect.

Comment Number: OR-GRSG-0281 (FrmLtr11)-65

Comment Excerpt Text:

[specific comments about stream temperatures coded as seperate comment- these are their citiations]

Stream Temperature Citations

1. Bohren, C.F. 1987. Clouds in a glass of beer. John Wiley and Sons, Inc. New York, NY. Page 81-81

Radiative equilibrium of the earth is described. The planet is bathed in solar radiation and is always bathed as one half of the earth always has sun shining on it. Absorbed radiation gives up its energy to whatever absorbed it, thereby causing its temperature to increase. The earth does not get hotter and hotter because the earth also emits radiation in a spectra distribution different from the incoming solar radiation. Everything emits infrared radiation. If the atmosphere absorbed no infrared radiation the ground would be intolerably cold and so would the air in contact with it.

2. Bohren, C.F. 1998. Atmospheric Thermodynamics. Oxford University Press. New York, NY.

Page 45 describes temperature scales and thermometers. It discusses the subjectivity of a human's perception of temperature which is not a reliable measure of temperature. Thermometers are based in the Zeroth law of Thermodynamics.

Page 233-237 discusses Henry's Law: air in water. Molecules that strike water from air will be captured by it and retained for at least a brief time before possibly returning to the air. Because of this at the surface of water, their concentration increases above that in the air. This is known as adsorption. Eventually molecules dissolved in water will come into equilibrium with those in the air.

Page 346-347 discusses energy transfer and thermal conductivity in water and gases such as the atmosphere.

Page 381 provides a problem and solution to demonstrate that humans are not reliable thermometers.

3. Bohren, C.F. 2004. The Freezing of Streams and Ponds: A Simple—ButUncomfortable—Experiment. The Physics Teacher. 42:12:522-525.

"It is an exaggeration to say that streams never freeze. Sometimes they do depending on their flow rate and air temperature, and their length, width, and depth (the surface layers of rivers certainly freeze). Almost by definition, streams are relatively short, shallow, narrow watercourses. My water-shaking experiment shows that it takes a surprisingly long time to freeze even a small amount of water at air temperatures more than 15°C below the (nominal) freezing point of water. Stream velocities may be 0.1 to 1 m/s, which in an hour or so corresponds to a few kilo- meters of travel. A stream fed at its head by a spring flanks our land. This stream flows for 1 to 2 km before sinking into the ground. There would not be enough time for the stream water to freeze between its appearance and disappearance even if it were not also fed along the way by water above 0°C." Violently and continuously agitating water can indeed increase (slightly) its temperature, but if you had to heat your morning cup of coffee by shaking, you would collapse from exhaustion before obtaining something you would want to drink.

4. Edinger, John E., D.W. Duttweiler, J.C. Geyer. 1968. The response of water temperatures to meteorological conditions. Water Resources Research. 4(3); 1137-1143.

Temperature difference and exposure time influence this process. In the study of water temperature the concept of an equilibrium temperature is used to describe the response of water temperature to meteorological conditions. Edinger et al. (1968) indicated that the rate of heat exchange is a function of the difference between actual water temperature and an equilibrium temperature at which the net rate of heat exchange would be zero. They noted that the equilibrium temperature changes in response to varying meteorological conditions and that water temperature moves continuously toward the equilibrium temperature. Edinger et al. (1968) indicated that a lag time approaching 6 hours can occur between maximum equilibrium temperature and maximum water temperature.

5. Faucheux, L.P., L.S. Bourdieu, P.D. Kaplan, and A.J. Libchaber. 1995. Optical Thermal Ratchet. Physical Review Letters. 74:9: 1504(4)

The authors experimentally demonstrated the principle of a thermal ratchet. They presented an optical realization by directing motion of Brownian particles in water and induced by modulating in time a spatially periodic but asymmetric optical potential. The experimental results agree with a simple theoretical model based on diffusion. Similar models of engines that extract work from random noise have been recently proposed under the denomination of "thermal ratchets" (Feynman, R.P., R. B. Leighton, and M. Sands. 1963.) Thermal noise can be a tool rather than a physical limit to the efficiency of motors.

6. Halliday, D. and R. Resnick. 1988. Fundamentals of physics. 3rd ed. John Wiley & Sons Inc., New York.

Standard college Physics textbook. Chapter 22 covers Entropy and the Second Law of Thermodynamics.

The directions in which natural events happen is governed by the second law of thermodynamics. The second law can be expressed in several equivalent forms two of which involve simple statements about heat and work. The Second law--first form states: It is not possible to change heat completely into work, with no other change taking place and the second form states: It is not possible for heat to flow from one body to another body at a higher temperature, with no other change taking place. In a third form in terms of entropy it states: In any thermodynamic process that process from one equilibrium state to another, the entropy of the system + environment either remains unchanged or increases. All three forms are equal. Many events do not occur even though they would not violate the first law of thermodynamics. The spontaneous flow of heat from a cold to a hot body is an example. The second law of thermodynamics sets up a criterion for identifying such "forbidden" processes.

7. Kirkpatrick, Larry D., G.F. Wheeler. 1995. Physics a world view. Harcourt Brace College Publishers. Chapter 9: Thermal Energy. Heat and temperature are not the same thing. Heat is a flow of energy and temperature is a macroscopic property of the object. Two objects can be the same temperature and yet transfer different amounts of energy to a third objects. EXAMPLE: a swimming pool of water and a coffee cup of water at the same temperature can melt very different amounts of ice. The amount of heat it takes to increase the temperature of 1 gram of any material by 1 oC is known as the specific heat of the material. This is an intrinsic property of the material and is not dependent on the size of shape of the object made from the material. The specific heat of water is numerically 1. The specific heat of air is 0.24. When two different materials are brought into thermal contact with each other, they reach thermal equilibrium, but do not experience the same changes in temperature because of their different specific heats and masses. The heat lost by the hotter object is equal to the heat gained by the colder object. "The specific heats of the materials on the surface of the earth account for the temperature extremes lagging behind the season changes. The first day of summer in the Northern Hemisphere usually occurs on June 21. On this day the soil receives the largest amount of solar radiation because it is the longest day of the year and the sunlight arrives closest to the vertical. And yet, the hottest days of summer occur several weeks later. It takes time for the ground to warm up because it requires a lot of energy to raise its temperature each degree.

8. Larson, L. and P.A. Larson. 2001. Influence of thermal gradients on the rates of heating and cooling of streams. Journal of Soil and Water Conservation. 56:1:38-43 The study addressed the influence of thermal gradients on rates of stream heating and cooling. 4 watersheds in Northeastern Oregon were studied using air temperature as an index of the thermal environment to estimate the rate of stream heating or cooling in different thermal environments. Rates were tested to evaluate a means of quantifying and evaluating rates of water heating through the application of scientific principles. There were no significant differences between rates of heating or cooling at similar elevations between watersheds during any of the study years. Days with similar thermal gradients had similar rates of heating and cooling.

9. Maloney, S.B., A.R. Tiedemann, D.A. Higgins, T.M. Quigley and D.B. Marx. 1999. Influence of stream characteristics and grazing intensity on stream temperatures in eastern Oregon. Gen. Tech. Rep. PNW-GTR-459, Portland, OR :U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 19 p. Stream temperatures were measured during summer months, 1978-1984, at 23 forested watersheds near John Day, Oregon to determine temperature characteristics and asses effects of three range management strategies of increasing intensity. Maximum temperatures in steams of the 12 watersheds ranged from 12.5 to 27,8o C. Maximum stream temperatures on four watersheds exceeded 24o C the recommended short term maximum for rainbow trout and Chinook salmon. Streams with greater than 75 percent stream shade maintained acceptable stream temperatures for rainbow trout and Chinook salmon. Lowest

temperatures were observed in streams from ungrazed watersheds. Although highest temperatures were observed in the most intensely managed watersheds the effect of range management strategy was not definitive. It was confounded by watershed characteristics and about 100 years of grazing use prior to initiation of this study.

10. Maloney, S.B., A.R. Tiedemann, D.A. Higgins, T.M. Quigley and D.B. Marx. 1999. Influence of stream characteristics and grazing intensity on stream temperatures in eastern Oregon. Gen. Tech. Rep. PNW-GTR-459, Portland, OR U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 19 p. Stream temperatures were measured during summer months, 1978-1984, at 23 forested watersheds near John Day, Oregon to determine temperature characteristics and asses effects of three range management strategies of increasing intensity. Maximum temperatures in steams of the 12 watersheds ranged from 12.5 to 27.8oC. Maximum stream temperatures on four watersheds exceeded 24oC the recommended short term maximum for rainbow trout and Chinook salmon. Streams with greater than 75 percent stream shade maintained acceptable stream temperatures for rainbow trout and Chinook salmon. Lowest temperatures were observed in streams from ungrazed watersheds. Although highest temperatures were observed in the most intensely managed watersheds the effect of range management strategy was not definitive. It was confounded by watershed characteristics and about 100 years of grazing use prior to initiation of this study.

11. Mohseni, O. and H.G. Stefan. 1999. Stream temperature/air temperature relationship: a physical interpretation. Journal of Hydrology 218 (1999) 128-141.

Linear regressions of stream temperature versus air temperature are attractive because they require only one input variable (air temperature), which can be simulated by General Circulation Models. The equilibrium temperature concept introduced by Edinger was used. In stream reaches with large drainage area, stream temperature can be approximated by equilibrium temperature. At elevated air temperature the vapor pressure deficit above a water surface increases drastically causing strong evaporative cooling and hence a flatter stream temperature / air temperature relationship. At low air temperatures, stream temperatures often reach 0oC as an asymptote. If an upstream flow control (dam, reservoir release) or a waste heat input is present, the lower asymptotic value can be larger than 0o C. As a result of these upper and lower constraints for stream temperatures, the stream temperature/air temperature relationship resembles and S-shaped function rather than a straight line. The authors made a physical interpretation of the relationship between stream and air temperature. They observed a strong association between air and stream temperature and that the upper and lower constraints of the relationship tended to form an S-shaped function due to changing factors such as vapor pressure deficit.

12. von Baeyer, Hans C. 1999. Warmth disperses and time passes: the history of heat. The Modern Library. NY Today we know that warmth or heat is nothing but motion, a palpable manifestation for the ceaseless, random, chaotic agitation of the invisible atoms and molecules that compose all matter. Temperature, a measure of the intensity of heat, turns out to be related to the speed of those particles - - the faster they jiggle, the hotter they seem to the touch. These insights in turn suggest new more difficult questions. Why doesn't' a warm cup ever heat up spontaneously, and come to a rolling boil, while the vast reservoir of motion vested in the air of even a cool kitchen is imperceptibly reduced? In the middle of the nineteenth century, this question occupied center sage of scientific research. In the language of thermodynamics, the science of heat that was then emerging, the question became: When a hot body is in contact with a cool body, why does heat always flow from hot to cold and never the other way around? Why does heat only flow downhill, which in time led to the theories of universal gravitation and general relativity and today inspires the search for a quantum theory of gravity.The puzzle of the teacup

also affects our lives in a more personal and philosophical way. It turns out that the flow of heat from the tea into the air or from any body into a cooler one for that matter defines the flow of time itself.

Comment Number: OR-GRSG-0532-100

Comment Excerpt Text:

Pg. 3-139 - The DEIS discusses federal reserved water rights. The State recommends that the section regarding Federal reserved water rights include information about the process for determining federal reserved water rights. The State suggests adding the following language, "Federal reserved water rights are determined through a formal process called adjudication. During adjudication, claimed federal reserved water rights are quantified, documented, and eventually incorporated into the prior appropriation system."

