

			Preliminary Assessment of BLM Proposed Action Consistency with COT Report <sup>2</sup> (Y = yes; N = no; U = unknown)				Do relevant BLM Programs as a group meet the Conservation Objective? (Only evaluated for Alternative D).	Issue <sup>1</sup>
Issue <sup>1</sup>	Conservation Objective	Conservation Measures / Options	Alternative A (No Action)	Alternative B (NTT)	Alternative C (Conservation)	Alternative D (Preferred Alternative)		
PACs (BLM Programs: All)	Retain sage-grouse habitats within PACs	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	All PAC-related measures are difficult to assess due to broad statements. Since PAC's, PPH, PGH were created after existing RMP's there's virtually no measures that are GRSG-specific. Consequently, even though some measures were conducted irregardless of GRSG, lack of prioritization for GRSG could allow color ranking to be	All PAC-related measures are difficult to assess due to broad statements, however, Alt B has many measures that appear to adequately retain habitat in PACs (all PPH in Colorado).	All PAC-related measures are difficult to assess due to broad statements, however, Alt C has many measures that appear to adequately retain habitat in PACs (all PPH in Colorado).	T: Y- Also mentions completion of activity level travel plans within five years of the record of decision, no interim measures specified. Rec: U. RM: Y - Under several actions. WHM: Y - Will manage herds to maintain/enhance habitat. SMC: Existing Leases - N, is voluntary; New Surface Lease - Y but up to 5% disturbance cap; New Underground Lease - Y but up to 5% disturbance cap; other categories - Y but up to 5% disturbance cap . LM: N - With a couple exceptions, almost all measures or design features are not legally enforceable so are primarily voluntary/cooperative. NELM: U - Allows for consideration of expansion for existing operations but for new activities only considers up to 5% disturbanc cap. SMM: U - Allows for consideration of expansion for existing operations but for new activities only considers up to 5% disturbanc cap. MSE: U - Objective to provide protection to extent of law. FFM: Y - Largely consistent with Alternative B measures. FO: Y - But only because it's stated that GRSG habitat will be given preference over other resource values. Exceptions are allowed. ES&R: Y - Despite possible exceptions. HR: Y - Despite possible exceptions. ACEC: N - There are no ACEC's proposed, only analysis of Alternative C ACEC proposal which was rejected.	U - Several Yes's but enough U's or N's to make it unknown.	PACs (BLM Programs: All)
	If PACs are lost to catastrophic events, implement appropriate restoration efforts	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Fire, and perhaps subsequent non-native, invasive plant encroachment, is the most	Specific wording on restoration/rehabilitation following catastrophic events is not included in	Specific wording on restoration/rehabilitation following catastrophic events is not included	Specific wording on restoration/rehabilitation following catastrophic events is not included in any alternative in the DEIS but conservation measures to restore and maintain habitat in suitable GRSG habitat after wildfire is included.	Y - It appears that the strategies will adequately restore habitat.	
	Restore and rehabilitate degraded sage-grouse habitat within PACs.	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Restoration/rehabilitation measures in existing plans but most not sage-grouse specific.	U - Difficult to say that measures are any better than Alt D. Perhaps B, C, and D could be green.	U - Difficult to say that measures are any better than Alt D. Perhaps B, C, and D could be green.	T: Y - Can restore/close roads. REC: N. RM: U - Unsure of timelines involved for land health assessments and corrective actions. WHM: U - Minor issue in Colorado but would assume could rehab impacts of horses if needed. SMC:Y - Reclamation through adoption of SMCRA mining plan. LM: U - It appears there's flexibility to do rehab but not sure to what extent laws allow. NELM: Y. FFM: Y. HR: Y - (restoration in PH is prioritized for GSG, but unclear if PH restoration projects receive priority over other projects).	Y? - If they do manage for GRSG habitat objectives they should be able to restore and rehabilitate GRSG habitat.	
	Identify areas and habitats outside of PACs which may be necessary to maintain viability of sage-grouse. If development or vegetation manipulation activities outside of PACs are proposed, the project proponent should work with federal, state or local agencies and interested stakeholders to ensure consistency with sage-grouse habitat needs.	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Since PAC's were created after existing RMP's there is no focus on areas outside of PAC's (preliminary general habitat and linkage corridors in CO). However, there are State-wide and local population-level plans that may have guided some sage-grouse conservation in these areas.	Only one measure under Range that says to identify where measure would be beneficial to GRSG and this is for ADH not just PGH (so includes PAC's's). Are several measures in different sections that say to prioritize seasonal habitats for measures but applies to ADH not just PGH. Consequently, there are measures to protect PGH (or linkages) but no measures that specifically state to identify areas outside of PAC's that may be necessary to maintain viability of GRSG.	Only one measure under Range that says to identify where measure would be beneficial to GRSG and this is for ADH not just PGH (so includes PAC's's). Are several measures in different sections that say to prioritize seasonal habitats for measures but applies to ADH not just PGH. Consequently, there are measures to protect PGH (or linkages) but no measures that specifically state to identify areas outside of PAC's that may be necessary to maintain viability of GRSG.	In Colorado PACs include priority habitat (PPH). However, many conservation measures are prescribed for all designated habitat (ADH), which includes linkage corridors, and in one or two instances conservation measures are targeted only for General habitat and/or linkage corridors (C). Consequently, the following assessment of adequacy focuses on whether some or all of the conservation measures under the BLM programs apply to General Habitat (PGH) and linkage corridors. FWS has not found discussion in the CO EIS about identification and maintenance of sagebrush habitat outside of PAC's and linkage corridors that may be necessary to maintain viability of GRSG. T: U - One measure, seasonal or permanent road closures, were applied to ADH (recommended to BLM that other measures apply to ADH not just PH). REC: N. RM: Y - Most are in ADH or have recommended they be applied to ADH. WHM: Y - Adequate, WHM not a big issue in Colorado. SMC: Y - most in ADH. LM: N - All PH, no measures directed at general or linkage corridors. Alternative D has some protective language but it is unknown how much protection is really able to be afforded due to constraints under 1872 Mining Law. NELM: N - Only applies to PH but recommended to apply to ADH. SMM: Y, partially - One of two measure says apply to ADH. MSE: N - Recommended application to ADH. FFM: Y - Not all but most are applied to ADH. FO: Partial - but fine. ES&R: Y - Recommended adoption of Alternative B language for one conservation measure. HR: Y - Most but not all applied to ADH. ACEC: N - There are some existing ACEC's that might provide protection to GRSG in GH and linkage corridors; however, they almost certainly did not include GRSG objectives in their protective language and no new ACEC's are proposed under Alternative D.	U - Currently unknown how much important GRSG habitat outside of PAC's (which is the same as PPH in CO).	
