From:	Clayton, Creed
To:	Ireland, Terry
Subject:	Re: Newest version of GRSG Public Draft EIS Comments
Date:	Sunday, November 17, 2013 12:50:12 PM
Attachments:	Comments on GRSG Public Draft EIS pd TI CC edits 11-17-13.doc

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My comments attached.

For our cover letter and briefing for Noreen, I think our primary recommendations include these (here is some draft language):

We recommend including in the final plan year-round protection for all leks (in ADH). This would apply to fluid minerals, rights-of-way, mining, and other significant surface disturbing actions. The commonly accepted buffer distance for lek protection is 0.6 mile. However, recent local data may suggest that a larger buffer (perhaps closer to one mile) is more appropriate to protect lekking and nesting GRSG.

We are also recommending that the disturbance cap be applied to all habitats used by GRSG, not just the sagebrush habitat types identified in the EIS. The disturbance cap would then be applied to specific grasslands, meadows, and shrub types surrounding leks, which are used by GRSG.

Additionally, we are recommending that a disturbance density cap be included in the final plan. As in two of the alternatives in the EIS, we believe that an average density of no more than 1 disturbance per 640 acres is a level of disturbance that can be compatible with a sustainable GRSG population.

.....

Terry, also, I was going to remove from our comments my paragraph recommending that IF an exception to the 0.6 mile lek buffer is made, then all disturbance within 0.6-mile should be included in the cap (regardless of habitat type). I didn't see it in there anymore though; perhaps you already removed it. Sounds good.

On Sun, Nov 17, 2013 at 11:29 AM, Ireland, Terry <terry_ireland@fws.gov> wrote:

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Comments on Northwest Colorado Greater ~~RS~~Sage-grouse~~G~~ Public Draft EIS

~~Note: Red highlighted questions/comments in brackets need to be answered internally or with BLM.~~

GENERAL

We have reviewed the DEIS considering the objectives identified in the 2013 Conservation Objectives Team report (COT report), which details the necessary actions for the conservation of greater sage-grouse. Alternative D as presented in the DEIS most closely meets the objectives identified in the COT report, with the following necessary modifications.

Appendix B, Fig. 2-1, p. B-7 (and Appendix G, Cap Management): Many lek sites and surrounding habitats occur outside of the GIS SWReGap vegetation classes that identify ecological sites supporting sagebrush (Figure 2-1). By our calculations, approximately 10% of the leks (and vegetation within 200 m) in Colorado occur in three other vegetation classes: Inter-mountain Basins Semi-Desert Grassland, Rocky Mountain Lower Montane-foothill Shrubland, and Southern Rocky Mountain Montane-Subalpine Grassland. These vegetation classes should be included in the habitats subject to the disturbance cap because these mapped areas are important to GRSG in Colorado. Therefore, the disturbance cap should apply to all "sage-grouse habitats" rather than "ecological sites supporting sagebrush." This would allow for limited disturbance on all habitats used by sage-grouse, not just sagebrush types, including grassland, mesic meadow, and mountain shrub vegetation types. We realize that a site-specific disturbance cap analysis will need to be done when permitting individual projects, and that leks would likely be included in the [cap] analysis and calculations, independent of ecological site maps" (p. F-3). For the purposes of NEPA analysis, and because maps used for planning purposes are often extended beyond their original intent, the three additional vegetation layers should be included in Fig. 2-1.

Appendix F: Please provide a justification for allowing 5% disturbance in PPH versus the NTT recommendation of 3% or a lower disturbance level. In paragraph 2 of this Appendix, it should state: "Alternative D limits anthropogenic disturbance in PPH to 5 percent of ecological sites capable of supporting…"

P. F-3, lines 20-34: The disturbance cap would apply to ecological sites supporting sagebrush and areas specially identified by CPW as contributing to the health of GRSG populations, independent of ecological site maps. The disturbance cap should be applied to all habitats within 0.6 mile of known leks.. Disturbance and human activity in close proximity to active leks, nesting, and brood rearing habitat disturbs sage-grouse regardless of the habitat type in which the disturbance occurs. Applying this consistent buffer would also simplify necessary habitat mapping efforts, reduce the likelihood of habitat mapping errors, eliminate habitat assessment discrepancies near leks, and help to protect non-sagebrush habitats that can also be important to GRSG (e.g., grassland in proximity to sagebrush).

P. I-4, Table I.1, row 13: Apply Alternative D to ADH for all new wells and existing wells.

Comment [K1]: ?? "Necessary" is too strong in my opinion.

Comment [K2]: I recommend rewording to state, "We believe that the measures outlined in Alternative D, along with our additions and modifications, meet the objectives identified in the COT report.

Comment [UF&WS3]: We should not recommend a specific alternative at this point ,but rather components from existing alternatives that can be cobbled together to make a better option. Hence my suggested edits.

Comment [UF&WS4]: Suggest numbering comments for clarity.

Comment [IT5]: Pat, just in the general section or all sections?

Comment [UF&WS6]: This sentence confused me so this is a suggested re-write. I hope I caught the intent….