Comment Number: OR-GRSG-0532-98

Comment Excerpt Text:

Pg. 3-139 - The DEIS states that "Instream water rights are applied for by the BLM, the ODEQ, the Department of Parks and Recreation, and the Department of Fish and Wildlife." According to ORS 537.336, only ODEQ, OPRD, and ODFW can apply for a state instream natural flow water right, not BLM. While only these state agencies may apply for new instream water rights, BLM could apply to transfer or lease an existing surface water right to an instream water right pursuant to ORS 537.348.

Comment Number: OR-GRSG-0532-99

Comment Excerpt Text:

Pg. 3-139 - The DEIS states that "the Oregon Water Resources Department has identified desired flow levels to protect recreation, fish and wildlife. These flow levels are not water rights; rather, the Oregon Water Resources Department uses them in its calculations of water availability." The State believes that instream water rights are mischaracterized in the above statements and would suggest the above sentences be replaced with the following "Instream water rights are enforceable water rights that receive a priority date and are regulated in accordance with the doctrine of prior appropriation. Like other water rights, instream water rights are also accounted for when determining water availability for new permit applications to use water."

SECTION 29.3 - IMPACT ANALYSIS

Comment Number: OR-GRSG-0053-3

Comment Excerpt Text:

With the removal of water sources the ability to extract large amounts of water from a pond would greatly inhibit any firefighting resources of tankers and helicopter to fill proficiently during an escaping range fire.

Comment Number: OR-GRSG-0093-144

Comment Excerpt Text:

4.172 Environmental Consequences – Water Resources

The concerns and comments listed above pertaining to in the Environmental Consequences– Soil Resources pertain to this section.

Similar to the Soil Resource analysis, the Water Resource Environmental Consequences analysis concluded that the more acres grazed by livestock, the greater the probability grazing standards would not be met; thereby subjecting water resources to the possible impacts of livestock grazing.

The DEIS/RMPA does not have an adequate basis to assume that the more acres grazed by livestock, the greater the probability grazing standards would not be met; thereby subjecting water resources to the possible impacts of livestock grazing. The correct assumption should be that, "short-term (as defined on page 4-5), site-specific impacts could occur if grazing was not in compliance with the terms and conditions within the grazing permit."

Comment Number: OR-GRSG-0093-145

Comment Excerpt Text:

Further, the statements about waste matter should define the impact to water quality in context, duration, and intensity in accordance with the general method for analyzing impacts (page 4-5). Page 4-246,

third paragraph states "Travel across land by any means can result in vegetation loss, loss of biotic crusts, soil compaction, and soil erosion which may increase soil deposition into waterways." This statement needs to be qualified and limited to motorized or mechanized travel.

Comment Number: OR-GRSG-0093-146

Comment Excerpt Text:

Impacts Common to All Alternatives

Page 4-248: Wild Horses and Burros

The environmental consequences to water resources from wild horses and burros are not similar for all alternatives. Alternative C proposes to remove water developments. According to Page 4-15, the removal of water developments will impact the distribution of wild horses, shifting yearlong use to riparian areas. This could increase the probability of possible impacts under Alternative C "through trampling or removing vegetation and compacting soils near water sources around which wild horses may congregate for water and shade." Page 4-232. This environmental consequence should be inserted under Alternative C for water resources. Alternative C and Alternative F

Page 4-251 and Page 4 -255 states: "This would completely remove the potential for improper livestock grazing and the associated impacts on water resources."

Similar to the comment under Environmental Consequences – Soil Resources this should be replaced with, "This would eliminate the possibility of the short-term, site-specific impacts from livestock grazing."

Insert on Page 4-252 – Alternative C: "The retirement of grazing permits would result in the loss of cooperative weed agreements, increasing the spread of invasives." Page 4-12.

Comment Number: OR-GRSG-0281 (FrmLtr11)-44

Comment Excerpt Text:

Comment and Solution, Vol 2, page pages 4-244, 245, 248, and 249, Section 4.17.2: There is little or no data available across the BLM lands to support this statement: Aside from the natural factors of weather-related erosion of soils into waterways, surface water quality can be temporarily affected by the additional transport of eroded soils into streams due to improperly managed recreational activities or livestock grazing, introduction of waste matter into streams from domestic livestock, and low-water crossing points of roads, routes, and ways used by motorized vehicles.

BLM relies on Multiple Indicator Monitoring techniques or visual observations to assert sediments are in streams and have not included repeatable, statistically valid sampling to identify the kinds or amounts of sediment or erosion. We suggest reviewing the government publication: Bunte, Kristin and Steven Abt. 2001. (Sampling Surface and Subsurface Particle-Size Distributions in Wadable Gravel- and Cobble-Bed Streams for Analyses in Sediment Transport, Hydraulics, and Streambed Monitoring. USDA. Forest Service. General Technical Report RMRS-GTR-74), and also Larson, P.A. and L.L. Larson. 2003. (Landowner monitoring of stream temperature and bottom sediments. J. Soil and Water Conserv. 58:3:152-157).

SECTION 30 - WILD HORSE AND BURROS

Comment Number: OR-GRSG-0003-16

Comment Excerpt Text:

The RMPA fails to mention, let alone discuss, the widely recognized fact that the BLM's Wild Horse and Burro Program is in a state of complete collapse. For the past several years, the BLM has refused to conduct gathers across the range of the GRSG, claiming that the program does not have sufficient funding to maintain gathered horses in longterm holding. Given that adoption rates are extremely low, and the Department of Interior has elected to take euthanization and sale without limitation of horses

"off the table," the result is that most HMAs in Oregon now significantly exceed AML. Current BLM feral horse counts demonstrate that the RMPA's statement (page 2-6) that "wild horse numbers have generally been maintained within AML in Oregon" is entirely false. For example, on Beaty Butte HMA, much of which is in GRSG habitat and which is also an allotment utilized by ten members of this District, feral horses now exceed AML by over 400%.

Comment Number: OR-GRSG-0003-17

Comment Excerpt Text:

Further, the final RMPA must provide feral horse numbers and AMLs by HMA in Oregon. The RMPA must also describe how HMAs overlap with GRSG habitat. The RMPA needs to recognize the BLM's current failure to manage feral horses within AML and within the law straightforwardly, and put forth recommendations for how the situation can be corrected, including consideration of: new sources of funding; the use of euthanasia and/or sale without limitation; new techniques for sterilizing horses; and also considering new cooperative approaches to feral horse management. In particular, the RMPA should include language encouraging District and Field offices to collaborate with local communities to develop locally-based approaches to managing herds within AML

Comment Number: OR-GRSG-0093-46

Comment Excerpt Text:

On Page 2-6, the RMPA/DEIS makes the incorrect statement that "wild horse numbers have generally been maintained within AML in Oregon." Wild horses exceed AMLs in Oregon. One example of this is the Murderers Creek Wild Horse herd. Another example is the Beaty Butte herd, which is at more than four times its AML and is located within GRSG habitat. Equally important, the DEIS does not address the fact that the BLM has not directed funds toward its wild horse program so as to allow for a sufficient level of gathers to reduce herds to AMLs in order to achieve a [thriving natural ecological balance] TNEB for many years.

Comment Number: OR-GRSG-0093-47

Comment Excerpt Text:

The DEIS attempts to address resource concerns by indicating that the HAF will be applied to wild horse and burro herd management plans. Page 2-21. However, it does not explain how or when that will occur. Nor does it demonstrate why an additional layer of analysis and amendment is necessary to achieve a [thriving natural ecological balance] TNEB and protect and conserve GRSG within the Herd Management Areas ("HMAs").

Comment Number: OR-GRSG-0093-48

Comment Excerpt Text:

Overall, the DEIS does not directly address or account for BLM's legal mandates, actual horse numbers or impacts in GRSG habitat, or its lack of funding in the horse program. The DEIS does not provide all relevant information or evaluate it so as to fully inform the decision that must be made or the public who are reviewing it.

Recommendation: Provide wild horse/burro numbers and AMLs by HMA in Oregon. Describe how HMAs overlap with GRSG habitat.

Comment Number: OR-GRSG-0093-86

Comment Excerpt Text:

It is also unclear how the BLM would apply the HAF to wild horse and burro HMAs. This needs to be explained so that the public can review and comment on this statement. OCA

Comment Number: OR-GRSG-0131-1

Comment Excerpt Text:

The DEIS incorrectly states that wild horse numbers have been kept near AML in Oregon. Based on the population numbers on the BLM website and 20% annual growth, wild horse populations will be 175% of AML in 2014.

Comment Number: OR-GRSG-0302-10

Comment Excerpt Text:

Further, the final RMPA must provide wild horse numbers and AMLs by HMA in Oregon. The RMPA must also describe how HMAs overlap with GRSG habitat. The RMPA needs to recognize the BLM's

current failure to manage wild horses within AML and within the law straightforwardly, and put forth recommendations for how the situation can be corrected, including consideration of: new sources of funding; the use of euthanasia and/or sale without limitation; new techniques for sterilizing horses; and also considering new cooperative approaches to wild horse management. In particular, the RMPA should include language encouraging District and Field offices to collaborate with local communities to develop locally-based approaches to managing herds within AML.

Comment Number: OR-GRSG-0329-2

Comment Excerpt Text:

The draft RMPA as currently written does not adequately protect wild horses in accordance with federal laws and regulations, and the Environmental Impact Statement (EIS) does not adequately analyze the impacts of the RMPA on wild horses and burros. The documents rely upon and include outdated and incomplete information, rendering them inadequate from the perspectives of protection Greater Sage Grouse and its habitat, as well as wild horse and burro protection. Further, impacts to wild horses are inadequately analyzed in the plan. The final RMPA/EIS must be amended to accurately reflect the Bureau of Land Management's (BLM's) legal obligation to protect wild horses and burros vs. its optional discretion to authorize livestock grazing, and to ensure its efficacy in achieving its intended goal of protecting the Greater Sage Grouse and its habitat.

Comment Number: OR-GRSG-0434-44

Comment Excerpt Text:

Current, comprehensive and multi-disciplinary land health assessments need to be conducted for HMAs that overlap sage-grouse habitat areas. BLM must specify in the DEIS estimated herd sizes for each HMA and incorporate sage-grouse habitat objectives that emphasize meeting or exceeding land health standards. After establishing initial herd sizes BLM must develop more protective AMLs and actually manage horse and burro numbers to meet the appropriate and protective AMLs. After the timely completion of land-health assessments and with revised AMLs BLM must put in place Herd Management Areas Plans ("HMAP") that help maintain and improve sage-grouse habitat through on-site restoration of horse and burro water developments, fence markings, and other structures.

BLM must incorporate more direct and robust management requirements in the DEIS. The DEIS must include an additional action designating initial and estimated herd sizes for each HMA that could be managed while still preserving and maintaining a thriving natural ecological balance and multiple-use relationships for that area (BLM 2010b).

Comment Number: OR-GRSG-0434-45

Comment Excerpt Text:

Lastly, BLM should consider an additional action to initiate planning for more effective horse and burro management. In addition to or in lieu of gathers, BLM should utilize permanent sterilization techniques to reduce horse and burro numbers to AML in HMAs that contain PPMA and PGMA. Sterilization would reduce long-term pressure on vegetation and sage-grouse habitat. If the BLM cannot meet its own standards to reduce wild horse population in sage-grouse habitat areas, permanent sterilization techniques may be one way to address the issue.

Comment Number: OR-GRSG-0532-29

Comment Excerpt Text:

The impact of wild / feral horses on GRSG habitat is a localized but real concern in certain areas of the public domain, as further addressed below. This is a concern not only to GRSG but other species and wildlife habitat concerns, as well as to local community and economic interests. The State supports efforts at the State, local, and national levels to address growing concerns over wild / feral horse management. Oregon offers the following page-specific comments as improvements to Alternative D on this issue:

- Pg. 2-46, Table 2-4, Objective-WHB 1 - Wild (feral) horses and burros are required by law to be managed by the BLM so that populations remain within appropriate AMLs.

