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1	Ch/ App	Section	Page #	Text Referencing	Comment
2	2	2.8.2 Table 2.4	2-66 (98)	Objective D-Veg1 and Objective D-LG2	Some plants that sage grouse use in riparian and other habitats are not native. "consistent with potential" may be misconstrued to not allow management favoring those plants even if they would support PFC or rangeland health goals.
3	2	2.8.2 Table 2.4	2-80 (112)	Objective: E-LG 2: T	This provides an appropriate focus on a mix or range management tools as recommended in Wyman et al (2006) and Swanson et al. (in press).
4	2	2.8.2 Table 2.5	2-127 (159)	Action C-VEG 12:	Removal of livestock watering infrastructure removes tools that are essential for watering livestock in a manner that supports the more powerful tools in grazing management, season of use, duration of use, rotation of use. Furthermore, it would cause livestock and wildlife like elk to concentrate use in riparian areas.
5	2	2.8.2 Table 2.5	2-132 (164)	Action D-VEG 23:	Riparian areas serve as fuel breaks in some areas and they do so better when functioning properly. However adjacent terrace and valley bottom vegetation management could enhance this while fostering resilience (chambers et al _____).
6	2	2.8.2 Table 2.5	2-133 (165)	Action D-VEG 26:	"Ecological integrity" is a bit vague or too specific depending on how it is interpreted. Functionality is the foundation. Then resource objectives should be based on local planning.
7	2	2.8.2 Table 2.5	2-134 (166)	Action D-VEG 28:	Fuels treatments for shrubs is important and useful. Also include trees (Specifically P/J) and other plants.
8	2	2.8.2 Table 2.5	2-152 (184)	Action B-WHB 4, Action B-LG 4, Action D-LG 4:	If land health assessments includes Riparian PFC, this should be specified (e.g. Rangeland Health and Riparian PFC).
9	2	2.8.2 Table 2.5	2-196 (228)	Action D-LG 4, Action B-LG-5:	Land health assessments are an excellent way to triage the management area and assess needs for management. Then management objectives for specific locations should be monitored with quantitative monitoring. See Swanson et al. (2006) and Dickard et al. (2014).
10	2	2.8.2 Table 2.5	2-200 (232)	Action B-LG 10, Action D-LG 10, Action E-LG 10: TMA-12.2:	It would be ideal for the public and the resource if the BLM and FS were on the same page and used PFC. Perhaps this is the means to do so.
11	2	2.8.2 Table 2.5	2-200 (232)	Action E-LG 10: TMA-12.2:	Fencing may be needed in non-riparian areas in order to improve management of riparian areas (e.g. dividing an upland pasture to shorten season of use in rotation grazing).
12	2	2.8.2 Table 2.5	2-201 (233)	Action B-LG 12:	Reference state vegetation may or may not be a useful goal or action. PFC is needed everywhere. Often PFC will move toward reference state vegetation. However PFC puts the emphasis on the physical functions as these are essential.

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13	2	2.8.2 Table 2.5	2-201 (233)	Action B-LG 13:	<i>Reducing hot season is very important where hot season grazing is the issue, as it often is. However, reducing hot season grazing is not needed everywhere. In some areas it is reduced enough already and in others there are other tools that are as or more useful for reducing negative impacts. Management should be site specific to meet objectives using all or any useful tools.</i>
14	2	2.8.2 Table 2.5	2-202 (234)	Action F-LG 15:	<i>This puts continuity of riparian areas above all else which may not be optimal.</i>
15	2	2.8.2 Table 2.5	2-206 (238)	Action D-LG 20:	<i>Sometimes it is not feasible or desired to move Salting and supplemental feeding locations, livestock watering and handling facilities at least one half mile from a riparian area (e.g. in a riparian pasture small enough to preclude it)</i>
16	2	2.8.2 Table 2.5		Action E-LG 33:	<i>The wording of this is fine up until the last five words. "...herbage removal within acceptable limits" puts the emphasis on leaves that are remaining when the more important consideration for many successful riparian strategies is the recovery time, especially within the growing season. Or a balance of the two considerations can work very effectively. (Wyman et al. 2006; Swanson et al. in press) A standard utilization level is an approach bound to fail because it cannot be adequately monitored everywhere whenever needed.</i>
17	2	Table 2.7	2-324 (356)		<i>Focusing management on allowable use levels where not meeting objectives is putting the emphasis of grazing management on a weak tool. It also focuses management on grazing where grazing may or may not be the driving management problem or opportunity (If this is not so, the caption needs to be changed). Most of the habitat objective issues identified in Table 2.6 (or its revised version) are not caused by current grazing management. Many of the habitat objectives identified in table 2.6 are caused by an inappropriate fire regime. Many that were caused by grazing will not be remedied by simply fixing grazing. As Wyman et al. (2006) and Swanson et al. (accepted) point out, utilization is important in places where the seasons of use are relatively long. However, utilization is much less important in riparian area management where grazing seasons are short and allow substantial parts of the growing season for plant recovery through growth or regrowth. Furthermore, requiring utilization levels such as these demotivates ranchers and range management specialists to find solutions that will work much more effectively. Those solutions, taught in the interagency (including Cooperative Extension, NRCS, BLM and FS) Nevada Range Management School, focus grazing management on season of use, duration of use, and rotation of use. This is especially true in large pastures (which were not the focus of Briske et al. (2008)). The terms and conditions column suggests that agencies will have people out monitoring in mid-season and this has repeatedly not worked. Where utilization is needed because of longer grazing seasons, a better approach is to have triggers followed up by end point indicators.</i>