	Re-evaluate the status of PACs and adjacent sage-grouse habitat at least once every 5-years, or when important new information becomes available.	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Not addressed at all because PAC's not in existence when existing RMP's were developed.	Mention of reevaluation in Monitoring Appendix (G) but could not find mention of reevaluation in NTT conservation measures in DEIS nor a time frame.	Mention of reevaluation in Monitoring Appendix (G) but could not find mention of reevaluation in NTT conservation measures in DEIS nor a time frame.	Timeframe for remapping habitat boundaries not specified but evaluation of status of PAC's is planned.	U - See comments.	Fire (BLM Programs: FFM, FO, ES&R, HR)
	Actively pursue opportunities to increase occupancy and connectivity between PACs.	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Since PAC's were created after existing RMP's there is no focus on areas outside of PAC's	No specific measures could be found that address this but several measures to minimize impacts in PGH could	Only one measure under Lands and Realty that says to strive to acquire private land but this is for ACEC's	Linkage corridors are identified in the DEIS and many measures in different BLM programs are applied to ADH, which includes linkage corridors. However, the DEIS does not discuss active pursuit of opportunities to increase occupancy and connectivity between PACs.		
	Maintain or improve existing habitat conditions in areas adjacent to (currently) burned habitat.	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	If there are measures in existing RMP's similar to this they certainly don't address GRSG	N - Measure not stated.	N - Measure not stated.	N - Measure not stated.	U - Not specifically addressed.	
Fire (BLM Programs: FFM, FO, ES&R, HR)	Retain and restore healthy native SB communities within GSG range	Restrict or contain fire within the normal range of fire activity (assuming a healthy native perennial sagebrush community), including size and frequency, as defined by the best available science.	No prioritization for suppression in GRSG habitat except possibly WRFO. Fire/invasive weeds not a huge threat in CO so perhaps all reds could be yellow.	Measures stated for minimizing fire use or using to benefit GRSG but undefined what normal range of fire activity is and therefore unclear whether measures would restrict/contain fire within normal range of fire activity.	Measures stated for minimizing fire use or using to benefit GRSG but undefined what normal range of fire activity is and therefore unclear whether measures would restrict/contain fire within normal range of fire activity.	U - Not specifically addressed if measures will be within normal range of fire activity. Will prioritize GRSG habitat with other resource values unless other circumstances come into play. Will maintain at least 70% of ecological sites in a Colorado Management Zone in sagebrush habitat where ecological sites can support at least 12% canopy cover of Wyoming big sage or 15% canopy of mountain big sage.	U - Although there are Yes's it is not clear that fuel and fire management strategies in all programs will retain and restore healthy SB communities.	Fire (BLM Programs: FFM, FO, ES&R, HR)
		Eliminate intentional fires in sagebrush habitats, including prescribed burning of breeding and winter habitats.	Considered on case by case basis, not prioritized for GRSG.	Wording not quite as strict as COT measure to eliminate all fires in breeding or wintering but is very close.	Wording not quite as strict as COT measure to eliminate all fires in breeding or wintering but is very	N - But will only be used for fire prevention/fuel reduction to benefit GRSG. Will not burn in less than 12" precip zone but if do will be for fuel break or enhancement of land where cheatgrass is a very minor component.		