Specific herds within PPMA and PGMA are well over AMLs. AMLs should be reduced by 25% in PPMA and PGMA. Feral horses and burros forage by clipping grasses very close to the ground; this causes a decrease in fine herbaceous litter standing and on the ground. It is also detrimental to, the life cycle of native perennial grasses by not leaving enough grass above the crown to regenerate leaf growth.

- Pg. 3-66 - First sentence of first paragraph states that wild horse herds are managed within AMLs. This is not true. See comment below for pg. 3-68.
- Pg. 3-68 - Section 3.5.2 does not adequately address the regulatory mechanisms that will be put in place to manage feral horses at AMLs. Horse numbers consistently over AML degrades habitat and the lack of funding to address those numbers adds to regulatory uncertainty. Without scientifically-based methods to estimate feral horse populations it is difficult to reliably assess the status of feral horse populations within the planning area. While Alternative D provides guidance for prioritizing land health evaluations, which would improve the efficiency and response time to improve GRSG habitat conditions, it does not address the impacts of herd numbers. Benefits to GRSG habitat suitability require additional population control measures, particularly for HMAs over AML (e.g., Cold Springs, South Steens, Ligget Table, Palomino Butte, and Beatys Butte HMAs). Trend data warrants a change in population management and we suggest amending Alternative D to include additional population control measures and adjusting permitted AMLs to ameliorate negative impacts to GRSG habitats.
- Pg. 3-68, Third paragraph – The State believes it is misleading to pool HMAs and report that they are 15% above AML. Beatys Butte HMA is 300+% above AML per BLM in Feb. 2013. Beatys Butte is an important area for GRSG. BLM must consider each HMA and bring each into compliance of AML if quality sagebrush-steppe habitat is to be maintained for GRSG and other sagebrush obligates. As the State understands it, there are ongoing conversations happening between a variety of stakeholders, including BLM staff, related to a potential pilot project effort associated with the Beatys Butte HMA. At the time of these comments, conversations are ongoing around a creative, locally grown solution to this HMA, with potential relevance to other HMA's of concern in Oregon and beyond. We request that the BLM stay engaged with the State and relevant stakeholders on this effort and ensure that options relative to this potential pilot effort are enhanced rather than foreclosed in the RMP EIS process.

Comment Number: OR-GRSG-0567-24

Comment Excerpt Text:

The draft EIS Action DWHB 1 and 2 (page 2-68) allow for the incorporation of sage-grouse habitat objectives into Herd Management Area plans and the evaluation of Appropriate Management Levels based on indicators that address structure, condition, and composition of vegetation and measurements specific to achieving sage-grouse habitat objectives that attain suitable Habitat Assessment Framework rating. However, monitoring is not mentioned nor how BLM will respond to situations where Appropriate Management Levels are not met This action eould be consistent with the COT report if it included measures to consistently monitor habitat, monitor horse/burro numbers, and to manage within Appropriate Management Levels. BLM has full authority to manage the horse/burro populations and has management plans in place with population objectives. However, for various reasons, a number of herd management area populations remain above recommended levels. We recommend that this issue be raised to the national level and a new plan be developed to meet the commitment of managing horse/burro numbers at an appropriate level.

SECTION 30.1 - BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: OR-GRSG-0354 (FrmLtr05)-2

Comment Excerpt Text:

The final RMPA/EIS must include the findings and recommendations of the National Academy of Sciences (NAS) report. In addition, the BLM should ensure that none of the designated actions will hinder or prohibit implementation of the NAS recommendations for the reform of the wild horse and burro management program

Comment Number: OR-GRSG-0593-2

Comment Excerpt Text:

the RMPA/EIS does address overall wild horse and burro management strategy, but omits entirely any mention, let alone consideration of the NAS report. This must be rectified in the final RMPA/EIS, and any designated alternatives must allow for the full implementation of the NAS' recommendations

SECTION 30.3 - CUMULATIVE IMPACT ANALYSIS

Comment Number: OR-GRSG-0093-159

Comment Excerpt Text:

6. The removal of range water developments will affect the distribution of wild horses, shifting yearlong use to riparian areas (Page 4-15). This impact was not discussed within the cumulative impacts analysis for vegetation, soils, water, or fish/wildlife resources. Further, this shift in distribution may result in new wild horse pressures on private, state, or other federal lands as competition for water sources become scarce. The shift in distribution and possible impacts to the herd population should also be discussed on Page 5-35, 5.1.6 Wild Horses and Burros.

SECTION 31 – WILDERNESS AREAS/WILDERNESS STUDY AREAS

Comment Number: OR-GRSG-0434-13

Comment Excerpt Text:

In addition to impacts to LWC, the DEIS fails to include any discussion of impacts to areas identified by members of the public as having wilderness characteristics. Many portions of the planning area have been inventoried by ONDA and other individuals and organizations and these citizen proposal areas have been submitted to BLM in accordance with BLM Manuals 6310 and 6320. (See Attachment B: ONDA wilderness inventory findings and proposed roadless units. Submitted on CD.) Have those inventory submittals been considered for either new management or in the analysis of impacts during this land use planning process? The DEIS contains no disclosure or discussion of this significant information.

Comment Number: OR-GRSG-0591-67

Comment Excerpt Text:

Lands with Wilderness Characteristics

This planning amendment addresses the protection of sage grouse habitats across Oregon, therefore directly affecting the naturalness and outstanding opportunities for primitive and unconfined recreation. See DEIS at 4-256. It therefore requires consideration of an alternative that would protect wilderness characteristics pursuant to BLM Manual 6320.06. BLM notes that wilderness characteristics falls within FLPMA's inventory and planning requirements. DEIS at 3-116. The designation of new Lands with Wilderness Characteristics ("LWCs") under BLM inventories in the planning area represents significant new information that must be addressed here. However, BLM does not intend to address Lands with Wilderness Characteristics in this planning effort. DEIS at 3-141. There are 697,900 acres of LWC that overlap with PPH, and 576,200 acres that overlap with PGH. DEIS at 3-141. Additional lands have yet to be inventoried. DEIS at 2-142. Apparently, none of these lands has been designated for protection of wilderness resources through the land-use planning process to date. Id. BLM apparently intends to ignore direction to address this issue in this land-management planning effort, despite the clear value in designating LWCs for protection of wilderness character to sage grouse conservation. This is arbitrary and capricious.

We are concerned that in pursuing this course of action, BLM has not fully lived up to its obligations under Manual 6320, undertaking the process required for the planning and management of Lands with Wilderness Characteristics. This must be done under the RMP amendment at hand, and the plan amendment should further designate all LWCs falling within sage grouse habitats to preserve their naturalness, solitude, and outstanding opportunities for primitive and unconfined types of recreation. Such protections would directly address threats that have been identified as threatening the persistence of sage grouse, such as infrastructure, roads, and energy development. Designation of LWCs to protect their wilderness characteristics would confer addition protections on key sage grouse habitats, further buttressing the agency effort to apply adequate conservation measures for the bird.

SECTION 31.1 - RANGE OF ALTERNATIVES

Comment Number: OR-GRSG-0281 (FrmLtr11)-14

Comment Excerpt Text:

The DEIS has not adequately addressed the deficiencies in the Oregon District's inventories and therefore lacks the ability to properly restrict activities in ACECs and RNAs. The DEIS has not provided clear direction about how this work should be done prior to any advancement of the proposed actions.

Comment Number: OR-GRSG-0434-10

Comment Excerpt Text:

As mentioned at the outset, sage-grouse require sagebrush-dominated landscapes containing minimal levels of human land use. Wilderness, WSAs, Lands with Wilderness Characteristics and other areas with identified wilderness characteristics all contain expanses of sagebrush and are, by definition, without the permanent presence of man. These areas are therefore critical contributors to core and connectivity habitat and legally preclude many of the forms of surface disturbance that the DEIS is attempting to prevent. The DEIS states that Wilderness and WSA management will continue in accordance with existing laws, regulations, and policies, yet fails to acknowledge that a suite of management actions beneficial to sage-grouse can and do take place in Wilderness and WSAs. Nevertheless, efforts including treatment of invasive species, grazing management, horse and burro management, wildfire suppression and recreation management all take place in these areas and actions can be taken above and beyond minimum legal and policy requirements to benefit wilderness resource values like sage-grouse. The absence of reasonable proposed actions within Wilderness and WSAs to benefit sage-grouse is a missed opportunity. BLM should consider and include actions within Wilderness and WSAs such as, but not limited to, native seed planting, removal of structures or changes to recreation management in the proposed action.

Comment Number: OR-GRSG-0434-11

Comment Excerpt Text:

Similar to Wilderness and WSAs, large areas of Lands with Wilderness Characteristics (LWC) overlie areas of sage-grouse habitat in the planning area, yet the DEIS states that no decisions related to the management of lands with wilderness characteristics will be made by this plan. DEIS at 3-141. In fact, many decisions in the DEIS that would take place in identified LWC units will impact wilderness characteristics – and therefore must be studied in detail in this EIS. Actions that will affect wilderness character will in turn affect sage-grouse populations and habitat because of the fundamental connection between unfragmented sagebrush habitat and preservation of roadless areas that are primarily natural in state. BLM must analyze and disclose actions that might harm and benefit both sage-grouse and LWC unit characteristics. BLM should also identify actions to maintain LWC in all PPMA, connectivity and PGMA habitat areas.

Comment Number: OR-GRSG-0434-12

Comment Excerpt Text:

Identification and discussion in the DEIS of positive and negative effects on LWC is also lacking in detail. The statement that LWC would likely experience either increased protection or no impacts from sage-

grouse management and restrictions is both overly broad and unsupported by the analysis. DEIS at 4-259. While management actions such as excluding oil and gas leasing and development or closing areas to travel might benefit LWC, several types of management actions designed to benefit sage-grouse may negatively impact LWC.

Vegetation treatments, for instance, may increase or decrease both short and long term naturalness of LWC units depending on location and type of treatment. The analysis of impacts from juniper treatment states that juniper treatments under Alternatives D and E could temporarily impact LWC but could enhance naturalness in the long term. Is it always the case that naturalness will increase at some point after juniper treatment? When is that point and how will this finding apply in different areas? The DEIS should define temporary and long-term impacts in this context. Additional specificity about where juniper treatments would be applied within LWC would allow improved analysis of impacts. Maps depicting the overlap of LWC with sage-grouse habitat types would allow the reader to better understand the location and extent of this type of impact. Similar to juniper or sagebrush treatment, other forms of restoration and mitigation may temporarily increase surface disturbance or diminish solitude resulting in impacts to LWC. Additional clarification of these sorts of impacts is also necessary. A lack of specificity about where management different management actions might impact LWC makes a thorough comparison of impacts between alternatives difficult. BLM should clarify the type and extent of actions that may impact LWC and disclose those impacts with greater specificity in Section 4.18 and Table 2-7.

SECTION 32.1 - PREDATION

Comment Number: OR-GRSG-0003-14

Comment Excerpt Text:

Ample contemporary evidence has demonstrated that predators are a major cause of sagegrouse mortality. For example, the Oregon Sage Grouse Plan3 indicates that out of the estimated 40% of a sage-grouse cohort that annually subcomes to mortality, fully 85% of reported non-hunting mortalities are due to predators. Further, a recently study4 published by the US Fish and Wildlife Service demonstrated that sage-grouse populations in Nevada's Virginia Mountains had a cumulative nest survival rate of only 22.4%, with depredation being the primary cause for 82.5% nest failures in the study. According to the authors, "common ravens were the most frequent sage-grouse nest predator, accounting for 46.7% of nest depredations."

3 Greater Sage-Grouse Conservation Assessment and Strategy for Oregon. Haggin, C., 2011.

4 Lockyer ZB, Coates PS, Casazza ML, Espinosa S, Delehanty DJ. 2013. Greater sagegrouse nest predators in the Virginia Mountains of northwestern Nevada. Journal of Fish and Wildlife Management 4(2):242–254; e1944-687X.