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18					<p><i>Both were described in the Nevada Rangeland Monitoring Handbook (Swanson et al. 2006) adopted by both BLM and FS by publicly signing the letter of support at the 2007 SRM ceremony. Both should be based on local considerations including season and duration of grazing, objectives, vegetation type, the amount of rest built into the system etc. If the intent of this Table 2.7 approach is to provide incentives to have grazing make progress toward objectives, then the approach should be targeted at only those objectives for which grazing is relevant and where current or recent grazing management is the cause of the problem. Even then, an alternative more powerful strategy would strengthen the incentive as a tool for effecting progress. This more powerful strategy is avoid stressing the important forage plants by either A. Utilization levels such as those proposed OR B. Short use periods with no livestock grazing during substantial parts of the growing season and use periods at a different seasons in different years. "No grazing from May 15 to August 30 in brood rearing habitat" precludes important tools for improving brood rearing habitat. Grazing repeatedly in September is likely to do damage to the physical functioning of riparian areas. Grazing before May 15 may cause riparian areas to not be grazed, and</i></p>
19					<p><i>The problem with grazing in riparian areas and wet meadows is not that sage grouse are directly impacted by cattle use at the time that sage grouse use these areas. The problem is that poor grazing management causes riparian areas to lose functionality and other resource values. To address this problem there are many tools. As described in Swanson et al. (in press) the need is for more generally successful tools to be used than generally unsuccessful tools. On balance there must be more recovery than damage over the length of the grazing rotation cycle. This management must keep the plants healthy so they can have strong roots and go through succession toward more or an adequate amount of riparian stabilizers. Precluding grazing from May 15 to September 1 is very clearly overkill as demonstrated by the diversity of successful methods applied in the Elko District and elsewhere across the nation. Managing this problem with only utilization standards would be overkill (because it is often unneeded), distracting (because it emphasizes a weaker tool while other and better approaches lose focus from lack of assurance) and ineffective (because it has proven to not be effective in practice where agencies cannot afford the personnel to monitor adequately and lose budgets because the fights are unproductive). The policy needs flexibility to use strong tools and certainty that strong tools will be used. So far this Table 2.7 widely misses the mark. It will likely be the subject of numerous law suits and it is contrary to what has been taught in Nevada and across the West by the BLM/FS National Riparian Service Team and by the Nevada Range management School for more than a decade.</i></p>
20	2	2.9	2-326 (358)	Alternative C.	<p><i>"Removal of fencing would reduce the potential of GRSG direct strikes but would increase negative impacts on brood rearing habitats from wild horses and burros having access to more riparian sites." This sentence is very important. Due to our Nation's inability to manage public horse populations, their sphere of influence must be limited to HMAs and fenced riparian pastures will be a critically important tool for Riparian management and PFC.</i></p>