		<div>Design and implement restoration of burned sagebrush habitats to allow for natural succession to healthy native sagebrush plant communities.</div> <div>Implement monitoring programs for restoration activities. To ensure success, monitoring must continue until restoration is complete, with sufficient commitments to make adequate corrections to management efforts if needed.</div> <div>Immediately suppress fire in all sagebrush habitats.</div> <div>Which (if any) of Options 1a - d were applied?</div> <div>Which (if any) of Options 2a - j were applied?</div> <div>Which (if any) of Options 3a - e were applied?</div> <div>Was Option 4 applied?</div> <div>Were locally derived measures developed?</div>	<div>For many of the ES&amp;R and Habitat Restoration actions most FO's and the Routt NF do not have existing conservation</div> <div>Minimal evidence of monitoring.</div> <div>No prioritization for suppression in GRSG habitat</div> <div>1.a and b. probably occur</div> <div>Few if any options occur.</div> <div>3, b, c, d likely occur</div> <div>Unclear.</div> <div>COT defers to State plans where effective measures applied. Colorado Conservation Plan has 6 pages of conservation strategies for fire but not</div>	<div>Y - mentions use of native seeds for restoration as well as deferment/modifications to grazing and other actions.</div> <div>A couple monitoring measures included.</div> <div>Does prioritize suppression in both PPH and PGH.</div> <div>1.a, b, and c</div> <div>Few if any options occur.</div> <div>3, b, c, d, and e are directly mentioned or inferred.</div> <div>N - No mention in DEIS but IM updated</div> <div>COT defers to State plans where effective measures applied. Colorado Conservation Plan has 6 pages of conservation strategies for fire but not known if effective, is voluntary plan</div>	<div>Y - mentions use of native seeds for restoration as well as deferment/modifications to grazing and other actions.</div> <div>A couple monitoring measures included.</div> <div>Does prioritize suppression but not in PGH.</div> <div>1.a, b, and c</div> <div>Few if any options occur.</div> <div>3, b, c, d, and e are directly mentioned or inferred.</div> <div>N - No mention in DEIS but IM</div> <div>COT defers to State plans where effective measures applied. Colorado Conservation Plan has 6 pages of conservation strategies for fire but not known if effective, is</div>	<div>Y - Have conservation measures for restoration.</div> <div>N - DEIS mentions monitoring framework but needs to be completed.</div> <div>U - Does prioritize suppression but considers other resource values and specific circumstances.</div> <div>1a: Y - Use of native community and native seed is prescribed in a few BLM programs so perennial grasses would probably be included. 1b. Y. 1c. Y. 1d. N.</div> <div>2b, 2c and 2d: Y - These options partially mentioned, other options under #2 not mentioned.</div> <div>3b, c, d, and e</div> <div>N - No mention in DEIS but IM updated at national level (IM No. 2013-128).</div> <div>COT defers to State plans where effective measures applied. Colorado Conservation Plan has 6 pages of conservation strategies for fire but not known if effective, is voluntary plan. DEIS mentions many but not all of these strategies.</div>		
<div>Non-native, Invasive Plant Species - Weeds/Annual Grasses (BLM Programs: Nearly all have some prevention/control/monitoring conservation measures)</div>	<div>Maintain and restore healthy, native SB communities</div>	<div>Retain all remaining large intact sagebrush patches, particularly at low elevations.</div> <div>Reduce or eliminate disturbances that promote the spread of these invasive species.</div> <div>Monitor and control invasive vegetation post-wildfire for at least three years.</div> <div>Require best management practices for construction projects in and adjacent to sagebrush habitats to prevent invasion.</div> <div>Restore altered ecosystems such that non-native invasive plants are reduced to levels that do not put the area at risk of conversion if a catastrophic event were to occur.</div>	<div>No prioritization for sagebrush or sage-grouse habitat but some weed control conducted. Non-native, invasive plants not considered a top threat in CO.</div> <div>No prioritization for sagebrush or sage-grouse habitat but some weed control conducted.</div> <div>Control, and by default monitoring, of invasives may</div> <div>Unclear. BMPs not necessarily mentioned but actions under Programs such as Travel and Lands and Realty do mention restriction of number and size of roads or ROW's so indirectly addresses practices to prevent</div> <div>Indirectly addressed but no language specific to this measure.</div>	<div>Many non-native invasive measures mentioned in various Programs but difficult to ascertain if efforts will retain remaining large intact habitat.</div> <div>Many measures mentioned in various Programs to reduce or eliminate disturbances but unsure if they are adequate to reduce spread of weeds.</div> <div>Indirect statements thru maintenance of desirable habitat but no mention of</div> <div>No specific mention of BMPs to prevent invasion but there is language in different programs to address weeds.</div> <div>Some measures for restoring ecosystems to limit weeds though no discussion of catastrophic event.</div>	<div>Many non-native invasive measures mentioned in various Programs but difficult to ascertain if efforts will retain remaining large intact habitat.</div> <div>Many measures mentioned in various Programs to reduce or eliminate disturbances but unsure if they are adequate to reduce spread of weeds.</div> <div>Indirect statements thru maintenance of desirable habitat</div> <div>No specific mention of BMPs to prevent invasion but there is language in different programs to address weeds.</div> <div>More measures for restoring ecosystems to limit weeds but no mention of catastrophic event.</div>	<div>Table 2.4 does mention will monitor and control invasives following any ground disturbance. Although there are many conservation measures under the different BLM Programs that address avoiding or minimizing impacts to priority, general, or all designated habitat none of them explicitly state that they are aimed at retaining remaining large intact sagebrush patches, whether low or high elevation.