Comment Number: OR-GRSG-0003-15

Comment Excerpt Text:

The RMPA should include a section that discusses at length the impact of predators to sage-grouse populations in Oregon. The RMPA should include an objective of partnering with ODFW to study and manage predators, specifically crows and ravens, in core sage-grouse habitat areas. The RMPA should recommend establishing an MOU with ODFW to cooperatively manage predator populations on sage-grouse habitat.

Comment Number: OR-GRSG-0009-3

Comment Excerpt Text:

This DEIS is supposed to focus on avoiding a listing and yet there is no analysis on how BLM could improve conditions for the birds by encouraging human hunting and trapping of predators There is evidence that predator control benefits Sage Grouse populations, but the relationship between management of the habitat where hunting and trapping of predators is actually encouraged and increased is not analyzed. The effect of removing or limiting certain kinds of human activity, such as

hunting and access in GSG habitat was not properly analyzed.

Comment Number: OR-GRSG-0018-1

Comment Excerpt Text:

3: While the control and elimination of the West Nile Virus is included in the RMPA, there is no inclusion of any predator control. One of the main causes of the grouse's decline is the increased number of their natural predators, such as the coyote, the ravens, badgers, and the crows and other raptors. This should be included as a part of the collaboration between the BLM and the USFWS.

Comment Number: OR-GRSG-0026-29

Comment Excerpt Text:

Predation of GRSG nests is only marginally addressed in the DEIS with the stated explanation that the BLM manages the habitat not the GRSG population. They assign the responsibility for GRSG survival to the Oregon Department of Fish and Wildlife (ODFW). We continue to believe that the DEIS falls short of its mission by not focusing on an effective approach to reducing all threats to GRSG not just habitat. Mechanisms which institutionalize cooperation between local private landowners, ODFW and BLM will undoubtedly enhance GRSG populations with common sense strategies to look across the spectrum of threats to achieve a strategy which protects and enhances GRSG populations (see attached research App. 1 GRSG Nest predators in Virginia Mountains of NW Nevada).

Comment Number: OR-GRSG-0028-1

Comment Excerpt Text:

(PREDATORS) The BLM and the ODFW fail to analyze the full scope of this threat. We as ranchers see this threat daily during nesting and rearing seasons across all species. This is the rationale for not providing a full analysis of this threat to sage grouse on public lands.

Recommendations: Include Predators into this very important equation for sage grouse survival without it habitat is secondary.

Comment Number: OR-GRSG-0039-4

Comment Excerpt Text:

Predation is a threat to sage-grouse as provided in the USFWS 2010 decision that the listing of the bird is warranted but preluded. It is also one of the 5 factors that USFWS must analyze in the final listing of the bird. By choosing to only analyze habitat influences of predation the agency fails to address the entirety of the threat. BLM addresses all aspects of West Nile Virus control including direct control of mosquitos which is also not under BLM direct control, yet according to your draft, predator control is outside of your scope since you are responsible for managing habitat. This is inconsistent in thought and action.

Comment Number: OR-GRSG-0041-1

Comment Excerpt Text:

On page 117 of the Sage-Grouse Conservation Assessment & Strategy for Oregon, a source cited in the RMPA alternatives, it is stated, " Sage-grouse have many predators, but few studies have examined the effects of predator control on sage-grouse populations." (Batlerson & Morse 1948, Slater 2003, Coats & Delehant 2004) What many believe to be the number one limiting factor to healthy sage-grouse populations, according to the ODFW document, have never been seriously studied. When ravens were removed from study areas, increased nest success was observed, but the science was flawed because of no appropriate control in the researchers experiment. This is an indication that predator control could help survival rates of the bird. In the same document, it is stated in such instances where populations are at a critical level the feasibility of short-term predator control programs should be evaluated. Longterm extensive predator control programs are not effective or socially acceptable. My translation would be that predator control, because it may be expensive and people may not like what it entails, is therefore ignored. Ignoring this real issue and moving on to another; habitat, is not being intellectually honest.

Comment Number: OR-GRSG-0046-3

Comment Excerpt Text:

Predation is a major threat to Sage-grouse, and I was astonished that this document does not adequately address predation. Within the past 4 years I have observed a noticeable increase in a variety of species on our private land, such as, coyotes, ravens, badgers, bobcats, and squirrels. Predator control measures that reduce threats to Sage-grouse on public lands should be adequately analyzed.

Comment Number: OR-GRSG-0048-9

Comment Excerpt Text:

Another factor in sage-grouse decline is predation. This is ignored and not addressed by the BLM in this document; BLM states it is outside of their management. While true, it does not remove predation as a point to be analyzed for how predation is being addressed (even if it is by another agency).

Comment Number: OR-GRSG-0067-1

Comment Excerpt Text:

In fact, habitat for sage grouse may not be the critical (limiting) factor for the species (notwithstanding the obvious loss of sagebrush habitats over the past century). Today predation, specifically by ravens, may well be more important in many areas given the significant increase in raven populations in much of the sage grouse range over the past several decades. At the very least a thorough discussion of this possibility is necessary in conjunction with habitat discussions, especially as it relates to nesting and early broodraising cover. I believe further research is needed regarding predation on sage grouse.

Comment Number: OR-GRSG-0074-18

Comment Excerpt Text:

The draft RMPA does not analyze predation in its' entirety; in Vol. I pg.ES-9, BLM attempts to absolve the agency from responsibility of addressing the entire problem by stating the BLM is responsible for managing habitat only and ODFW is responsible for managing animals. Predator control is eliminated from any detailed analysis based on this premise. However the public is aware of the various studies on sage-grouse with telemetry, actually trapping birds and tracking them etc. Many of these studies are funded by BLM and BLM biologists are active participants. The agency biologists confer and make recommendations on predator control. Does BLM deny these activities exist? Please provide a written response in the comment section. If the agency acknowledges its' roles in GRSG studies and predator control programs, How does it explain its' refusal to analyze predator control in the Draft RMPA?

Comment Number: OR-GRSG-0074-19

Comment Excerpt Text:

The draft RMPA applied the state plan as alternative E. The BLM omitted the portions of this plan on predation including predator control on pg. 117 Included in the conservation guidelines. What is in law, regulation or policy which prevents BLM from analyzing predator control in the Draft RMPA? The BLM was proactive in analysis of larvicides and considering insecticides for mosquitos. These insects are under the auspices of APHIS. What empowers BLM to be proactive in treating mosquitos yet cannot analyze predator control?

Comment Number: OR-GRSG-0093-51

Comment Excerpt Text:

While the statement of ODFW's authority is correct, it does not mean that the BLM must not or cannot evaluate the impacts of predators or evaluate the BLM's ability to control predators. For example, conifer removal will have impacts on the location of avian predators, thereby controlling and reducing such predation. Indeed, the BLM at least recognizes this threat on Page 4-17, and on Page 5-28 the DEIS states that "Mature trees may offer perch sites for raptors, so woodland expansion may also represent expansion of raptor predation threat." Conifer removal is squarely within BLM's authority. Further, BLM's work to remove perches occurs in concert with other efforts and has a cumulatively positive impact on GRSG.

The BLM does briefly acknowledge in its design features that it should "Remove standing and encroaching tress within at least 110 yards of occupied sage-grouse leks and other habitats to

reduce the availability of perch sites for avian predators as resources permit." Appendix C Required Design Features for Alt. B, C, D, F, Page C-6. However, it does not include this information as part of a discussion or evaluation of alternatives for predator control, nor does it evaluate other methods for predator control in the RMPA/DEIS.

Most importantly, the BLM Land Use Planning Handbook makes clear that the BLM is expected to cooperate with state wildlife agencies to achieve goals for wildlife populations on BLMmanaged land by "working in close coordination with state wildlife agencies, "drawing on state comprehensive wildlife strategies," and identifying actions "needed to achieve desired population and habitat conditions while maintaining a thriving ecological balance and multiple use relationships." The DEIS/RMPA utterly fails to address any of these requirements.

The DEIS/RMPA must include a section that discusses the impacts of predators to GRSG populations and the means by which the BLM can affect those impacts, including an objective of partnering with ODFW to study and manage predators, specifically crows and ravens, in GRSG habitat.

Comment Number: OR-GRSG-0100-1
Comment Excerpt Text:
By the way, I didn't see any mention of predators other than raptors, except a very brief mention on Page 4-100. Why? The above predators have a real effect on the bird population-it isn't just the raptors.

Comment Number: OR-GRSG-0101-9
Comment Excerpt Text:
Predator Control

Ravens, coyotes and other predators are hard on the nesting hens and their young and are a large cause of loss of existing GRSG nests and their young. Nowhere in the BLM and USFW Document do I find any mitigation of predators anywhere.

Comment Number: OR-GRSG-0122-7
Comment Excerpt Text:
More sage grouse can be protected by banning sage grouse hunting and eliminating predators than all of the proposed actions. This is a reasonable alternative that must be evaluated and selected.

Comment Number: OR-GRSG-0138-3
Comment Excerpt Text:
Recommendations: BLM-Oregon should concentrate on promoting and then protecting native predators to enable natural control of the wild-horse-and-burro population on the range. A puma, bear, wolf, and coyote-protection program should be implemented.

BLM should collaborate with the Oregon Department of Fish and Wildlife to prohibit hunting of predators in the Sub-Region. Concerned livestock operators should be advised to use guardian-dogs to protect their animals. There are several specialty-breeds that have been developed just for this purpose, and they are reportedly effective. Protecting one's herd is just part of the cost of doing business on public lands, where the grazing is cheap

Comment Number: OR-GRSG-0144-7
Comment Excerpt Text:
The BLM neglected to take a realistic and hard look at the predators of the sage grouse or the predators of the sagebrush habitat. Coyotes, raptors, dogs being run by their owners and now the occasional wolf are the reason grouse numbers are not static. The BLM needs to take a hard look at its science. Predators are the natural enemy of the sage grouse and would be responsible for the rise and decline and rise again of the population.

Comment Number: OR-GRSG-0145-10
Comment Excerpt Text:
In Table 2-1, the DEIS proposes to "Establish design features and best management practices to reduce avian predator perching and nesting on structures, and enhance hiding cover at nest sites." This indicates that, instead of addressing predator control, BLM may be proposing to implement stubble height requirements. This would not be a workable scenario

for livestock producers. While managing for adequate cover at nesting sites is both manageable and a scientifically supported method (see France et al., 2008), a numerical stubble height standard would create an unworkable situation both for ranchers and the agency. Annual variations, landscape variations, the technical intricacies of measuring stubble height, and other limitations would make this standard a counterproductive way to address nesting cover.

Meanwhile, predation is the primary demonstrable source of mortality to sage grouse. Sage grouse eggs are preyed upon by a wide variety of predators including red foxes, coyotes, badgers, black-billed magpies, and ravens. Juvenile and adult sage grouse predators include golden eagles, prairie falcons, coyotes, badgers, and bobcats. Sage grouse broods are preyed to ravens, red foxes, raptors, ground squirrels, snakes, and weasels. However, of the predators above, ravens are the most ubiquitous (Coates 2007; Coates and Delehanty. 2004; Coates et al. 2008; Coates and Delehanty 2010; Christiansen 2011). There is abundant research on raven predation on sage grouse and other species (Boarman 1993; Boarman 2003; Boarman et al. 1995; Boarman and Heinrich 1999; Boarman et al. 2006; Bedrosian and Craighead 2010; Bui 2009; Cagney et al. 2010; Coates 2007; Coates and Delehanty 2004; Coates et al. 2008; Coates and Delehanty 2010; Conover et al. 2010; Cote and Sutherland 1997; DeLong 1995; Gregg et al. 1994; Heinrich et al. 1994; Moynahan et al. 2007; Preston 2005: Ramey, Brown, and Blackgoat 2011; Schroeder and Baydack 2001; Snyder et al. 1986, Sovada et al. 1995; Watters et al. 2002; and Webb et al. 2009). The final plan should include in predator management program such as the one undertaken by the USDA-APHIS Animal Damage Control at landfills across southern Wyoming at the request of the Wyoming Game and Fish Dept. (Wyoming Game and Fish 2012, USDA/APHIS/Wildlife Services 2013).