Comment [UF&WS7]: It currently reads "less than" which isn't accurate. Leads the reader to believe it 4% and below

Comment [K8]: I don't have Table I.1 with me right now, so I don't know what this is about. But, assuming this is appropriate, I would reword it to say "For the proposed plan, we recommend using the language from Alternative D, but applying it to ADH." We believe this is important for the protection of GRSG because….

Appendix G: The Surface Reclamation Plan ~~(Appendix G)~~ developed by the White River Field Office was included as the model to follow for reclamation of surface impacts. However, on P. 168, Table 2.4, Fluid Minerals, NTT #60 it states that bonds would be secured to ensure that reclamation "…would result in full restoration of the lands to the condition it was found prior to disturbance." Please describe the discrepancy between this standard and the ~~This reclamation standard differs from the~~ standard in Appendix G ~~and, thus needs to be consistent or explained why it's different~~. Also~~, the reclamation language in~~ Appendix G states that "Reclamation success criteria on sage-grouse habitats would generally be contingent, where prescribed, on evidence of successful establishment of desired forbs and sagebrush. Reclaimed acreage would be expected to progress without further intervention to a state that meets sage-grouse cover and forage needs based on site capability and seasonal habitat use as per Appendix A, "Structural Habitat Guidelines" from the *Colorado Greater Sage-grouse Conservation Plan*." The Service recommends that a minimum threshold of reclamation success based on GRSG habitat ~~strucuture~~structure be identified ~~stated~~ in the Final EIS to clearly define ~~as it is unclear at what point the BLM/USFS would declare~~ reclamation successful for GRSG. ~~and, therefore, when the reclaimed disturbance could be taken out of the total disturbance for monitoring of the disturbance cap allowed in the 21 Colorado management zones. [Added 11/8/13. Needs discussion.]~~

Table 2.4: An often-used conservation measure under Alternative D in the DEIS paraphrased here states: 'in each of the 21 ~~CO~~ Colorado management zones ~~for ADH of main~~retain~~ing~~ ~~at least~~ a minimum of 70% of ecological sites capable of supporting~~in~~ 12% canopy cover of W~~Y~~yoming big sagebrush or 15% canopy cover of ~~of~~ mountain sagebrush with a 30% disturbance cap from loss of sagebrush from all causes (anthropogenic, wildfire, plowed field agriculture, and vegetation treatments, mappable stands of cheatgrass and PJ, but not irrigated meadows…'. Although we recognize the intent of this conservation measure is to not count things such as wildfire and cheatgrass in the 5% anthropogenic disturbance cap, use of this conservation measure depends on scale and location. Consequently,~~W~~ we request that use of this conservation measure be justified in the FEIS including a description of supporting information. Furthermore, if the conservation measure remains in the FEIS there needs to be a clarifying statement added to it that no new anthropogenic disturbance will be authorized if the 30% cap is reached (even if fire, for example, is the primary reason the cap is reached).

~~[Is a~~Table 2.4: An often-used caveat under Alternative D paraphrased here states~~ing~~ that the DEIS will: 'consider GRSG habitat requirements in conjunction with all resource values managed by BLM/USFS, and give preference to GRSG habitat unless site-specific circumstances warrant an exemption'. Please identify or bookend the potential exemptions in the FEIS. Furthermore, the FEIS needs to state that reporting of exemptions or exceptions will be done. ~~acceptable?~~]

~~[Are the color rankings in the COT review matrix supposed to be ranked by compliance with the COT objectives/measures/options or the level of threat in our State, or a combination of both?~~

~~PACs~~

Comment [UF&WS9]: the specific vegetation requirements listed in Colorado's Conservation Plan should be cited as well as the measure of 'functionality' or 'occupancy' and whether they are included in the definition of "restoration success". Too often "reclamation success" could be and is defined as vegetation established to reduce the risk of erosion… not taking into consideration the functionality of the restored vegetation relative to GRSG needs.

Comment [IT10]: Pat are you saying to add more here or in the FEIS?

Comment [UF&WS11]: This is a minimal canopy cover.

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Comment [IT12]: Pat, *what* exactly depends on scale and location?

Comment [IT13]: Pat, as BLM informed us this conservation measure is not included in other DEIS's. Given that we are wondering how impacts of large fires are being addressed in reference to disturbance caps if something like this conservation measure is not included in the other DEIS's?

Comment [UF&WS14]: This is a mis-interpretation of the literature. It depends on the scale and location, so its fair to ask for justification of this measure, including a description of supporting information.

Comment [IT15]: Pat, what do you mean by bookend?

Comment [UF&WS16]: Are the exemptions identified, or at least bookended? If not we need to ask for that clarification. Otherwise this is o.k.

Comment [UF&WS17]: Both if you can do it, but if not with compliance with the COT objectives.

~~[Is there discussion of catastrophic event restoration in the DEIS? Is there discussion in DEIS on reevaluation of PAC status and adjacent habitat every 5 years or when important new information becomes available? Is there discussion in DEIS on active pursuit of opportunities to increase occupancy and connectivity between PACs?]~~

FIRE
(BLM Programs: Fuels Management, Fire Operations, Emergency Stabilization and Restoration, Habitat Restoration):

~~For wildfires we recommend inclusion of a statement in the FEIS [or is it the ROD?]~~ ~~T~~The BLM ~~that should~~ should minimally follow BLM Instruction Memorandum (IM) No. 2013-128, or as appropriate~~-~~ more recent IM's ~~[what about USFS guidance?] be followed~~ for fuels management and fire operations direction.