</div> <div>U - There are measures to develop a plan to monitor and control weeds following ground disturbance in several programs and reclamation through adoption of SMCRA reclamation plan should prevent weed invasion but not certain. Suggested Design Feature for fluid minerals is to control weeds but don't know how many operators will comply nor how complete the control effort will be. Washing vehicles is mentioned but not sure how inclusive in different programs. Federal mineral and Federal surface management may differ. Measures in existing ACEC's to control invasive species may vary.</div> <div>N - DEIS mentions to monitor and control but no explicit language to monitor and control for at least 3 years post-burn.</div> <div>T: U - mentions restoration of roads and use of native plants. RM: Y - one measure does state to develop a plan to monitor and control weeds following ground disturbance. WHM: U - Perhaps indirectly through evaluation of habitat composition and herd management measures. SMC: U - Again, adoption of SMCRA Plan may limit weeds but unsure. LM: N - No mention of monitoring and control. NELM: N - follows solid (locatable) mineral and fluid mineral design features which include reclamation and prevention of weed dispersal through washing vehicles but no mention of BMP's to prevent invasion. SMM: N. MSE: Federal mineral - N, probably. Federal surface - N, probably.</div> <div>HR: U - measures for restoration and for maintenance of at least 70% of ecological sites in an area capable of supporting GRSG habitat to suitable native habitat (standard measure). May be adequate but unsure.</div>	<div>U - Although there are Yes's it is not clear that non-native invasive plant control strategies in all programs will maintain and restore healthy SB communities.</div>	<div>Non-native, Invasive Plant Species - Weeds/Annual Grasses (BLM Programs: Nearly all have some prevention/control/monitoring conservation measures)</div>
<div>Energy Development (BLM Programs: T, FM, Wind, Solar, LAR, MSE)</div>	<div>Energy development should be designed to insure that it will not impinge upon stable or increasing GSG population trends</div>	<div>Avoid energy development in PACs. Identify areas where <b>leasing</b> is not acceptable, or not acceptable without stipulations for surface occupancy that maintains sage-grouse habitats.</div> <div>If avoidance is not possible in PACs due to <b>pre-existing valid rights</b>, adjacent development, or split estate issues, development should only occur in non-habitat areas, including all appurtenant structures, with an adequate buffer that is sufficient to preclude impacts to sage-grouse habitat from noise, and other human activities.</div>	<div>Older RMPS = no. New RMPS are better, but still might allow for too much development--standard 0.6 mi NSO and 60 day TL. But WRFO has a disturbance cap (2% probably). Heading towards yellow due to future incorporation of protective measures.</div> <div>No. Existing leases typically have no GRSG protections. Standard BLM lease terms (200 m, 60 d) inadequate to protect GRSG.</div>	<div>Y: PPH closed to new leasing.</div> <div>Y: PPH protected, especially &lt; 4 miles from lek, with 3% cap and disturbance density cap (1/640). However, This may not be upheld if challenged by lease holder in court.</div>	<div>Y: ADH closed to new leasing.</div> <div>Same as B.</div>	<div>Adequate? = Yes for new leasing. NSO on new leases for all PPH, with exceptions, and within 0.6 mi of all active leks. NSO exceptions require concurrence from CPW and can only be made where data document a healthy GRSG population at objective levels. Probably no mitigation required for an exception other than demonstrating GRSG pop. is healthy, unless needed to remain within 5% anthropogenic disturbance cap within sagebrush. 5% Disturbance cap can be exceeded if GRSG populations known to be healthy and won't be adversely impacted.</div> <div>Adequate? Probably not in high gas occurrence potential areas, but perhaps not much more BLM can do without violating existing lease rights. [We are requesting a 0.6-mi no-disturbance-in-any-habitat COA rather than just a timing restriction.] Disturbance in sagebrush habitats is capped at 5% in PPH. If GRSG population is documented to be healthy and project would not adversely affect the GRSG population, 5% may be exceeded. Leks would also be buffered by 4 miles during the lekking and early brood rearing seasons. There is no clear directive to minimize sagebrush habitat loss below 5%. Standard lease terms should allow concientious BLM NRS/biologists to move project outside of best habitat up to 200 m if not constrained by terrain or other resources. Standard BLM 60-d TL can be used as a bargaining tool in negotiating other protections in Master Development Plans. This scenario often occurs in the PPR GRSG population. Heading towards yellow due to future incorporation of protective measures.</div>	<div>Note: Although Alternative D is not fully consistent with COT, due to pre-existing mineral rights, BLM does not have authority to fully preclude all lease development in all PPH. Alternatives B and C may violate existing lease rights (e.g. precluding development within 4 miles of a lek could preclude access to minerals).</div>	<div>Energy Development (BLM Programs: T, FM, Wind, Solar, LAR, MSE)</div>

fluid Minerals: Oil, gas, & oil shale (including all on-lease development: pipelines, access roads, pits, compressors, etc.)		If development must occur in sage-grouse habitats due to <b>existing rights and lack of reasonable alternative avoidance measures</b> , the development should occur in the least suitable habitat for sage-grouse and be designed to ensure at a minimum that there are no detectable declines in sage-grouse population trends (see row below and COT report for measures to facilitate this).	No. Existing leases typically have no GRSG protections. Standard BLM lease terms (200 m, 60 d) inadequate to protect GRSG.	Y: PPH protected, especially < 4 miles from lek, with 3% cap and disturbance density cap (1/640). Distance between development and leks maximized. However, This may not be upheld if challenged by lease holder in court. Additionally, no adaptive management proposed if GRSG population exhibits a population decline.	Same as B.	See above. 5% sagebrush disturbance cap, AND any loss of GRSG habitat would need to be offset by effective mitigation. [We are requesting that the cap apply to all important GRSG habitats, not just sagebrush.]There is no COA to ensure measurement of population trends. If population declines are detected, there is no adaptive measure defined for reducing impacts or increasing mitigation.		fluid Minerals: Oil, gas, & oil shale (including all on-lease development: pipelines, access roads, pits, compressors, etc.)