Comment Number: OR-GRSG-0150-2

Comment Excerpt Text:

If Greater Sage-Grouse populations are to grow, BLM must focus with ODFW on determining the extent of predation impacts on the bird populations with predator-removal projects and methods of deterrence. Refer to data collected by Z.B. Lockyer in Nevada

Comment Number: OR-GRSG-0152-5

Comment Excerpt Text:

We believe the BLM has taken an unnecessarily narrow approach to the issue of predator control by deeming it to be out of the scope of the decision. In doing this, the agency has made an implicit and erroneous assumption that the only method available to control predators is through direct removal, which is under the authority of Oregon Dept. of Fish & Wildlife. It assumes land use activities cannot be an element in predator control. In many cases, predators are a major influence on sage-grouse populations. By underplaying the importance of predator control, we feel the agency is "missing the boat" on an important factor in sage-grouse populations.

Several studies emphasize the impact of predators, including Hagen (2013)3, Lockyer et al. (2013)4, Bui et al. (2010)5, and Mezquida et al. (2006)6. Hagen found that predation may limit population growth in fragmented landscapes and areas with subsidized predator populations. Lockyer et al. reported that about 83% of nest failures were caused by predators in northwestern Nevada. In Wyoming, Bui et al. also found that 83% of nest failures were the result of predation and that raven occupancy near sagegrouse nests, rather than raven density, was important to nesting success. Ravens are not the only predators. Mezquida notes that the removal of the animal control agent 1080 likely caused an increase in populations of nest predators including coyotes, ravens, badgers, foxes, and others.

Predation losses are a function of the number of predators and the hunting efficiency of each predators. Predator populations have grown with habitat fragmentation and anthropomorphic or "natural" (juniper) subsidies such as the expanded presence of perches. Some of these issues can be addressed by the BLM via habitat improvement, removal of juniper, and removal of other subsidies.

For example, the BLM has the management ability to reduce the potential effects of ravens on grouse reproduction by reducing raven occupancy within important sage-grouse nesting habitat –through a holistic approach that considers: (1) limiting subsidized feeding opportunities, (2) removal of perches that can be used by predators such as ravens, hawks and eagles, and, (3) where appropriate removal or adverse conditioning of predators where localized impacts have substantial impact on sage-grouse populations.

EOCA requests that the BLM reexamine its predator control strategy in light of the major impacts predators may have on localized sage-grouse populations. A holistic predator control strategy focused on management of the landscape and the subsidies utilized by native generalist predators is within the authority of the BLM.

(3) Hagen, Christian A. 2013. Predation on Greater Sage-Grouse. Greater Sage-Grouse, Ecology and Conservation of a Landscape Species and its Habitats.

(4) Lockyer, Z.B., P.S. Coates PS, M.L. Casazza, S. Espinosa, D.J. Delehanty. 2013. Greater sage-grouse nest predators in the Virginia Mountains of northwestern Nevada. Journal of Fish and Wildlife Management, 4(2):242-254.

(5) Bui, Thuy-Vy D., John M. Marzluff, Bryan Bedrosian. 2010. Common Raven Activity in Relation to Land Use in Western Wyoming: Implications for Greater Sage-Grouse Reproductive Success, The Condor, Vol. 112.

(6) Mezquida, E.T., Steven J. Slater, and Craig W. Benkman. 2006. "Sage-Grouse and Indirect Interactions: Potential Implications of Coyote Control on Sage-Grouse Populations," The Condor 108:747, 752.

Comment Number: OR-GRSG-0193-13

Comment Excerpt Text:

Section G - Predator Control

Predator control can be a critical tool, especially when a species reaches the "point of resistance." Information regarding that can be found in "Game Management" by Aida Leopold (1933), "Wildlife Management, Upland Game and General Principles" by Reuben Edwin Trippensee (1948), and in "Predator Control and Wildlife Management" by William E. Riter (Sixth North American Wildlife Conferences (1941).

Each publication emphasizes the importance that predator control had on antelope population recoveries from the 1900s to 1935. It can be applicable to sage-grouse as well.

Wallahan's theory of "point of resistance" essentially states that once a species' population reaches a certain low point "(or minimum population), below which the species, for reasons unknown, fails to respond to "protection" (Leopold 1933), no amount of habitat will stop their decline unless that species is protected from predators until such time that surplus populations can withstand losses from natural predation and hunting.

"Predators influence distribution and population."- Richard Mackie, Professor, Montana State University, Livestock/Big Game Symposium, Reno, NV (1991)

"Wildlife are not allowed complete ecosystems anywhere, not even in parks or refuges. Wildlife are living in compressed habitat."- Martin Varva, Superintendent, Eastern Oregon Agricultural Research Center

Beaty Butte AMP FEIS (1998) Pronghorn Antelope (pg. 34): A study on the Hart Mountain Antelope Refuge by the USFWS and Oregon Dept. of Wildlife found that the "greatest cause of fawn mortality was predation, 75% by coyotes, 13% by unknown predators, and 5% by eagles" even when "Pronghorn habitat, health and nutrition were found to be excellent. These findings indicate predation, primarily

by coyote, is the major limiting factor on the refuge at this time (USFWS 1997)." [emphasis added]

The conclusion here is that habitat conditions are important, but not critical, and is not necessarily the solution, predator control is. Sage-grouse are habitual and utilize the same leks and nesting areas each year. Predators learn where to find food and pass that knowledge down to their offspring.

A perfect example of the need for predator control is the spotted owl. For 20 years, 18.5 million acres of forest has been preserved for the spotted owl. However, the barred owl, although not a predator, but a competitor for the same habitat, has endangered the spotted owl and the USFWS has proposed to shoot 3,600 barred owls to save the spotted owl.

If the elimination of a fierce competitor is warranted to protect the spotted owl then a continuous predator program for sage-grouse is justified and it's inclusion in the GRSG plan is imperative.

The USFWS is also considering predator control on Oregon rivers to protect salmon by reducing the number cormorants.

Comment Number: OR-GRSG-0193-14

Comment Excerpt Text:

Wildlife Habitats in Managed Rangelands- The Great Basin of Southeastern Oregon, Sage Grouse, Mayo W. Call and Chris Maser (1985)

Breeding Habits (pg. 5-8): "Leks are usually small open areas (1/10 to 10 acres) in size but they may be as large as (1 00 acres or more (Call 1979)."

" ... generation after generation of birds will use the same lek ... (Dalke et al. 1960, Patterson 1952, Wiley 1973). One lek in Idaho may have been used for 90 years ... "

Once predators learn where to find food, that knowledge is passed on from one generation to another. A predator program would break that chain. Should sage-grouse populations reach the carrying capacity of their particular habitat control operations could be temporarily ceased and hunting seasons could keep them in check from exceeding their available habitat.

Comment Number: OR-GRSG-0193-15

Comment Excerpt Text:

Lek and nesting areas are small in nature and could be protected with single-wire electrical fencing and augmented with predator control. Not all leks need such protection. Such measures could be site-specific and temporary until such time critically site-specific low populations rebound. Such protection measures could be mobile in design; used in one area and then moved to another. Trapping would be a useful near leks and nesting areas.

"Egg laying normally begins about mid-April. .. Incubation takes 25 to 27 days ... peak of hatching varies from the last week in May to the second week in June. The mean hatching date in Oregon is the second week in June ... (Patterson 1952)."

Predator control and electrical fencing would be of short duration; March through June. Predator control is imperative during that period.

Comment Number: OR-GRSG-0193-16

Comment Excerpt Text:

Brooding-Rearing Habitat (pg. 9): Dargan and Keller (1940) attributed high mortality of chicks to predation rather than to adverse weather. Predation accounts for considerable mortality in chicks. Most egg predation and nest destruction in Oregon has been attributed to ravens (Batterson and Morse 1948, Girard 1935, Nelson 1955 ... Thus ... predation during the chicks' first weeks of life appears to be critical factors ... (Carr 1968)." (emphasis added]

Predation (pg 12): "Losses of sage-grouse nests and young to predation are often high and are probably the most significant factor in determining annual recruitment to the population (Allred 1942, Autenrieth 1091, Batterson and Morse 1948, Gill 1964, Patterson 1950). (emphasis added]

" ... one study in Oregon in which 66 of 131 nests were destroyed by predators showed that the greatest single limiting factor of sage grouse as nest predation by ravens (Batterson and Morse 1948). Ravens were also the only significant avian predator on sage grouse nests on Autenrieth's (1981) south-central Idaho study area. In other areas, magpies may be important nest predators (Brooks 1930). According to Gill (1965), hens are only present on the nest while actually laying eggs during the 10 to 14 day laying period. They are commonly absent from nests from one-half hour after sunrise to 1 hour before sunset., and nests are highly vulnerable to predators ... Crows also prey on young grouse (Grondahl1956)." [emphasis added]

Comment Number: OR-GRSG-0193-18

Comment Excerpt Text:

The BLM can contract with either local trappers and hunters to trap and shoot coyotes, crows and ravens during the critical times of breeding and brooding or the BLM can contract with the USDA MPH IS to control predators on a continuous and as-needed-by-site basis to promote higher breeding rates and higher chick: hen ratios.

Predator control of ravens and crows during the breeding and brooding periods would require modifying Oregon hunting regulations.

Comment Number: OR-GRSG-0193-20

Comment Excerpt Text:

The ODFW 2011 study shows that "Of the 40% of a grouse population that succumbs to mortality during a year predation accounts for approximately 85% of reported non-hunting mortalities and 79% of nest failures (Bergerud 1988)." [emphasis added]

Higher populations can be achieved and maintained if predator control is used as a tool. The exclusion of predator control within the GRSG Plan indicates that neither the BLM nor the USFWS are serious about the survival of sage-grouse and that the plan is more political in nature and designed to eliminate multiple-uses such as grazing and energy and mineral developments.

Comment Number: OR-GRSG-0220-20

Comment Excerpt Text:

While the Draft RMPA/EIS references that predator control is outside the scope of the decision and that such control is under the authority of the Oregon Department of Fish and Wildlife ("ODFW"), the BLM has taken an overly narrow approach to predator control and overlooks that predator control is within the control of the BLM. First, it arbitrarily assumes that the only control mechanism is through removal. Secondly, it assumes land use activities cannot be an element in predator control. Third, it ignores that predators may be a major influence on sage-grouse populations in specific circumstances.

Comment Number: OR-GRSG-0222-4

Comment Excerpt Text:

Coyotes, crows and ravens are the worst of the bunch. Control them, and sage grouse will increase dramatically. However, Alternative D completely ignores that solution. The GRSG plan is doomed for failure unless we go back to active management policies that resulted in peak deer and sage grouse populations.

Deer and sage grouse were at an all-time high during the 1950s and '60s. Many times, the number of cattle grazing rangeland were more than now, and Lake County had three government trappers.

Comment Number: OR-GRSG-0230-11

Comment Excerpt Text:

The Draft RMPA does not analyze predation in its entirety. The role of predator/prey is very complicated and because disease and predation are one of the five factors USFWS will consider in the September 2015 listing decision, BLM should fully analyze all threats to sage-grouse and not just aspects of the threat. In Vol. 1 p. ES-9, BLM attempts to absolve the agency from responsibility of addressing the entire problem by stating the BLM is responsible for managing habitat only and ODFW is responsible for managing animals. Predator control is eliminated from any detailed analysis based on this premise. However the public is aware of the various studies on sage-grouse with telemetry, actually trapping birds

and tracking them etc. Many of these studies are funded by BLM and BLM biologists are active participants. The agency biologists confer and make recommendations on predator control.