P. 177, Table 2.4, Fuels Management, NTT Item 75, Alternative D: ~~We recommend that t~~The conservation measure to not reduce canopy cover to less than 15% should be applied to All Designated Habitat (ADH).

P. 178, Table 2.4, Fuels Management, NTT Item 76, Alternative D: ~~We recommend that t~~The conservation measure to apply appropriate seasonal restrictions for vegetation management should be applied to ADH.

P. 179, Table 2.4, Fuels Management, NTT Item 78, Alternative D: The text under this item mentions conditions to consider when using prescribed fire. We recommend BLM include a ~~tha~~t a risk analysis, ~~that~~ including~~es~~ parameters such as tolerable level of cheatgrass allowed for a prescribed burn/natural ignition fire, ~~which are to be used for fuel breaks or enhancement of land health, be stated~~ in the Final EIS. ~~or a subsequent risk analysis template be developed that describes the allowable range of site-specific variables for evaluation at the project level. [Should this be in the FEIS or is template development shortly after the ROD is signed acceptable?]~~

Comment [UF&WS18]: This may be a moot point if BLM includes Ken Mayer's fire risk table in their documents. I would leave the comment in for now.

P. 183, Table 2.4, Emergency Stabilization and Restoration, NTT #89: ~~We recommend use of~~ Alternative B language ~~or clarification under NTT #87~~ should be selected as a conservation measure to consider climate change when proposing restoration seedings and ~~that using seeds based on adaptation includes~~ to consider~~ation of~~ seed from warmer regions of the subject plant's range.

P. 185, Table 2.4, Habitat Restoration, NTT #94: Alternative B language should be selected as a conservation measure to consider climate change when proposing restoration seedings and to consider seed from warmer regions of the subject plant's range. ~~Same comment in regards to NTT #89 but clarify in Alternative D NTT #92 if it is not made into a separate conservation measure.~~

Comment [UF&WS19]: This is really confusing. Can we just repeat what NTT # 94 is and draft a longer comment to ensure absolute clarity?

NON-NATIVE, INVASIVE PLANT SPECIES
(BLM Programs: Nearly all)

Non-native, invasive plant control and monitoring measures are scattered throughout the DEIS by BLM/USFS Programs. Provide a list of Programs where the measures are addressed so they are more easily found and provide references to sections in individual Field Office/Forest Resource Management Plans/Land Use Plans (RMPs/LUPs) where non-native, invasive plant control and monitoring measures will continue to be used under the RMPs/LUPs. ~~We recommend consolidation of references and conservation measures in a single non-native invasive plant section following, at a minimum, COT report conservation measures~~ in order ~~for the BLM, USFS, and FWS~~ to more effectively be able to determine if measures are meeting the DEIS purpose and need and the COT objective and measures for non-native, invasive plant management.

Insert COT report conservation measure #3 to monitor and control invasive plants for at least 3 years post-wildfire under Fuels Management, Emergency Stabilization and Restoration, and Habitat Restoration sections ~~to follow COT report conservation measure #3~~.

~~Additionally, insert conservation measures under the non-native, invasive plant section, or in all program areas, involving reclamation and restoration where prevention, control, and monitoring measures are lacking.~~

BMPs to ~~We recommend incorporation of methods to~~ reduce the spread of non-native invasive plants such as washing equipment, etc. should be included.

ENERGY DEVELOPMENT
(BLM Programs: Fluid Minerals, Wind, Solar)

In regards to determining if an exception can apply for proposed energy projects if the 5% disturbance cap is reached, ~~The Service recommends that~~ criteria should be developed for determining a healthy and stable or increasing GRSG population and ~~be~~ the process should be described in the FEIS. Furthermore, inclusion of a detailed description of criteria for determining what constitutes habitat loss and disruptive activities to GRSG is recommended, such that it is clear the 5% disturbance cap can be accurately measured.~~.~~ ~~If numerous exceptions are granted this would potentially create development above the 5% disturbance cap and impacts to GRSG populations would likely occur. [Added 11/8/13. Needs discussion.]~~

P. 163, Table 2.4, Fluid Minerals, NTT #49: On existing leases, alternative B would impose a limit of one permitted disturbance per section (640 acres) in PPH. We assume this means no more than one pad or one compressor station or one centralized water facility, etc., per section. We recommend that this Condition of Approval be included in the proposed plan, although calculated as an *average* of 1 disturbance per 640 acres over all PPH within a given Colorado Management Zone. This would allow for the clustering of such disturbances, thereby minimizing fragmentation of habitats,~~rather than spreading them out, a~~ and allows for greater flexibility in development design and planning at the master development plan scale while limiting development to a level compatible with existing GRSG populations. If certain Colorado Management Zones are already above this disturbance density (e.g., MZ 16, 17), and not all leases are held by production yet, we recommend granting lease extensions until older

Comment [UF&WS20]: I haven't seen any disturbance protection for known Winter Concentration Areas (WCAs). Are these not designated in the Colorado Conservation Stretegy?