		Which (if any) of Measure 3a - 3e were applied?	a = No. b. = no. c = sometimes. D = ?? E = no.	a = disturbance cap at 3%, which may or may not be restrictive enough for the grouse. Disturbance density also limited to 1/640 acres. Measures b, c, & d = same as Alt. D.	Same as B.	a. Reduce density of energy structures: would depend on lease rights/operator plans and would be voluntary; no density limit in Alt D. [We are requesting density limit of 1/640.] b. Keep development out of PACs: Same as the 3 rows above. Subject to negotiation and plans of lease holder. Accomplishment of "b" is difficult with existing leases, and probably won't be fully achievable. c. Structure consolidation--is typically strived for by BLM NRSs. Cannot understand "d," although reclamation for GRSG habitat is often a challenge. e. Tall or noisy structures: noise not directly addressed in EIS; addressed rather as a timing restriction BMP around leks. Generally addressed at the project level (APD). Tall structures associated with wind energy addressed under infrastructure/ROWs. Noise for compressors would likely be adequately addressed by Infrastructure/ROW.		
		Were locally derived measures applied that addressed objective?	Partially.	BMPs, mostly in the form of Required Design Features, minimize effects to GRSG habits. Examples: make fences GRSG friendly, use pitless drilling, net pits, reclaim site with GRSG in mind, maximize interim reclamation, etc.		BMPs, mostly in the form of Preferred Design Features, minimize effects to GRSG habits. Examples: make fences GRSG friendly, use pitless drilling, net pits, reclaim site with GRSG in mind, maximize interim reclamation, etc.		
<b>Sagebrush Removal / Elimination (BLM Programs: RM, FFM)</b>	Avoid SB removal or manipulation in GSG breeding or wintering habitats	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	No measures that specify in wintering habitat and minimal measures in other/all seasons.	Doesn't say avoid, but is essentially the same by only allowing treatments that conserve, enhance, restore GRSG habitat.	Doesn't say avoid, but is essentially the same by only allowing treatments that benefit GRSG habitat.	Y? - DEIS has measures for managing for GRSG habitat and standard measure of maintaining 70% of areas in ecological site conditions suitable for GRSG, which includes breeding and winter habitat.	Y? - If they do manage for GRSG habitat objectives they should be able to avoid SB removal and manipulation in breeding and winter habitat to the extent that at least 70% of an area (mgmt zone) is suitable for GRSG.  Y - If they implement all the strategies described in Alternative D of the DEIS they should meet habitat objectives and proper functioning condition.	<b>Sagebrush Removal / Elimination (BLM Programs: RM, FFM)</b>
<b>Grazing (BLM Programs: RM)</b>	Conduct grazing management for all ungulates in a manner consistent with local ecological conditions that maintains or restores healthy SB shrub and native perennial grass and forb communities and conserves the essential habitat components for GSG (shrub and nesting cover). Areas which do not currently meet this standard should be managed to restore these components. Adequate monitoring of grazing strategies and their results, with necessary changes in strategies, is essential to ensuring that desired ecological conditions and GSG response are achieved. Livestock and wild ungulate numbers must be managed at levels that allow native sagebrush vegetative communities to minimally achieve Proper Functioning Conditions (PFC; for riparian areas) or Rangeland Health Standards (RHS; uplands).	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Do conduct with intent to meet ecological conditions and PFC and do LHA monitoring but little specific to GRSG needs.	Y	Y	Y? - See option statements/questions. Wild ungulates not addressed.		<b>Grazing (BLM Programs: RM)</b>
		Which (if any) of Options 1 - 5 were applied?	1 - partially, unclear if the perennial grass community is consistent with the ecological sites. 2 - maybe. 3 - N. 4 - conduct habitat assessments but not necessarily for GRSG. 5 - N.	1: U - Updated ESD's not available in all areas, no specific statement about perennial grass community; 2: not directly stated; 3: intent to incorporate GRSG habitat needs into RMP's and AMP's but not sure when will have measures incorporated, especially in AMP's; 4: intent to monitor habitat through LHA's but don't know how often this done and what existing coverage is; 5. Y	1: U - Updated ESD's not available in all areas, no specific statement about perennial grass community; 2: not directly stated; 3: intent to incorporate GRSG habitat needs into RMP's and AMP's but not sure when will have measures incorporated, especially in AMP's; 4: intent to monitor habitat through LHA's but don't know how often this done and what existing coverage is; 5. Y	Same as B and C.		
<b>Range Management Structures (not ranked in COT report table)(BLM Programs: RM)</b>	Avoid or reduce the impact of RMS on GSG	Range management structures should be designed and placed to be neutral or beneficial to sage-grouse.	Very little in any existing plan dealing with range structures and none that say should be neutral or beneficial.	Y? - DEIS doesn't state that RMS's will be designed and placed to be neutral or beneficial but does state that RMS's will be utilized to enhance livestock distribution and to control timing and intensity of utilization.	Y? - DEIS doesn't state that RMS's will be designed and placed to be neutral or beneficial but does state that RMS's will be utilized to enhance livestock distribution and to control timing and intensity of utilization.	Y? - DEIS doesn't state that RMS's will be designed and placed to be neutral or beneficial but does state that RMS's will be utilized to enhance livestock distribution and to control timing and intensity of utilization. However, bottom of page 702 states that range improvements can be used (under Alt. D) as long as they do not adversely affect GRSG.	U - With exception of fences and spring developoment pipes there are no strategies that actually state that RMS's will be designed and placed to be neutral or beneficial to GRSG or will be removed or modified, just that they will be used to enhance livestock management that should benefit GRSG.	<b>Range Management Structures (not ranked in COT report table)(BLM Programs: RM)</b>

		Structures that are currently contributing to negative impacts to either sage-grouse or their habitats should be removed or modified to remove the threat.	N	Y	Y	Y - DEIS does talk about them being removed or modified (Table 2.4 line 36).		