Comment Number: OR-GRSG-0230-12

Comment Excerpt Text:

Harney SWCD recommends BLM enter into an MOU with ODFW to provide a complete analysis of predation in the RMPA induding predator control. Given the increase in predator populations and the lack of scientific data, the BLM should, at a minimum, analyze the conservation guidelines in ODFW's state plan as conservation measures in the RMPA. The BLM should include in a preferred alternative in the RMPA predator control research to begin immediately on public land in appropriate lek areas with ODFW, accredited universities, and the Agricultural Research Service. If BLM does not encompass any or all of these recommendations, the agency should respond in detail in the response-to-comments as to why they chose not to encompass these recommendation(s) in the RMPA.

Comment Number: OR-GRSG-0231-4

Comment Excerpt Text:

Predation is listed as a threat to Sage Grouse within Harney County. The current document does not adequately address predation by choosing to only analyze the habitat influences. An article by Zachary B Lockyer and associates entitled "Greater Sage Grouse Nest Predators in the Virginia Mountains of Northwestern Nevada", published in December 2013 provides results of video monitoring of sage grouse nests. This documents verifies that ravens, American badgers, coyotes, long tailed weasels, Great Basin gopher snakes, bobcats and multiple rodent species are all a threat to sage grouse. All conservation measures that reduce threats to sage grouse on public lands should be analyzed and presented to the public, including predator control.

Comment Number: OR-GRSG-0247-3

Comment Excerpt Text:

have attended several of BLM's Sage Grouse meetings for the DEIS and am very disappointed in how information was received and the complete avoidance of the issue surrounding predation. Hundreds of folks at these meetings have said they see predation as a huge problem

Comment Number: OR-GRSG-0248-1

Comment Excerpt Text:

We have seen excellent recovery of populations of Golden Eagles, Bald Eagles, as well as the common Raven. Is it not true that part of the decline of sage grouse can be blamed on predation by these same bird species? Eagles and Raven populations are on the rise, they are predators to young hatches of the sage grouse. What are the plans for these species of birds that destroy nests of the sage grouse?

Comment Number: OR-GRSG-0276-10

Comment Excerpt Text:

A 4.25-mile (6.9-kilometer) avian predator foraging distance is assumed to adequately encompass possible direct and indirect effects (Boarman and Heinrich 1999; Leu et al. 2008) in instances where increased predation from infrastructure (e.g. power lines, wind turbines, communication towers, agricultural and urban development) is a threat. – Oregon RMPA/DEIS. Pg. 4-9

Engel and Young (1992) determined that non-breeding ravens traveled daily an average 6.9 km in Idaho (up to 62.5 km) from roost sites to distant human-subsidized food sources (i.e., landfills and feedlots). Leu et al. (2008) used the 6.9 km range for common ravens to delineate the ecological effect area of power lines for avian predators. Thus, the selected 6.9 km range as the assumed range for avian predators is not based on any information on actual predation of greater sage-grouse by avian predators, but rather on common ravens making foraging trips to landfills and feedlots that are widely spaced in the landscape.

Comment Number: OR-GRSG-0276-23

Comment Excerpt Text:

Use of Perch Deterrents

Perch-discourager research has shown limited effectiveness in preventing perching, a potential for

increased nesting on discouragers, and an increased electrocution risk associated with perch discouragers (Messmer et al. 2013). To eliminate perching, all potential perching surfaces must have effective deterrents. There are currently no commercially available perch guards designed to keep raptors off an entire structure. The original intent of perch guards was to minimize electrocutions by discouraging birds from perching in electrocution risk areas and encouraging them to perch on other areas of the pole that do not pose an electrocution risk. IPC believes there is a misconception that if a power line is built, high levels of raptor and raven use will ensue. While that may occur in some areas, not all power lines have high raven and raptor use. Predator densities vary regionally due to a variety of factors, including food sources, habitat types, the juxtaposition of habitats, and other factors. Raven and raptor use of power lines in sage-grouse habitat is likely to vary depending on the surrounding land use.

In areas where raven predation on sage-grouse nests is a concern, perch discouragers may aid in the accumulation of nest material (APLIC 2006) and could potentially increase raven predation pressure due to nest construction on discouragers in sensitive areas. In addition, increased electrocution risk associated with poles modified with perch deterrents has been documented. The negative impacts of perch discouragers must be weighed against the limited benefits they may provide, particularly if they are contributing to mortalities of protected birds and facilitating increases in predator nesting populations. It appears the BLM has not investigated the efficacy of perch deterrents and simply assumes perch deterrents are effective on power line structures.

Comment Number: OR-GRSG-0276-40

Comment Excerpt Text:

Text: Pg. 4-9 Assumptions

A 4.25-mile (6.9-kilometer) avian predator foraging distance is assumed to adequately encompass possible direct and indirect effects (Boarman and Heinrich 1999; Leu et al. 2008) in instances where increased predation from infrastructure (e.g. power lines, wind turbines, communication towers, agricultural and urban development) is a threat.

Comment: Engel and Young (1992) determined that non-breeding ravens traveled daily an average 6.9 km in Idaho (up to 62.5 km) from roost sites to distant human-subsidized food sources (i.e., landfills and feedlots). Leu et al. (2008) used the 6.9 km range for common ravens to delineate the ecological effect area of power lines for avian predators. However, other researchers found substantially smaller home ranges for common ravens. In the Mojave Desert of California, nesting ravens hunted live food an average of 0.57 km from their nest (Boarman and Heinrich 1999). Sherman (1993) found that nesting ravens in the east-Mojave Desert of California spent 75% of foraging time within 400 m of the nest with daily trips of several kilometers, probably to obtain water. Based on this information, IPC does not believe that the selected 6.9 km range as the assumed range for avian predators is based on any information on actual predation of greater sage-grouse by avian predators, but rather on common ravens making foraging trips to landfills and feedlots that are widely spaced in the landscape.

Comment Number: OR-GRSG-0302-8

Comment Excerpt Text:

KBR appreciates that the BLM's primary mission is to manage habitat, not wildlife. However, it is critical that any wide-scale GRSG conservation effort—in order to be effective—take a holistic approach to GRSG conservation: i.e. not merely focusing on a limited range of threats, but recognizing the full scope of issues that are compromising the sage-grouse's ability to thrive. It is, for this reason, essential that the BLM's preferred alternative in the final RMPA include a substantial discussion of predators, their impact to the GRSG in Oregon, and possible strategies for managing the predator population.

Ample contemporary evidence has demonstrated that predators are a major cause of sage-grouse mortality. For example, the Oregon Sage Grouse Plan[2] indicates that out of the estimated 40% of a sage-grouse cohort that annually subcomes to mortality,

fully 85% of reported non-hunting mortalities are due to predators. Further, a recently study[3] published by the US Fish and Wildlife Service demonstrated that sage-grouse populations in Nevada's Virginia Mountains had a cumulative nest survival rate of only 22.4%, with depredation being the primary cause for 82.5% nest failures in the study. According to the authors, "common ravens were the most frequent sage-grouse nest predator, accounting for 46.7% of nest depredations."

The impact of predators is significant and directly relevant to the survival of the GRSG. However, predation is neither discussed nor evaluated in the RMPA. This is unacceptable. The BLM Land Use Planning Handbook makes clear that the BLM is expected to cooperate with state wildlife agencies to achieve goals for wildlife populations on BLM-managed land by "working in close coordination with state wildlife agencies," "drawing on state comprehensive wildlife strategies," and identifying actions "needed to achieve desired population and habitat conditions while maintaining a thriving ecological balance and multiple use relationships."

Given this direction, it is clear that the BLM should, as part of its strategy to protect the GRSG in the Oregon sub-region, consult with, jointly study, and jointly develop a predator management strategy for PPMA and PGMA with ODFW. Further, it is entirely permissible, and in keeping with the language in the BLM Land Use Planning

Handbook, for the BLM to enter into a memorandum of understanding (MOU) with ODFW that articulates a cooperative approach to studying and managing predator populations.

The RMPA should include a section that discusses at length the impact of predators to sage-grouse populations in Oregon. The RMPA should include an objective of partnering with ODFW to study and manage predators, specifically crows and ravens, in core sage-grouse habitat areas. The RMPA should recommend establishing an MOU with ODFW to cooperatively manage predator populations on sage-grouse habitat.

Comment Number: OR-GRSG-0309-3

Comment Excerpt Text:

Predation

Although the United States Fish and Wildlife Service identified predation as a low threat to Sage grouse, one would be remiss not to discuss this issue. Sage grouse are one of the most preyed upon species on the desert landscape. Just about every carnivore or omnivore on the sagebrush steppe preys upon Sage grouse. In a study done in the Virginia Mountains in North Western Nevada, trail cams captured pictures of Sage grouse and their nests being attacked by various different aggressors. Crows, ravens, coyotes, bobcats, snakes, ground squirrels, among others were filmed attacking birds and their nests.

Without an effective predator control program, there should be low expectations for Sage grouse numbers in the Western United States. It is hard to take serious a plan that is pointed, or comprehensive, that does not address predator control. Any species of animal can be provided with perfect habitat, but if they are killed on a large scale before they can take advantage of that habitat all efforts are pointless. I would ask that the BLM have realistic expectations for Sage grouse recovery in light of not addressing predator control.

Comment Number: OR-GRSG-0379-2

Comment Excerpt Text:

Predation control as a management alternative has been incorrectly precluded from consideration during the scoping process and inadequately addressed in the DEIS. BLM appears to believe that it has no obligation to consider reasonable alternatives because such alternatives are not within the jurisdiction of the lead agency. Avoiding the obligation to consider reasonable alternatives not within the jurisdiction of the BLM is contrary to federal law. 40 CFR 1502.14

Comment Number: OR-GRSG-0382-1

Comment Excerpt Text:

Long term funding for predator control could be established by setting up a tax exempt organization for the purpose of saving the Greater Sage Grouse (501 c3) and collecting contributions. The reason this would work is because it also helps many of the ranchers and sportsmen who utilize the areas impacted by the Greater Sage Grouse. Many of these ranchers are paying for predator control with after tax dollars. Today and for many years the sportsmen have contributed to the costs of both raven and coyote control. Funding would not have to come from the BLM's budget. Voluntary contributions would quickly become enough to be selfsustaining from a foundation established for predator control A portion of the USDA-APHIS already performs this task.

Comment Number: OR-GRSG-0396-4

Comment Excerpt Text:

Couldn't a bounty be put on the known predators and let the sportsmen help. It may not change the situation quickly but over time it should have some positive effect. The bounty in the 1960s on porcupines significantly reduced their numbers. The Forest Service also hunted the porcupines into the 1990s. It is very rare to see a porcupine today.

Comment Number: OR-GRSG-0447-3

Comment Excerpt Text:

Predation is a threat to GRSG as provided in the USFWS 2010 decision on listing. West Nile Virus and control of mosquitoes which is not under BLM's direct control either is addressed. There should be some collaboration between government agencies on GRSG and predators are one area. BLM manages 52% of GRSG habitat so all threats should be analyzed. Predator populations have increased in the last 30 years.