Comment [IT21]: Pat, I'm not sure what you're asking and what you mean by the CO cons. Strategy?

Comment [UF&WS22]: I would add emphasis here.

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disturbances that are no longer in use are reclaimed allowing for new disturbances to be permitted once again. ~~We make this recommendation if BLM has retained enough authority over current lessees to accomplish this; w~~We realize that BLM does not have the authority to infringe upon existing lease rights.

P. E-8. GRSG PPH COA-47-51d. For existing oil and gas leases within PPH, it appears that the preferred alternative under COA-47-51d could allow numerous drilling pads and access roads to be constructed within 0.6 miles of ~~close to~~ GRSG leks outside of the lekking to early brood-rearing season. ~~Although the pad construction, drilling, and completion stages involve the most noise and human activity, producing~~Producing pads also create vehicle ~~involve truck~~ traffic and human activity which is disruptive to sage-grouse breeding and nesting activities. ~~and could be disturbing to nearby grouse.~~ Standard BLM lease terms would allow BLM to require a pad to be moved up to 200 meters from a lek, but~~-~~ this distance~~s~~ does not protect sage-grouse habitat~~s~~.~~perhaps no further.~~

The 5% disturbance cap would limit the loss of sagebrush habitat, but would not constrain the construction of roads and pads in other habitats. In GRSG populations with mixed habitats, such as the Parachute-Piceance-Roan (PPR) population, these activities~~this~~ could result in numerous pads being strategically located within non-sagebrush habitats but in ~~rather~~ close proximity to GRSG leks. We have tested the~~is~~ possibility in a ~~realistic mock~~ GIS exercise in the PPR population in MZ 17 on BLM land and ~~it is relatively easy~~ in most ~~all~~ cases ~~to place~~ new pads could be constructed near leks (within 200m to 1000m) ~~constructed~~ in non-sagebrush habitats (including, but not limited to aspen stands, gambel oak, grassland, etc.) without being constrained by the disturbance cap. This scenario provides little protection to GRSG as ~~While it is helpful for GRSG to keep pads out of sagebrush,~~ the close proximity of producing pads to leks and nearby sagebrush habitat will ~~could lead to~~ disturb~~ance of~~ lekking, nesting, and brood-rearing sage-grouse, even if direct sagebrush impacts are avoided.

To prevent or minimize this risk, ~~we recommend strengthening~~ this COA should be revised (or a new ~~, or creating a new~~ COA applied), to keep new pad locations on existing leases outside the 0.6 mile ~~away~~ from leks regardless of habitat type (not just a timing restriction on pad construction/drilling, but a year-round restriction on new pad ~~locations~~siting/construction). ~~Ideally, k~~Keeping pad locations 0.6 mile from lek sites ~~would~~ provides more protection ~~be best~~ for GRSG (as in the current Little Snake Field Office RMP for new leases, and strongly recommended in the 2008 Colorado Greater Sage-grouse Conservation Plan). Where the authority exists, the ~~We hope the~~ BLM should ~~has authority to~~also apply such a COA to existing leases; it would still be far less restrictive than COA-47-51b/c, (which would preclude new pads anywhere within PPH on existing leases, or at least would maximize the distance between new pads and leks within a lease). We recommend that this COA apply to all leks as well, including those in PGH. ~~By our GIS calculations, n~~Nearly one fourth of the area within 0.6 mile of a GRSG lek is already leased in Colorado according to GIS analyses conducted by our office.

Comment [UF&WS23]: Is this edit correct? I was confused on first read until I figured out that it was the verbalization of COA-47-51b/c.

We recommend that ~~T~~the 0.6 mile buffer ~~should~~ be applied to all actions under all BLM/USFS Programs, not just energy development actions. For example, the exception criteria (p. E-11 for Right-of-Ways) c~~sh~~ould state something to this effect: "Except in rare cases, exceptions to ROW avoidance will not be granted within 0.6 mile of any GRSG lek." We believe that year-round

protection of leks from other sources of significant surface disturbance, such as mining, should also be precluded. Additionally, we understand that more recent CPW data may indicate that a year-round buffer larger than 0.6 mile may be warranted, such as a 1-mile buffer, which would include the preponderance of GRSG nests surrounding a lek in most cases.

Should existing authorities preclude the BLM from ~~not be able to~~ preventing new pads from being constructed outside of the lekking, nesting, and early brood rearing seasons within 0.6 mile of a lek on an existing lease, and for all existing pads sited within 0.6 mile of a lek ~~we recommend that~~ all vehicle ~~truck~~ traffic and work- related activities associated with oil and gas production should be prohibited from 6:00 PM to 9:00 AM ~~(within 0.6 mile of a lek~~ during the breeding season~~, generally~~ 3/~~(15 to 6/15)~~ to prevent disturbance to breeding and lekking GRSG. ~~Dates provided could be extended 2 weeks based on changes in elevation or other topographical differences influencing lek attendance and nesting behaviors.~~

Our suggestions to modify COA-47 to further protect leks should be within the range of the alternatives contained within the draft EIS; we recommend its inclusion in the proposed plan.