		Were locally derived measures applied that addressed objective?	N	N	N	N - but I'd say NWCO District-wide measures in the DEIS are adequate.		
Free-Roaming Equid Management (BLM Programs: WHM)	Protect sage-grouse from the negative influences of grazing by free roaming equids.	Develop, implement, and enforce adequate regulatory mechanisms to protect sage-grouse habitat from negative influences of grazing by free-roaming equids.	Y - but w/o consideration of GRSG habitat requirements	Y - Monitoring and management of herd size appears adequate.	Y - Monitoring and management of herd size appears adequate.	Y - Monitoring and management of herd size appears adequate.	Y - It appears that the strategies will adequately manage wild horses/free roaming equids. Not a big issue in CO.	Free-Roaming Equid Management (BLM Programs: WHM)
		Manage free-roaming equids at levels that allow native sagebrush vegetative communities to minimally achieve PFC (for riparian areas) or RHS (for uplands).	U - but do have monitoring and gathers	U - Monitoring and management of herd size appears adequate but no mention of achieving PFC (riparian) or RHS (uplands).	U - Monitoring and management of herd size appears adequate but no mention of achieving PFC (riparian) or RHS (uplands).	U - Monitoring and management of herd size appears adequate but no mention of achieving PFC (riparian) or RHS (uplands).		
		Which (if any) of Options 1-4 were applied?	2 and 3 partially, 4	All or parts of all	All or parts of all	For option 1 AML's established but unknown if monitoring has been conducted on maintenance of suitable GRSG habitat parameters specifically; habitat monitoring in general done to justify horse gathers. No additional research has been conducted to determine wild horse impacts on GRSG habitat parameters; Option 2: Y - Have herd objectives; however, don't adjust for drought conditions just have long-term herd objectives; Options 3 and 4: Are currently being worked on in conjunction with USGS.		
		Locally derived measures applied that achieve objective?	Y	Y	Y	Y - Pg. 346 CCP strategy 6.2.2.2 states encouragement of consideration of GRSG habitat objectives when revising Wild Horse mgmt plans. Monitoring of habitat in addition to herd size management should achieve GRSG objectives in relation to WHM (free roaming equid) impacts.		
Pinyon-juniper Expansion / Conifers (BLM Programs: HR)	Remove pinyon-juniper from areas of SB that are most likely to support GSG (post-removal) at a rate at least equal to the rate of p-j incursion	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	N	U - veg treatments prioritized to restore to GRSG habitat but no mention of removing at rate of incursion	U - veg treatments prioritized to restore to GRSG habitat but no mention of removing at rate of incursion	U - Measure for restoration and for maintenance of at least 70% of ecological sites in an area capable of supporting GRSG habitat to suitable native habitat (standard measure). Also, measure to put restoration of sagebrush and understory as highest priority but considering other resource values and unless site-specific circumstances warrant exemption. Should be adequate	U - There's the standard measure of managing for at 70% of an area to be in suitable GRSG habitat so PJ management could take place to achieve that but no	Pinyon-juniper Expansion / Conifers (BLM Programs: HR)
		Which (if any) of Options 1 - 4 were applied?	None	None explicitly but 2, 3, 4 indirectly.	None explicitly but 2, 3, 4 indirectly.	None explicitly but 2, 3, 4 indirectly.		
Agricultural Conversion (BLM Programs: LAR)	Avoid further loss of sagebrush habitat for agricultural activities (both animal and plant production) and prioritize restoration. In areas where taking agricultural lands out of production has benefited GSG, the programs supporting these actions should be targeted and continued (e.g., CRP/SAFE). Threat amelioration activities should, at a minimum, be prioritized within PACS, but should be considered in all GSG habitats.	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Lands identified for disposal for management consolidation but without regard for GRSG habitat.	Most Ag conversion and programs are directed at private land. Table 4.2 which is a comparison by Alternatives of alleviated threats identified in the COT states (for Ag and urbanization) that GRSG habitat would not be identified for disposal unless consolidation of ownership would benefit GRSG or its habitat. Also will consider GRSG values in acquisition of land in ADH. DEIS refers to the 2008 Colorado Cons. Plan for actions addressing ag conversion and urbanization. Table 4.2 says DEIS	Most Ag conversion and programs are directed at private land. Table 4.2 which is a comparison by Alternatives of alleviated threats identified in the COT states (for Ag and urbanization) that GRSG habitat would not be identified for disposal unless consolidation of ownership would benefit GRSG or its habitat. Also will consider GRSG values in acquisition of land in ADH. DEIS refers to the 2008 Colorado Cons. Plan for actions addressing ag conversion and	Most Ag conversion and programs are directed at private land. Table 4.2 which is a comparison by Alternatives of alleviated threats identified in the COT states (for Ag and urbanization) that GRSG habitat would not be identified for disposal unless consolidation of ownership would benefit GRSG or its habitat. Also will consider GRSG values in acquisition of land in ADH. DEIS refers to the 2008 Colorado Cons. Plan for actions addressing ag conversion and urbanization. Table 4.2 says DEIS addresses COT by limiting urban/ex-urban development and maintaining intact sage communities as well as acquiring and managing GRSG habitat.	U - Ag conversion to crops or hayfields would only occur on private or other non-federal land. The only tie-in to Federal land may be lands swapped and subsequently converted by non-federal landowners to crops/hay. This threat is addressed through BLM Land and Realty Program measures.	Agricultural Conversion (BLM Programs: LAR)
		Which (if any) of Options 1 - 4 were applied?	None, but ag conversion directed at private land and 1 and 4 are NRCS not BLM/USFS programs.	None, but Ag conversion and programs are directed at private land.	None, but Ag conversion and programs are directed at private land.	None, but Ag conversion and programs are directed at private land.		