Comment Number: OR-GRSG-0461-2

Comment Excerpt Text:

Predators are the main factors that are not allowing these birds to repopulate. This RMP is flawed and without them being within these pages there will be a continued decline of Sage Grouse and all birds. The most pristine Sage Grouse habitat will not bring animals back that are in the bellies of Eagles, Ravens, Red tail hawks, Foxes, Coyotes, snakes ETc... These predatory animals are abundant (tenfold) and are multiplying rapidly since the early 90s and they are killing more sage grouse than any other reason and these pages should be filled with their direct effect on the Sage Grouse. The BLM needs to take a Hard Look why they are not being blamed for the majority of these bird deaths throughout the pages of the Oregon Sub-Region Greater Sage-Grouse Draft Resource Management Plan Amendment and Environmental Impact Statement.

Comment Number: OR-GRSG-0461-3

Comment Excerpt Text:

The BLM is not attempting to control domesticated predators either. Cats and dogs are being allowed to roam at will within know Sage Grouse lands. Nowhere in this document is it noted that these domesticated predators are being allowed with their owner's approval to roam freely and at will within Sage Grouse habitat. As this issue is not mentioned within these pages and at public meetings this RMP is flawed and the BLM needs to take a Hard Look at this issue and rewrite this RMP.

Comment Number: OR-GRSG-0471-2

Comment Excerpt Text:

The obvious major impact of predators (human, fowl, and four legged) on sage grouse populations must be better addressed in Alternative D, with emphasis upon the actions the BLM will encourage in reducing predatory impacts on the sage grouse.

Comment Number: OR-GRSG-0503-1

Comment Excerpt Text:

Ravens, coyotes and other predators are hard on the nesting hens and their young and are a large cause of loss of existing GRSG nests and their young. Nowhere in the BLM/USFS and USFW Document do I find any mitigation of predators anywhere.

Comment Number: OR-GRSG-0532-70

Comment Excerpt Text:

Pg. ES-9 Predator Control - This is the only section in the document that addresses predators. While it may be true that the BLM has no control over the predatory species themselves, this is an issue that still needs to be addressed in more detail. The existence of the MOU between The BLM, USDA, APHIS and ODFW for predator control should at least be referenced and include an explanation of what is being done to control predators and how the MOU affects sage grouse populations. Predator control can also be non-lethal. Species like ravens have benefited from human subsidies of food (e.g., roadkill) or the addition of structures on the landscape which can be used for nesting or perching. BLM does have the ability to influence predator abundance through its land and habitat management so it must be addressed in greater detail in this DEIS.

Comment Number: OR-GRSG-0558-8

Comment Excerpt Text:

Predation is another main factor for a decline in sage-grouse numbers; however, the BLM ignores this issue by saying it is outside of their management. That may be the case to some point, but it doesn't remove the BLMs responsibility to analyze what is being done to address predators by other agencies, especially in the cumulative effects section.

Comment Number: OR-GRSG-0591-84

Comment Excerpt Text:

In some areas, tamarisk and Russian olive are increasing in riparian areas; we are concerned that this will also degrade brood-rearing habitats through sage grouse avoidance of trees and creation of raptor perching and nesting habitat. BLM itself acknowledges that treeless riparian edges and wetlands are important brood-rearing habitats (DEIS at 3-23); the presence of trees gives perching opportunities for avian predators and results in behavioral avoidance by sage grouse. What is the relationship between tamarisk and Russian olive invasion and livestock overgrazing in riparian habitats, and what does BLM propose to do to address the spread of these invasive trees?

Comment Number: OR-GRSG-0600-1

Comment Excerpt Text:

Mitigation of predators was not included in the EIS or plans offered and must be addressed before moving forward.

Comment Number: OR-GRSG-0624-2

Comment Excerpt Text:

Predator Control

- Predator reduction should be part of the plan. Predation is the primary demonstrable source of mortality to sage grouse. Sage grouse eggs are preyed upon by a wide variety of predators including red foxes, coyotes, badgers, black-billed magpies, badgers, and bobcats. Sage grouse broods are prey to ravens, red foxes, raptors, ground squirrels, snakes, and weasels

Comment Number: OR-GRSG-0632-5

Comment Excerpt Text:

Alternative D states restoration projects will be prioritized and coordinated with USFWS along with other agencies to prioritize protection of sagebrush habitat although nothing is mentioned about coordinating with the USFWS on predator control. Predation control should not be ignored as GRSG eggs are preyed upon by many predators including coyotes, badgers, magpies, and ravens.

SECTION 32.2 - NOISE

Comment Number: OR-GRSG-0026-5

Comment Excerpt Text:

On page 2-87, Alternative D uses 3.2 miles when evaluating the effects of noise on leks, however, on page 4-18 the distance is 2 miles.

Comment Number: OR-GRSG-0095-13

Comment Excerpt Text:

The Final EIS should also cite the new Blickley study that is currently in preparation.152 Alternative D should extend noise restrictions in terms of timeframe and level for all development, including the construction and use of ROWs and the exploration of all minerals.

151 DEIS, at 2-95.

152 Draft DEIS, at D-5 (citing Patricelli et al. 2010 and Blickley et al. In Preparation).

SECTION 32.3 – INVASIVE PLANTS

Comment Number: OR-GRSG-0062-8
Comment Excerpt Text:
Adopt and promote an invasive species related prevention/education program based on the tenets at - http://playcleango.org/

Comment Number: OR-GRSG-0078-3
Comment Excerpt Text:
Invasive Species

The RMPA/DEIS does not analyze invasive plant species in a way that fulfills the PURPOSE AND NEED of the document. The preferred alternative states that the GRSG Wildland Fire and Invasive Species analysis will be completed by December of 2014 (RMPA Vol. I, Table 2-6 pp. 2-76). This analysis must be completed and included within the RMPA/DEIS to provide adequate documentation of regulatory mechanisms to assist the USFWS in their determination, meet the purpose and need of the document, and provide an avenue of public comment on proposed invasive species management. The RMPA/DEIS identifies some specific management activities, but does not provide a cohesive plan or analysis in any alternative on how the BLM would lessen the primary threat of invasive species. References: RMPA Vol. 1, D-WFM 32, pp 2-75 & 2-76; Vol III, Appendix H; Vol II chapter 4, Tables 4-3 & 4-4, p. 4-22 and Vol. II p. 5-30 par. 6.

Comment Number: OR-GRSG-0093-157
Comment Excerpt Text:
3. Passive restoration techniques may result in increase of weed spread. Loss of integrated weed management through weed control cooperative range improvement agreements will result in an increase in invasive plant species (Page 4-12). The language used within the cumulative impact section Page 5-22 and Page 5-28, states "Alternative C could also impact weed control agreements with lessees, which would reduce the resources available to combat weed spread on BLM lands." This does not adequately assess or explain the cumulative impacts of the decision.

Comment Number: OR-GRSG-0093-69
Comment Excerpt Text:
Page 4-12 and Page 4-14. The RMPA/DEIS recognizes that the loss of cooperative weed agreements would increase the spread of invasives. It should also address the fact that restricting or terminating grazing will mean the loss of cooperative weed agreements as ranches are no longer available for the agreements.

Comment Number: OR-GRSG-0093-70
Comment Excerpt Text:
Further, the statement on Page 4-35 should include a discussion that recognizes the impact of eliminating activities. Elimination of activities can cause an increase in invasive species if the area is not being regularly observed by permit holders or agency staff administering permits. In addition, unmanaged and abandoned areas can experience invasive population increases precisely because they are not being managed for a particular use. Livestock permittees are just as anxious as agency personnel to remove detrimental invasive species because they are concerned about wildfire risks and reduced rangeland health, which ultimately results in less healthy rangeland and reduced forage production. Removing permittees from an area will mean less help in the field to address invasive species. Particularly in light of current staff loads, this could be highly detrimental to the BLM's goals for invasive species

Comment Number: OR-GRSG-0093-72
Comment Excerpt Text:
Page 4-69 states: "New invasions of noxious and invasive weeds would continue to occur and spread as a result of ongoing vehicle traffic in and out of the planning area, recreation, wildland fire, wildlife and livestock grazing and movements, and surface-disturbing activities."

The items above are not the only vectors for invasive weeds spreading. Birds, insects, rodents, rabbits, coyotes, deer, elk, antelope, etc., are also vectors.

Comment Number: OR-GRSG-0093-73

Comment Excerpt Text:

Page 4-70: The following statement does not apply to all invasive plants: "Invasive plants can alter plant community structure and composition, productivity, nutrient cycling, and hydrology and can competitively exclude native plant populations." The statement is expressing too many concepts that have not been factually established in the research.

Comment Number: OR-GRSG-0093-74

Comment Excerpt Text:

Page 4-129. This page states the following: "Recent research indicates that the increase in fine fuel loading, particularly the build-up of litter in bunchgrass crowns, from the removal of grazing can increase bunchgrass mortality in a fire, facilitating the spread of invasive plants."

Recommendation: Provide a cite such as Strand and Launchbaugh (2013) and the articles it cites to support this statement.

Comment Number: OR-GRSG-0093-75

Comment Excerpt Text:

Page 5-27: Under all alternatives, integrated vegetation management would be used to control, suppress, and eradicate noxious and invasive species. In some cases of new infestations, of a few plants, for example, eradication can occur. For larger infestations, eradication is likely an unrealistic goal. Being able to manage invasive plants is realistic and workable on many sites. Recommendation: Delete the word "eradicate." Use the phrase "achieve manageable populations" of noxious and invasive species.

Comment Number: OR-GRSG-0134-13

Comment Excerpt Text:

Planning criteria for the draft plan includes developing management objectives for controlling invasive species in sage-grouse habitat (1-22). Invasive species are identified as a primary threat to sage-grouse in Oregon (2-11; 4-70) and millions of acres of public lands in the planning area are moderately or highly vulnerable to cheatgrass incursion (3-32, Table 3-8). However, and although the draft plan acknowledges that grazing can reduce resistance of native vegetation communities to cheatgrass incursion (4-13; 4-89; 4-129), it does not proscribe grazing where cheatgrass occurs to avoid contributing further to its spread on the landscape. In fact, the draft plan suggests that grazing can reduce the spread of invasive grasses, if applied annually before the grasses have cured—without citing scientific support (4-13) and ignoring published research to the contrary.

Comment Number: OR-GRSG-0281 (FrmLtr11)-17

Comment Excerpt Text:

Vol 1, page 2-60 Actions VG/RM 9: Reject C, D, E, F and accept Alternative B. Alternative D conflicts with the use of non-native if it is available and needed due to ecological site conditions. This would be a site-specific decision which is beyond the scope of this broad landscape DEIS.

Comment Number: OR-GRSG-0281 (FrmLtr11)-42

Comment Excerpt Text:

Comment, Vol 2, page 4-71: Direct protection of sagebrush habitat to support GRSG would limit or modify uses in this habitat type. Such use restrictions would reduce damage to native vegetation communities and individual native plant species in areas that are important for regional vegetation diversity and quality. Likewise, use restrictions would minimize loss of connectivity and would be more likely to retain existing age class distribution within these specific areas. Use restrictions could also minimize the spread of invasive species by limiting human activities that cause soil disturbance or seed introductions.

Soultion: Use restrictions could also increase the spread of invasive species. Doing nothing to manage invasive plants is a decision that does not work. Wildlife and wind transport weeds. Connectivity

could be lost where native vegetation was not managed in a healthy, vigorous state.

Comment Number: OR-GRSG-0281 (FrmLtr11)-55

Comment Excerpt Text:

Comment: Vol 2, page 4.69: New invasions of noxious and invasive weeds would continue to occur and spread as a result of ongoing vehicle traffic in and out of the planning area, recreation, wildland fire, wildlife and livestock grazing and movements, and surface-disturbing activities.

Solution: The items above are not the only vectors for invasive weeds spreading. Birds, insects, rodents, rabbits, coyotes, deer, elk, antelope, etc.

Comment Number: OR-GRSG-0281 (FrmLtr11)-58

Comment Excerpt Text:

Comment Vol 2, page 4-70: We do not agree with this statement: Invasive plants can alter plant community structure and composition, productivity, nutrient cycling, and hydrology and can competitively exclude native plant populations.