P. 167, Table 2.4, Fluid Minerals, NTT #59: ~~We recommend using~~ ~~l~~Language in Alternative B should be used for identification of areas for acquisition of mineral rights or use of conservation easements that would benefit GRSG.

P. I-6. Table I.1, #38. Regarding anti-perching devices, we recommend that only those anti-perching devices be used that would not facilitate raptor or corvid nest construction. Additionally, for large transmission towers, if anti-perching devices alone would be inadequate to prevent raptor or corvid nesting, we recommend requiring that H-frame or other non-lattice towers be required in addition to anti-perching devices.

p.I-4. ~~We recommend a~~Add~~ing~~ a Required/Preferred Design Feature to Appendix I to minimize effects from geophysical exploration projects in GRSG habitats, including, but not limited to minimizing ~~. Something like: Minimize the impact to GRSG habitats during geophysical exploration projects (e.g., minimize~~ vegetation loss from shot-hole drilling, crushing by off-road vehicle travel and vibroseis trucks, clearing for staging areas, etc.~~)~~.

SAGEBRUSH REMOVAL
(BLM Programs: Range, Fuels Management)

See Grazing and Fire comments.

GRAZING
(BLM Programs: Range)

Comment [UF&WS24]: Is the lekking season not already established? I would remove the vagueness of the statement, unless the season for protection varies across the field office.

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Comment [K25]: I now recommend removing this paragraph. It has the drawback of indicating that exceptions to our recommended 0.6-mile buffer would be granted.

Comment [IT26]: Creed, this is related to the above paragraphs correct? If so I don't think this sentence is necessary. We don't need to point out whether it's within the range of alternatives or not.

Comment [K27]: OK, remove.

Comment [K28]: I really think it is unwise to remove the "we recommend" statement (here and elsewhere). Without it, the comment comes across as harsh and somewhat rude. It sounds more like an ultimatum than a recommendation. We don't want to make pre-decisional ultimatums that might kind of tie our hands during the final listing decision in 2015.

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Comment [UF&WS29]: Chapter 4: (p.506) A bullet should be added: "augmented distribution of populations… …which in turn could have impacts to genetic structure of the population."

Comment [IT30]: Pat, I don't know what your comment means. Doesn't appear to match text on page 506.

P. 150, Table 2.4, NTT #21: ~~We recommend prioritization of allotments for land health assessments~~ We recommaend description of a rotational timeline in which land health assessments ~~they~~ will be completed, minimally in ~~d, preferably~~ less than 10 years.

Please describe how the assessments will be conducted (such as standard land health assessment) and what habitat structure guidelines will be used (such as the Habitat Assessment Framework). If the HAF is not used, reference ~~cite~~ Connelly et al. 2000 or Hagen et al. 2007 for the habitat guidelines.

~~If HAF is not used, we recommend retaining the main components such as essential habitat components.~~

We recommend addressing drought in habitat objectives and applying BLM IM No. 2013-094, and similar USFS guidance on FS lands. ~~[What about USFS guidance on addressing drought?]~~

P. 152, Table 2.4, NTT #25, Alternative D: ~~Under the Range Management section, please clarify~~ Add to this conservation measure~~s related to~~ that avoidance of GRSG impacts from livestock trailing will also be addressed to assure GRSG habitat guidelines are being met.

In areas where ~~Where~~ wild ungulates are negatively impacting sage-grouse habitats the BLM/USFS ~~should an issue, we recommend~~ work~~ing~~ with ~~the~~ Colorado Parks and ~~A~~Wildlife, and other agencies as appropriate, ~~State wildlife agencies~~ to design and conduct habitat work that redistributes wild ungulates. In problematic areas ~~and w~~Where domestic ungulate grazing overlaps problems exacerbated by wild ungulate overuse, modifications to livestock~~modify~~ grazing management should be implemented ~~(including, but not necessarily limited to the recommendations in the following comments in Table 2.4)~~ until ~~as necessary to maintain or improve~~ greater sage-grouse habitat conditions are improved~~.~~

Insert a conservation measure under Range Management to ~~E~~evaluate, modify as necessary, and time range improvement projects to limit impacts to GRSG.

P. 151, Table 2.4, Range Management, NTT #24: ~~We recommend u~~Use ~~of~~ language in ~~a~~Alternative B for vegetation and composition structure to emphasize GRSG habitat objectives.

P. 152, Table 2.4, Range Management, NTT #25: We recommend using Alternative D language but change the first sentence to read: (ADH) Include terms and conditions on grazing permits and leases that assure ~~habitat~~ plant growth meets seasonal sage-grouse habitat requirements and residual forage remains at least at minimum recommended height for hiding cover.

P. 153, Table 2.4, Range Management, NTT #28: We recommend the use of Alternative B language but add to it that stubble height must be consistent with summer-fall habitat structure guidance in the 2008 Colorado GRSG Conservation Plan or the newest guidance. ~~[Can we reference the CCP here?]~~

P. 153, Table 2.4 Range Management, NTT #29: Alternative D language is acceptable but include that stubble height must be consistent with summer-fall habitat structure guidance in the

Comment [UF&WS31]: Of the HAF? This is unclear – I would suggest expanding.