Mining (BLM Programs: T, LAR, SMC, LM, NELM, SMM, MSE, HR)	Maintain stable to increasing GSG populations and no net loss of GSG habitats in areas affected by mining	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Protective language for GRSG not in existing RMP's but various areas found unsuitable for coal mining, or in mineral withdrawal areas that may have some overlap with GRSG habitat.	Coal mining would be found unsuitable and NSO for facilities. Mineral withdrawals or closure to hardrock mining and material sales.	Coal mining would be found unsuitable and NSO for facilities. Mineral withdrawals or closure to hardrock mining and material sales.	SMC: U - Existing surface leases have voluntary PDF's; new surface leases may find unsuitable but may allow up to 5% cap; underground leases and lease renewals will place facilities outside of PPH to max extent possible but exceptions may apply; exploration won't occur if affects GRSG unless impact fully mitigated; will provide additional effective mitigation above 5%; reclamation plan prescribed by SMCRA is adopted by BLM. LM: N - Can't withdraw areas from mineral development based on GRSG concerns, may be able to require mitigation and timing limitations, all design features are suggested so don't have to be followed. NELM: Y? - No new mines?? Consideration for allowing expansion of existing mines up to 5%, if over 5% consider allowing but with additional effective mitigation, have many preferred or suggested design features. SMM: Y? - No new mines?? Consideration for expansion of existing mines and allowance up to 5% disturbance cap with additional effective mitigation if over 5%. MSE: Federal mineral/non-federal surface - U - apply conservation measures as allowable. Federal surface/non-federal mineral - U - apply appropriate PDFs to surface.	U - Several mining strategies that appear to be beneficial but several with unknown effects to conservation of GRSG.	Mining (BLM Programs: T, LAR, SMC, LM, NELM, SMM, MSE, HR)
		Which (if any) of Options 1 - 4 were applied?	1 and 3 partially addressed but not specific to GRSG	1, 2, 3, and maybe 4 but not explicitly stated.	1, 2, 3, and maybe 4 but not explicitly stated.	1 - Y?, will possibly avoid new mining activities but up to 5% cap; 2? - Not explicit to avoid leasing until other habitats restored; 3? - Reclamation required for mine plans but unclear if not sure if they would go so far to document GRSG use; 4 - N, no measures included for reclamation of abandoned mines.		
Recreation (BLM Programs: T, REC)	In areas subjected to recreational activities, maintain healthy native SB communities based on local ecological conditions and with consideration of drought conditions, and manage direct and indirect human disturbance (including noise) to avoid interruption of normal GSG behavior.	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	GRSG and GRSG habitat not addressed	U - do have travel management measures	Y - travel management and recreational restrictions	U - Allows Special Recreation Permits on BLM and SUA's on USFS that will not adversely affect GRSG due to habitat loss or disruptive activities. Alt D. for Casual Use category provides for potential to seasonally close camping and and non-motorized recreation w/in 4 miles of a lek in ADH. Alt D. least restrictive for const of new roads, realignments, and upgrading. All PPH limited to designated routes, no cross-country travel for Alt B, C, and D. Travel management plans scheduled to be completed in 5 years. Largely passive restoration through closure of trails, etc. Limits disruption to species. Allows for consideration of transplanted sage-brush but does not require it as in Alt C. 5% disturbance cap applied to new roads, alignments, upgrades.	U - Difficult to say what impacts of recreation currently are to GRSG in CO.	Recreation (BLM Programs: T, REC)
		Which (if any) of Options 1 - 2 were applied?	GRSG and GRSG habitat not addressed	tion 1: There is potential to close ORV use. Option 2: Road and trail construction can be avoided, no	tion 1: There is potential to close ORV use. Option 2: Road and trail construction can be avoided, no	Option 1: There is potential to close ORV use. Option 2: Road and trail construction can be avoided, no mention of other restrictions on facilities in recreation and travel sections.		