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21	2	2.9	2-327 (359)	Alternative E	<i>Promotes riparian grazing improvements along with additional infrastructure in order to control season, duration and degree of use. These improvements would be beneficial to late summer brood-rearing habitat for GRSG. Another important sentence. Alternative E embraces more riparian management tools.</i>
22	2	2.9	2-327-328 (359-360)	Alternative A	<i>"Keeping horses and burros at AML would reduce overall impacts on vegetation, especially nesting cover and riparian brood-rearing habitats during periods of drought." At best, this is true only if keeping horses at AML can be done and only if AML is based on riparian PFC which it has not been until recently (after the 2010 policy). Consistently, AML has been not been met.</i>
23	2	2.8.2 Table 2.5		All Alternatives	<i>Mowing of sagebrush areas is not mentioned in any alternative even though monitoring of existing mowed fuel breaks and habitat improvement projects has shown this tool to be highly effective in many areas and mowed fuel breaks may be a fundamentally important tool for reducing fire size and therefore average frequency (Swanson et al. 2013a,b,c, and Swanson et al. in review).</i>
24	2	2.8.2 Table 2.4	2-72 (104)	Objective D-VEG-D 1	<i>Although drought is well recognized as a stressful time for vegetation, the important consideration for vegetation is the survival of the perennial plants through the drought and their recovery after drought.</i>
25	2	2.8.2 Table 2.5	2-150 (182)	Action D-VEG-D, Action D-VEG-D 3, Action D-LG 28	<i>Fortunately once a plant becomes dormant, little or no stress occurs from grazing the dormant leaves. Unfortunately, prior to dormancy, opportunities for recovery from grazing that depend on moisture availability are shortened.</i>
26					<i>Riparian areas differ in their response to drought depending on whether surface water and ground water remains and for how long. Where surface water is absent, a pasture or use area a long distance from water may receive little or no livestock use. This allows water loving plants to grow toward the center of, and help restore, an over-widened channel so long as there is subsurface water for plant growth. Where surface water is limited, the use near the remaining water may be excessive. This prevents the drought opportunity for plant encroachment on an over-widened stream to narrow a stream. Animals also seek the green forage remaining in riparian areas with subsurface moisture. Because the amount of water can vary within and among seasons with or without drought, it is more important to have recovery periods built in to the grazing plan than to attempt to regulate the amount of use during a grazing event (an important weakness of table 2.7). With a short season of use, plants can recover on average through the years. With long seasons of use riparian plants in large pastures do not get sufficient recovery periods without rest years. Rest years can create fuels issues that could be avoided or lessened with short duration use.</i>

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27					<i>Following drought, perennial plants can benefit from a period of growth with little or short growing season grazing. For this reason it is important to move the season of use among years so that in some years plants have the needed opportunity to recover even if it is shortened in other years and to shorten the use periods. Shortening use periods often requires water development for larger herds in smaller areas (with fewer locations for watering) for a shorter time.</i>
28	2	2.9	2-327-328 (359-360)	Alternative A	<i>“Keeping horses and burros at AML would reduce overall impacts on vegetation, especially nesting cover and riparian brood-rearing habitats during periods of drought.” Interesting word choice (would) as it has not been sustained across the planning area yet. This statement is true only if “impacts on vegetation, especially nesting cover and riparian brood-rearing habitats” are considered in setting AML. Riparian conditions were not considered until 2010. So, many AML decisions will likely have to be remade to make this statement true.</i>
29	2	2.9	2-330-331 (362-363)	Alternative D	<i>“Grazing management to achieve vegetation composition and structure consistent with ecological site potential could maintain or enhance sagebrush and perennial grass conditions within PPMAs. Drought management and livestock resting during the growing season would provide a more resilient plant community.” The bigger problem than drought is the overabundance of forage/fuel in years after wet winters and springs. The biggest issue facing sagebrush habitats is not drought, but fire fueled by weather variability. Drought NEPA documents were a partially good idea that missed the bigger part of the issue. The more important question not addressed in any alternative is how to manage the forage/fuel opportunity/crisis after years like 1983-84 that preceded the big fire year of 1985 or the 1993 year that preceded the big fire year of 1995 or the 1995,6,7,8 wet years that preceded the huge fire years of 1999, 2000, 2001. Statistically the big fire years in the Southwest come the year after the wet years (____). Although they can come in the wet year after things dry up as in 2006.</i>

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30					<p><i>It is absolutely critical that this EIS empower districts to develop criteria based authority to issue TNR, stewardship contracting, or other grazing authority for livestock to consume these fuels after wet years and to do so in a manner that sustains the long term health of the herbaceous perennials and prevents the huge fires that consume sagebrush over vast areas. TNR is probably the easiest and brings in some additional revenue. Unfortunately it is less likely to be applied with finesse. Stewardship contracting could trade the grazing fee for a much greater economic benefit to the government by contracting for grazed fuel breaks in strategic areas to break up fuel continuity or protect critical habitats. Fall grazing of cheatgrass has been shown at the Gund Ranch to be a very effective way to use grazing to consume cheatgrass fuels in a manner that does not damage perennial plants (Smeltzer et al. accepted). This tool can be expanded with adaptive management to include more of a focus on using protein supplements or hauled water to concentrate grazing along fences. Winter grazing can be applied in areas without snow. Low stress livestock handling could be applied to concentrate cattle for fuel breaks across large landscapes. Any approach that works will have to provide economic and/or other incentives to producers to stock up or man up with the extra labor to put practices on the ground. They will also require monitoring to learn from the experience. The alternative of large fires that could easily have been prevented or shrunk is unacceptable. Not using this opportunity to create empowering NEPA documents ahead of the need, and therefore forcing such documents to be produced during the need which is not possible, is equally unacceptable.</i></p>
31	<p><i>General Commnet - Predation and Predator Control</i></p>				<p><i>See attached</i></p>
32	<p><i>General Comment</i></p>				<p><i>While the agencies claim that the DEIS recognizes valid existing rights, the management restrictions for sage-grouse could wholly or partially deny mining operators their rights. The disturbance cap concept proposed in Alternatives B, C, and F in the DEIS could result in the denial of projects simply because other disturbances have decreased available cap space. The BLM has no authority to deny valid existing rights; consequently, decisions and development made by entities with valid existing rights would affect what the BLM can authorize for subsequent users of land it administers in the management zone. By using the cap concept, BLM may uphold the valid existing rights of one operator at the expense of another. BLM cannot unilaterally modify existing claims or access to claims after the claims have been issued.</i></p>