Comment [IT32]: Not sure was from consistency call. I'm just going to delete as it doesn't seem that important.

Comment [UF&WS33]: We should tell them what we want to see here – not the exact measures, but the impacts that need to be avoided.

Comment [UF&WS34]: Is there more than CPAW involved here? If so, list them.

Comment [IT35]: Pat, the part in parentheses didn't make sense to me so I recommend deletion unless you can clarify to me why important.

Comment [IT36]: Colorado GRSG Conservation Plan

Comment [UF&WS37]: What is the CCP? If it is current, based on science and provides good management, then I say yes.

2008 Colorado GRSG Conservation Plan or the newest guidance. ~~[Can we reference the CCP here?]~~

P. 154, Table 2.4, Range Management, NTT #31: Use Alternative D language but apply to ADH.

P. 156, Table 2.4, Range Management, NTT #33, second part: Specific language about establishment and monitoring of grazing exclosures should be included in the monitoring appendix (J). ~~We recommend revised Alternative C language be adopted as follows: For vegetation treatments in areas with grazing the treatment plan must include pretreatment data on wildlife and habitat condition. A subset of treatments (about 5%) in different sagebrush ecosites must have established grazing exclosures where treated areas are monitored at least 3 years before livestock returns and continue monitoring for at least 5 years after livestock are returned to the area. Compare to treated, ungrazed exclosures, as well as untreated areas. [Talk to BLM about existing exclosure monitoring.]~~

P. 157, Table 2.4, Range Management, NTT #35: ~~We recommend p~~Preferred and required design features to avoid or minimize potential for spread of West Nile virus should be applied to ADH.

P. 158, Table 2.4, Range Management, NTT #36: ~~We recommend that c~~Changes to structural range improvements and placement of mineral and salt supplements to enhance GRSG habitat and populations should be applied to ADH.

P. 159, Table 2.4, Range Management, NTT #39: We recommend Alternative D language with the modification of ~~appears acceptable but~~ inserting that at least minimum habitat requirements for sage-grouse should be maintained if used as a grass bank. Discussion of establishment and monitoring of exclosures for GRSG habitat in grass bank should also be included in Appendix J. ~~Also, insert language stating that establishment of grazing exclosures and monitoring of habitat within and outside of the exclosures will be conducted to ensure minimum sage-grouse habitat is maintained on the grass bank allotments. [Talk to BLM about exclosure monitoring.]~~

RANGE MANAGEMENT STRUCTURES
(BLM Programs: Range)

To be consistent with the COT report objective for range management structures, we recommend insertion of the following conservation measures: 1. New range management structures are to be placed to be neutral or beneficial to GRSG; 2. Existing structures that are impacting GRSG should be removed or modified.

FREE-ROAMING EQUID MANAGEMENT
(BLM Programs: Wild Horse Management)

~~Recommend managing for rangeland health standards using a GRSG reference such as Connelly et al. 2000.~~ Or the ~~HAF~~

Comment [IT38]: Repeated below.

~~If areas are not meeting appropriate management levels (AML's) are not being met BLM/USFS should commit in the FEIS and RMP's to start a NEPA process *immediately* to implement actions to address and show a track record that they can in fact accomplish AML reduction (this uses adaptive management process). We cannot rely on a promise of future NEPA to meet the COT objective if AML's are not currently being met as being an adequate . As it stands if AML's are being exceeded a promise of future NEPA does not meet adequacy of regulatory mechanisms.~~

~~Monitoring must be done to assess if are meeting rangeland health standards.~~ We recommend ~~L~~linking the Colorado monitoring framework to the rangewide monitoring framework (HAF) currently under development and/or to Connelly et al. 2000.

Appropriate Management Levels need to be established for drought conditions.

PINYON-JUNIPER EXPANSION
(BLM Programs: Fuels Management, Habitat Restoration)

~~We recommend providing a~~A conservation measure should be added to ~~under~~ the Habitat Restoration ~~p~~Program~~,~~ that commits to ~~there will be~~a 0% PJ incursion within 1000 m of leks (Baruch-Mordo et al. 2013). A caveat to the conservation measure may be included that if the lek is within 1000m of an ~~historical/~~ old growth PJ ~~area~~stand 120 years old or older (stand established in 1894 or earlier) .that the PJ within the ~~historical/~~old growth area does not need to be removed.

~~We recommend providing a conservation measure that~~A conservation measure should be added stateing ~~t~~there will ~~will~~ be no net increase in PJ (in phase 1 and 2 state of incursion) in other seasonal habitats with a target of removing all PJ incursion.

~~We recommend providing a conservation measure that~~ PJ removal in limited seasonal habitats (in CO or a CO management zone) should ~~will~~ be given high priority.

~~We recommend prioritizing m~~Mechanical removal of PJ should be prioritized as the preferred method.

As stated on P. 186, line 96, please ~~consider~~ reiterateing for that PJ removal projects that allow for re-establishment of sage and desirable understory herbaceous vegetation will be an objective. ~~Add that t~~This may be accomplished naturally (solely from act of PJ removal) or through seedings as appropriate, given existing condition of sage and herbaceous vegetation.