Ex-Urban Development / Urbanization (BLM Programs: T, LAR)	Limit urban and exurban development in GSG habitats and maintain intact native SB communities	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Parcels identified for disposal for consolidation of management but without regard to GRSG. Various areas managed as ROW avoidance.	Disposar. Land exchanges are preferred method for disposal. Public land consolidation is intended. Will consider GRSG habitat values in acquisitions.	Disposar. Land exchanges are preferred method for disposal. Public land consolidation is intended. Will consider GRSG habitat values in acquisitions.	Y - DEIS states (Table 2.4) that will retain public ownership (except for 1800 acres of isolated parcels (not necessarily GRSG habitat) identified for disposal). Land exchanges are preferred method for disposal. Public land consolidation is intended. Will consider GRSG habitat values in acquisitions.		Ex-Urban Development / Urbanization (BLM Programs: T, LAR)
		Which (if any) of Options 1 - 5 would be applied?	3 and 4 likely. 1, 2, and 5 no or unlikely.	All	All	1.a. HCPs not relevant. 1.b. easements mentioned as tool; 1.c. Land exchanges mentioned as tool; 2. acquisition mentioned as tool; 3. Consolidation of infrastructure mentioned via ROW consolidation for pipelines, transmission lines, etc; 4. Landfill exclusion not mentioned but landfills are never (?) permitted on BLM land, or if they were in GRSG habitat, they would be subject to a) no adverse effect on GRSG pops (at least in PPH), and b) 5% cap in PPH; 5. Relinquishment of land for urban development not intended (Table 2-4), with reasonable exceptions.		
Infrastructure (BLM Programs: T, LAR, Wind, Solar, RM, FM, SMC, LM, NELM, SMM)	Avoid development of infrastructure within PACs	No new development of infrastructure within PACs. Designated, but not yet developed infrastructure corridors should be re-located outside of PACs unless it can be demonstrated that these corridors will have no impacts on the maintenance of neutral or positive sage-grouse population trends or habitats. New infrastructure should be avoided where individual state plans have identified key connectivity corridors outside of PACs.	No.	Yes, PPH = Exclusion area.	Yes, ADH = Exclusion Area.	ADH managed as avoidance area but ROW's may be allowed if they don't adversely affect GRSG. Transmission lines > 230 kV excluded from most PPH, except a corridor where TWE & EGS are planned (ROW avoidance there). If no adverse effects to GRSG pops, still limits development and surface disturbance to 5% in sagebrush (extra mitigation could allow for > 5%). Submitting to BLM clarification request/comment on "53% of GRSG habitat [would be limited by ROW avoidance]"--recommending that ADH be ROW avoidance regardless of habitat type; Wind: ROW avoidance in ADH, threat low; Solar: ROW avoidance in ADH, threat low. Large scale commercial solar precluded by BLM Solar PEIS in NWCO.	Alt D = Probably. New ROW would only be authorized if GRSG neutral (including mitigation) and subject to a 5% disturbance cap in sagebrush habitats (recommending cap apply in all GRSG habitats). BLM decides what constitutes GRSG neutral.	Infrastructure (BLM Programs: T, LAR, Wind, Solar, RM, FM, SMC, LM, NELM, SMM)
		Where state sage-grouse management plans provide an effective strategy for infrastructure those strategies should be implemented. In all other situations the conservation options in the COT report should be considered.	A =B = C =D.	A =B = C =D.	A =B = C =D.	The Colorado GRSG Conservation Plan does have strategies to avoid, minimize, and mitigate impacts of infrastructure including roads and there is some overlap with conservation options in the COT report. However, implementation and effectiveness of the strategies is currently not well known.		
		Which (if any) of Options 1 - 10 would be applied?	A few likely applied but mostly not with GRSG in mind.	PACs = Exclusion areas.	PACs = Exclusion areas.	CM1 = Y, see above. CM2 i.collocation required where possible, but not restricted to 200m max width, ii. lost habitat would need to be mitigated to make project GRSG neutral. CM3 = general practice. CM4 Y intent shown in TM (enforcement assumed in EIS). CM5 = ? would occur over time. CM6 = RDF. CM7 = would only be permitted if GRSG neutral, also subject to 5% cap. CM8 = general practice, CM9 = Y if adverse effects to GRSG pops or over cap. CM10 Y, TM plan calls for evaluation of seasonal road closures and restoration of roads not designated. Note: Wind & Solar not specifically prohibited in Alt. D, but net adverse effects would be.		
Fences (not ranked in COT Report table)(BLM Programs: RM)	Minimize the impact of fences on GSG populations	No conservation measures specified. Is conservation objective addressed applying locally-derived measures?	Only WRFO RMP minimally addresses fences.	Y	Y	Y - Prescribes marking, modification, or removal of fences. We will recommend use of Alternative C language in Table 2.4 line 37, as it's more flexible rather than Alternative D which suggests marking as a first step, then modification, then removal in that order.	Y - Strategies seem adequate even though details like fence density and distance from leks not included.	Fences (not ranked in COT Report table)(BLM Programs: RM)
		Which (if any) of Options 1 - 3 were applied?	Only WRFO RMP may partially address 1 and 3.	1, 2, and 3 but without some of the distance specificity	1, 2, and 3 but without some of the distance specificity	1 -Y, although no description of terrain or density of fences; 2 - Y; 3 - Y, but no distance from leks mentioned. Stevens 2012, which specifies fence densities and distances, and Christiansen 2009 are listed as references however. Livestock management facilities besides fences (corrals, loading facilities, water tanks, windmills) will be addressed under the "Range Management Structures" or "Wild Horse Management" issues.		
<sup>1</sup> Threat Ratings		<sup>2</sup> Subjective Consistency (with COT Report) Rating Continuum				Programs		
Y: Pres. and Widespread		High Concern &/or Measure Not Applied				T = Travel		
L: Pres. and Localized		↑				REC = Recreation		
N: Not Known to be Pres.		Lower Concern &/or Measure Applied				LAR = Lands and Realty		
						Wind = Wind Energy Management		
						Solar = Industrial Solar		