Solution: All invasive plants do not fit what is being stated. The statement should be deleted or edited to reflect what the DEIS can cite for a reference, because it is expressing too many concepts that likely have never been factually established in the research.

Comment Number: OR-GRSG-0356 (FrmLtr07)-8

Comment Excerpt Text:

Alternate D-VG 35 states: "Use of approved herbicides, biocides, and bio-controls is allowed on all land allocations currently providing or reasonably expected to provide GRSG habitat." This is an accurate statement, however, practical delivery for control on special land designations may not be possible. For example, Wilderness Study Areas and Wilderness designations do not allow aerial or mechanical application

Comment Number: OR-GRSG-0433-31

Comment Excerpt Text:

The majority of sage-grouse habitat is within 2.5 km of a mapped road (Knick et al. 2011), and many unmapped roads and ORV trails crisscross BLM lands. Roads can influence the spread of roadside weed infestations into neighboring lands. Many studies show that the number of weed species in an area increases dramatically with the density of roads (Gelbard and Belnap 2003). Invasive weeds are not a food source for grouse, these weeds can outcompete sagebrush and make habitat more prone to fire. The risk that weeds like this will spread from roads and ORV trails into adjacent ecosystems varies depending on the site. It is highest where ORVs leave designated trails and disturb plants and soils, especially on deeper and more fertile soil types, which tend to be most susceptible to invasion.

Comment Number: OR-GRSG-0433-39

Comment Excerpt Text:

Once introduced or established, weeds "alter plant community structure and composition, productivity, nutrient cycling, and hydrology and may cause declines in native plant populations through competitive exclusion and niche displacement, among other mechanisms" (USFWS 2010). Invasive plants reduce and eliminate vegetation that sage-grouse use for food and cover, and do not provide quality sage-grouse habitat (USFWS 2010). Weeds are spreading at a rate of 2,300 acres per day on BLM land and 4,600 acres per day on all public land in the West (USFWS 2010).

Comment Number: OR-GRSG-0434-25

Comment Excerpt Text:

Restoration without prevention is a waste of agency time and money. Restoration and prevention processes may require different activities, first to restore damaged ecosystems and then to prevent the conversion of healthy ecosystems, moderately degraded ecosystems, or recently restored ecosystems into degraded ones. In some cases, the same activities are required for both restoration and prevention. Similar to the need to establish a priority list of habitat types for sagebrush treatment and

restoration BLM should also develop a prioritized list in Action D-VG 32 of locations and habitat types for invasive species treatments. The non-prioritized list in the DEIS does not allow adequate understanding of where treatment resources will be allocated or how those action swill impact invasive species or other resources.

Comment Number: OR-GRSG-0434-26

Comment Excerpt Text:

We also suggest that the DEIS include further detail describing where and how the allowable methods of invasive plant control identified in Action D-VG 33 will be utilized. The DEIS should include parameters for the use of each type of plant control based on habitat type and type of invasive species. The steps identified in Appendix H for the "stepdown assessment" of invasive species may be adequate, but the results of that assessment for invasive species are critical components of the DEIS and should be included in the proposed action.

Comment Number: OR-GRSG-0489-8

Comment Excerpt Text:

BLM should identify inventory and mapping of invasive species as a specific action (likely in Table 2-6) to be completed under the proposed alternative. Priority should be given to mapping exotic annual grasses, since these play the largest role in accelerating the fire cycle and since fire and invasive species are the greatest threat to sage-grouse in Oregon. The inventory of invasive species (especially exotic annual grasses) mentioned above should be an integral piece of the BLM's fire management planning as proposed in Alternative D, When completing an interagency, landscape scale assessment to prioritize at-risk habitat and identify fuels management, preparedness, suppression, and restoration priorities (Action D-WFM 1), the location of annual grass infestations is an important consideration.

The NRCS Sage Grouse Initiative Oregon Implementation Strategy (2013) has estimates of acres where annual grasses are dominant or subdominant, broken out by private and public lands and by ODFW sage-grouse Action Area. This may serve as a good resource for the BLM in further quantifying the extent of this threat.

Comment Number: OR-GRSG-0532-10

Comment Excerpt Text:

With a million acres infested with invasive annual grasses and noxious weeds, the State would like to see greater emphasis in the DEIS on weed treatment and native habitat restoration as a priority, including multi-landowner coordination and multi-tool treatments. Coordination of invasive weed treatments with adjacent owners—including State and private lands–will facilitate joint restoration projects for landscape level improvements and minimize re-infestations. Effective weed control depends on a multi-tool approach (i.e., herbicides along with grazing, mechanical treatments, and prescribed burns), recognizing that certain tools require significant care in their application and that new tools / techniques (e.g., the use of the strain of Pseudomonas fluorescens bacteria) are emerging through research and adaptive management. The State would like to continue to work with BLM on development of a coordinated multi-landowner and multi-tool approach as BLM works to refine this DEIS.

Comment Number: OR-GRSG-0532-11

Comment Excerpt Text:

The DEIS recognizes the need for identifying priority areas for restoring and maintaining native sagebrush, grass, and forb communities important to GRSG. That said, Action D-VG 1 is broad and somewhat vague in describing considerations for selecting treatment and restoration sites and target levels of treatment in order to address the invasive plant threat. The State recommends and would like to work with BLM and other stakeholders on the development of a prioritization approach associated with Action D-VG 1, which could build upon existing elements in Alternative D and the additional suggestions below.

As noted earlier, Early Detection and Rapid Response (EDDR), which is the practice of actively conducting systematic detection surveys for these invasive plants, and if detected, aggressively treating and controlling

them before they gain a foothold, is a critical strategy in habitat protection. Studies have shown a 34:1 cost-benefit for EDRR.

The State recommends additional emphasis on the EDDR in the final EIS and prioritization of additional resources for EDRR and associated invasive plant treatment efforts in the following prioritized order:

- new infestations,
- satellite populations,
- isolated populations,
- invasive species still subdominant,
- edges of large infestations,
- sites frequently used for temporary infrastructure such as incident base camps, spike camps, staging areas, and heli-spots.

When applying the GRSG lens to the above prioritization order, PPMA would be the primary focus (i.e., new infestations located within PPMA would rise to the top of the priority list). PGMA should not be ignored, but given the likelihood of limited resources, PPMA is the primary place to look when advancing treatments according the above order. Focusing EDDR-based invasive weed treatments and restoration activities on infestations that are proximate or within areas of seasonally limiting habitats (broodrearing, wintering, nesting) and connectivity corridors is also important, with the latter being especially relevant where smaller, more isolated populations or subpopulations exist. Finally, where significant disturbances exist within PPMA and PGMA from fire in areas of existing infestation, these areas should be immediate prioritized for EDDR-based attention and reseeding efforts as discussed later in these comments. This is particularly important in lower elevation, drier sagebrush habitats.

Comment Number: OR-GRSG-0532-12

Comment Excerpt Text:

The State recommends modifying Alternative D to add monitoring and treatment of invasive species associated with existing range improvements to the goal of PPMAs (recommendation under Alternative B). BLM is in the process of conducting nine EAs for site-specific analysis under their Vegetation Management EIS that includes 17 herbicides. The use of the herbicide Imazapic currently does not have the site-specific analysis for multiple complex vegetation management situations on most BLM districts. Some districts, including; Burns, Prineville and Lakeview districts have completed EAs that allow for the use of Imazapic post-fire for control of weeds such as medusahead and cheatgrass that represent the greatest threat to GRSG habitat. Adding monitoring and treatment of invasive species to the goal of PPMAs allows resources to be prioritized for these efforts.

Comment Number: OR-GRSG-0532-14

Comment Excerpt Text:

- Pg. 3-38 Line 8 under Invasive Plants - Delete "invasive plant species"
- Pg. 3-38 - Need to include discussion about how over-utilization by livestock can facilitate invasive plants (e.g., Reisner et al. 2013).

Comment Number: OR-GRSG-0532-145

Comment Excerpt Text:

- Make areas with invasive annual grasses / noxious weeds priority areas for Action D-VG 23 (pg. 2-64). Areas with minimal threat of being colonized by invasive species likely do not need restoration unless intense wildfire damages the soil seed bank. However, given that invasive annual grasses / noxious weeds are one of the top three threats to GRSG and rangeland health overall, it would be prudent to put additional effort into restoring areas invaded by these species.
- Action E-VG 31 - "Systematic and strategic detection surveys should be developed and conducted in a manner maximizing the likelihood of finding new patches before they expand. Once patches are located, seed production should be stopped and the weeds

should be eradicated. The most effective tools for eradication of many weeds are herbicides and possibly bio-controls." This Action needs to be included in Alternative D to improve knowledge of the quantity, location, and species of noxious weeds occurring on BLM-administered lands.

- Action D-VG 38, Action D-VG 39, Action D-VG 40, Action D-VG 41 (pg. 2-67) - As a neighboring land owner, the State has concerns about fire suppression activities regarding the spread of noxious and/or invasive weeds. Washing equipment is a step in the right direction for reducing weed transfer, however, using wash stations in active gravel pits and storage sites where material is then spread over miles of roads increases weed problems in ROWs. Similarly, base camps should not be placed where noxious and/or invasive weeds are found. Where possible, fire lines (dozer and hand line) should avoid areas where noxious or invasive weeds are present. Understanding this cannot always be avoided, this will help to minimize the spread of weeds in post-burn restoration.

Comment Number: OR-GRSG-0591-58

Comment Excerpt Text:

Livestock grazing also leads to cheatgrass invasion, as overgrazing eliminates native bunchgrasses and degrades biological soil crusts, both of which represent the ecosystem's natural defenses against this invasive weed (Reisner et al. 2013, Attachment 18). In order to minimize the spread of cheatgrass, livestock forage removal limits need to be set under the RMP amendment, allowing no more than 25% of the available forage to be consumed each year (see Braun 2006, Holechek 2010). BLM must restore degraded habitats by managing for elimination of cheatgrass from the system.

Comment Number: OR-GRSG-0591-61

Comment Excerpt Text:

Thus, livestock grazing plays a key role in the spread of cheatgrass and suppression of native bunchgrasses, both pre-fire in the sagebrush understory, and post-fire leading to conversion to annual grasslands.

Yeo (2005) demonstrated that cessation of livestock grazing leads to recovery of grass cover in sagebrush ecosystems, and restoration of rangeland health. BLM's 'hard look' failure in this instance leads to the result that the appropriate management actions (removal of livestock grazing entirely from cheatgrass-infested ranges, or at the very least removal of livestock from allotments that have burned for a minimum of three years) are not applied in either of the Preferred Alternatives. It also is responsible for the clearly erroneous conclusion regarding livestock removal, "Alternative C is likely to be the least fective of all the alternatives in controlling invasive plant species, and could contribute to population loss, loss of habitat, and habitat degradation and fragmentation." DEIS at 4-41. Please explain why this outcome has not occurred on the Hart Mountain Wildlife Refuge (see Ellsworth and Kauffman 2013), also in Oregon, where livestock grazing was removed in sage grouse habitats and elsewhere. We are also concerned that this assumption has biased the results of the impacts analysis regarding Alternative C, which should have the best performance in long-term range health due to removal of the leading cause of range health decline, domestic livestock. We are concerned that this bias in impacts analysis leads the agencies to erroneous conclusions regarding relative fire risk across alternatives.

Comment Number: OR-GRSG-0591-62

Comment Excerpt Text:

In some areas, tamarisk and Russian olive are increasing in riparian areas; we are concerned that this will also degrade brood-rearing habitats through sage grouse avoidance of trees and creation of raptor perching and nesting habitat. What is the relationship between tamarisk and Russian olive invasion and livestock overgrazing in riparian habitats, and what does BLM propose to do to address the spread of these invasive trees?

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