AGRICULTURAL CONVERSION
(BLM Programs: Lands and Realty, Range Management)

[No comments but might be based on needed follow-up from previous questions for BLM.

1. There is irrigated meadow acreage identified on both BLM and USFS, why?
2. There is cropland acreage identified on BLM (not USFS), why?]

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Comment [UF&WS39]: You'd best put a time frame on this – historical to my kid is 10 years ago!

Comment [UF&WS40]: Add appropriate text as per your discussions with BLM/FS

Comment [IT41]: Still need to ask Bridget this.

MINING
(BLM Programs: Solid Minerals – Coal (SMC), Locatable Minerals (LM), Non-energy Leasable Minerals (NELM), Salable Minerals (SM), Split Estate Minerals (MSE))

Provide measures that ~~E~~ensure that for any proposed or existing mine (under any mining category) ~~that~~ reclamation is conducted to meet GRSG habitat objectives.

Insert a statement/conservation measure under each of the mining categories that reclamation of an existing mine does not replace off-site compensatory mitigation for mine disturbance.

~~Insert a statement that adaptive management will be used to address mining impacts [Shouldn't the adaptive management statement be an up-front general statement for all BLM actions?]~~

P. 170, Table 2.4, Solid Minerals – Coal, NTT #64: Alternative D says measure applies to ADH but the associated text says only priority habitat. Please correct this anomaly.~~, change text~~ to ADH.

P. 174, Table 2.4, Locatable Minerals, NTT #65: We recommend using language in Alternative B but with slight modification that withdrawal of mineral leasing be conducted where there is a clear threat to persistence of the GRSG in the CO management zone. ~~[Should CO mgmt. zone be the level at which we measure a clear threat?]~~

P. 177, Table 2.4, Mineral Split Estate, NTT #73: Apply conservation measures to lessees of mineral estate to ADH.

~~P. 177, Table 2.4, Mineral Split Estate, NTT #74: Apply to ADH. [Can we apply to ADH if not mentioned in Alt. B or C, so maybe not in range of alternatives? Why are there no RDF's for fed surface/non-fed minerals under MSE and can't BLM/USFS require some features on federal surface? Also, why is there no MSE section in the RDF/PDF/SDF Appendix (I)?]~~

RECREATION
(BLM Programs: Travel, Recreation)

The ~~We recommend insertion of the~~ following parameters should be included under a new conservation measure or under Alternative D conservation measure NTT #5 (P. 144) ~~under the Travel Program:~~
-Limit roads to less than 0.09 kilometers/kilometer^2 and recommend high use paved or maintained gravel roads ~~highways or interstate~~s be placed at least 8 kilometers from leks (Johnson et al. 2011, Wisdom et al. 2011). Limit secondary roads (low-use gravel or two-tracks) within 400 meters of a lek (Wisdom et al. 2011) [Is leks correct or just occupied area? In PPH, ADH for entirety of CO, or per CO mgmt zone? Are these correct metrics? Is 300-400 meters in Knick et al. the minimum distance for secondary roads, i.e. not highway or interstate? Johnson et al. indicates that secondary roads may not influence GRSG distribution/presence.] This density and distance should apply to new and existing roads and if existing road density is above the recommended limits the existing roads should be closed or rerouted to the extent possible.

Comment [UF&WS42]: Yes. But it doesn't hurt to repeat it here. But, we should also state what we are trying to accomplish by applying adaptive management here – what mining impacts need adaptive management?

Comment [UF&WS43]: Some of the conservation measures mention establishing speed limits…

We should recommend an actual speed limit (or range of limits) placed here, as well as traffic volumes on each road.

Because enforcement is difficult in these areas, more and more energy companies are monitoring their vehicle with GPS-monitored speed.

I'm not sure how this information would inform a comment or measure (can't require them to purchase these devices), but it is a way for energy companies to enforce and police themselves. This also reduces the potential of vehicle-related mortalities, especially during the brood rearing seasons.

Comment [UF&WS44]: We have to go with leks because of the literature. I modified the road description as its unlikely there is a new highway in the works that we haven't heard about. But the road type inserted is similar.

Comment [UF&WS45]: yes

Comment [IT46]: Pat, this is in Wisdom et al. Knick gives the 1 km, 0.05 km and 0.01 km distances. What should we go with?????

Comment [UF&WS47]: It depends on traffic volume.

P. 143, Table 2.4, Travel, NTT #2: Alternative D language needs to be modified to include the provision to evaluate permanent road closures in addition to seasonal closures.

~~P. 144, Table 2.4, Travel, NTT #6:~~

~~P. 145, Table 2.4, Travel, last row, no NTT #: We recommend inclusion of Alternative C language for ADH but modify to state: Avoid new road construction within 4 miles of active GRSG leks for high intensity/high use roads. [Is this still a recommendation, didn't get restated in consistency call recommendations?]~~

P. 145, Table 2.4, Recreation, NTT #9: Define how "adversely affect" in the Alternative D conservation measure will be measured (e.g. any habitat loss, any potential disruption to individual GRSG, downward population trend in a GRSG population or CO mgmt. zone, etc.).

EX-URBAN DEVELOPMENT
(BLM Programs: Lands and Realty)

P. 148, Table 2.4~~.~~, Lands and Realty - Land Tenure Adjustment~~.~~, Alternative B, first row: ~~s~~States, "Retain public ownership of GRSG PPH." Alternative D states, "Same as Alternative B." However, on p. 585 the EIS states, "Compared to the other action alternatives, Alternative D allows the most flexibility in acres available for acquisition, disposal, or exchange because there is no management action proposed to retain public ownership of PPH." This is an apparent discrepancy. We recommend that the proposed plan include direction to retain PPH as stated in Table 2.4 for the preferred alternative.

P. 149, Table 2.4, Land Tenure Adjustment, NTT #16: Modify language in Alternative D by inserting language from Alternative C so that the conservation measure states: "(ADH) The BLM/USFS will identify and strive to acquire non-federal lands important for GRSG." Also include the rest of the language under Alternative D that starts with "For example:..."

INFRASTRUCTURE
(BLM Programs: Nearly all)

P. 146, Table 2.4, Lands and Realty, NTT #10: We recommend that all PPH be an ~~exclusion~~avoidance area for any kind of infrastructure. If infrastructure projects cannot be ~~excluded~~avoided then project impacts must be neutral or beneficial to GRSG, which must be demonstrated by the land management agency prior to construction. For example, fences maybe placed in PPH if impacts to GRSG habitat from construction and placement will be neutral or if benefits to GRSG habitat will be gained by the fence for management of livestock or wild ungulates. ~~The BLM or USFS (or permitting agency) must demonstrate neutrality, not the project proponent. Mitigation may be used to achieve neutrality. [Do we still think this, and how achieve?]~~

P. 587, Section 4.5.4. Summary of Impacts on Lands and Realty states, "Alternative D would limit development and surface disturbance in areas capable of supporting sagebrush from

Comment [UF&WS48]: ?

Comment [UF&WS49]: Cross-walk this with the comment above (NTT #5, p. 144. We may not need this comment in detail, but may be able to reference back to that one.

Comment [IT50]: Yes, I believe addressed under energy and may put under general section since will be for all actions.

Comment [UF&WS51]: In cluding fences for managing live stock or wild ungulates to improve habitat? You may want to qualify slightly.

Comment [UF&WS52]: I don't think we can dictate who does this – BLM/FS is responsible, but they can use project proponent data.

Comment [UF&WS53]: Lets not offer until they request.

identifying ROW avoidance areas on approximately 53 percent of GRSG habitat." However, Table 2.4 (p.146, NTT Item 10) states that all PPH would be classified as a ROW avoidance area, not just ecological sites capable of supporting sagebrush. Please resolve this apparent ~~This appears to be~~ inconsistent~~t~~cy. We recommend that the proposed plan designate all PPH as an avoidance area, as in Table 2.4 for Alternative D~~,~~ (~~-~~ROW permits would only be issued anywhere in PPH if the conditions in Table 2.4 were met ~~(~~[no adverse effects to GRSG populations and subject to disturbance cap]). Along with additional measures in Table 2.4 for Alternative D (NTT #13 and 14), Alternative D should then limit development and surface disturbance through ROW avoidance on approximately 95 percent of GRSG habitat (ADH), as stated for Alternative B (p. 587).

Comment [IT54]: Creed, you were going to modify correct?

Comment [UF&WS55]: I don't understand what we are recommending here – is this simply a statement of the benefits?

Comment [K56]: Perhaps take out this portion of the paragraph. It would be more simple and more clear, ending with our recommendation.

FENCES
(BLM Programs: Range Management)

Follow the COT objective to minimize impact of fences on GRSG.

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Insert a conservation measure in Range ~~p~~Program to place new fences no closer than 1 km from leks.

P. 158, Table 2.4, Range, NTT #37: We recommend choosing Alternative C language for ADH. Alternative C language is the most flexible and allows for the possibility of any of the three options; removal, modification, or marking of fences, as feasible or warranted without prioritizing which option should be conducted first.

Add to or replace the Stevens (2011) citation for fence collision information to Stevens et al. 2012 (Journal of Wildlife Managment article). [There's a Stevens 2013 as well, is it relevant to fence and other livestock management structure placement and distance from lek?]

Comment [UF&WS57]: Not sure the substance between these two are different .

Comment [IT58]: Pat, so what are telling me here?

APPENDIX I.

1. (p. I-2) #1: should measure #1 (in Table I-1) specify "size" as to mean perimeter and/or depth…?

2. (p. I-2) #2: the parenthetical ">60" looks as though it's defining 'shallow' as greater than 60 cm… should be listed or the wording restructured to make that more clear.

3. (p. I-4) #9: specify "important areas and habitats" – is that PPH, or any habitat? A specific seasonal habitat?

4. (p. I-4) #12: Establish the speed limit in this document. The establishment shouldn't be the design feature. Identify the speed (or range of appropriate speeds) limit here.

5. (p. I-6) #39: Does this mean "lay-down" fencing (which would be best), or simply fence marking, which would likely only be done in 'high-risk' areas identified in the model (Stevens et al.)

6. (p. I-7) #50 – see comment #10 above – possible add something regarding enforcement here and all similar measures…