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33	1	1.5.4	1-18 (18)	<i>Issues Eliminated from Detailed Analysis Because They Are Beyond the Scope of the LUPAs section</i>	<i>The effectiveness and efficacy of the changes that would result in the as a result of the DEIS cannot be determined if the issues of predation and predator control are not analyzed. The issue does not have to be under the purview of the BLM or the Forest Service to have relevance to the analysis...the issue only has to be under the purview of the BLM or the Forest Service to be included in the selected alternative. The analysis of an issue and the inclusion of measures in the selected alternative to address the issue should not be confused. Predation and predator control are as much within (or beyond) the scope of BLM and Forest Service authority as is Global Warming, and should be addressed for the same reasons. It is not an issue of whether or not BLM or Forest Service will implement predator control, but it is an issue of the magnitude of predation as a factor in causing the decline in sage-grouse populations that needs to be in the analysis to provide perspective on how effective the alternatives will be in sustaining sage-grouse populations and habitats.</i>
34	1	1.6	1-20 (20)	<i>Development of Planning Criteria, last bullet item on the page</i>	<i>All discussions of multiple-use seem moot when put in the context of "For Forest Service-administered lands, all activities within GRS habitat will achieve the GRS habitat objectives." It is very easy to conceive of situations where a proposed action could be denied because of potential impacts to sage-grouse or sage-grouse habitat based on this statement. This does not conform to multiple-use management.</i>
35	2	2.8.2	2-254 (286)	<i>Table 2.5; Action B-LOC 1; 1st bullet</i>	<i>Proposed withdrawal from mineral entry based on risk to sage-grouse and its habitat is not necessary as this action does not allow for avoidance, minimization of impacts, and mitigation of impacts within the designated areas (i.e., PPH, PPMAs, etc.). The approach of avoiding, minimizing, and mitigating impacts is preferable to withdrawal from mineral entry. The approaches outlined in Alternatives D and E are preferable to withdrawal from mineral entry.</i>
36	2	2.8.2	2-256 (288)	<i>Table 2.5; Action B-LOC 2</i>	<i>The mandatory application of BMPs from the NTT Report should not be considered. BMPs should be applied on a case-by-case basis, as relevant to the action being considered. These types of "one-size-fits-all" regulatory prescriptions are contrary to DOI and BLM guidelines on the Data Quality Act."</i>

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37		2 2.8.2	2-205 (237) and 2-207 (239)	Table 2.5; Page 205, Alternative B and F, Action B-LG 19 and F-LG 19 and Page 207, Alternative B Action B-LG 23 and Alternative F Action F-LG23	<i>The option of re-opening grazing privileges if a new permittee acquires a ranch/allotment where grazing privileges have been retired should be considered. This action element is based on the assumption that grazing is always negative with respect to impacts to sage-grouse and their habitat. Voluntary retirement of grazing privileges by one operator may not be economical or environmentally viable for the next operator. In addition, these areas should not be “retired” but be put in voluntary non-use status so they can be re-opened to grazing at a later date. These areas may provide important livestock grazing in years of drought when livestock are moved out of other pasture early, or may provide grazing lands for permittees when wildfire has resulted in closure of other pastures, either associated with the allotment or from neighboring allotments.</i>
38		4 General Comment			<i>This very qualitative discussion of impacts would be unacceptable to the BLM if it in an EIS written by a third-party contractor as a project component. The qualitative treatment of impacts as “more than,” “less than,” “increase,” “decrease,” and etc. is not sufficient to allow the public (or the authorized officer) to determine real impacts and the magnitude of the impacts. The only quantitative data presented are acres of sage-grouse habitats open to various land uses among the alternatives, or acreages of allotments within sage-grouse habitat, etc. There must be some quantification to create meaning and to allow the public to discern differences between alternatives.</i>
39		4 4.14.2	4-188 (780)	Locatable Minerals section - General	<i>The analysis of impacts to locatable minerals is predicated on how many acres of public land will be withdrawn from mineral entry. The alternatives have various restrictions placed on mineral activity and these are not analyzed or compared. The “Indicators” provided on page 188 are related to actions that will increase or decrease the acreage of mineral withdrawal, and the “actions placing restrictions or requirements that reduce efficiency and increase operational costs that could make development infeasible.” Yet in the analysis, these restrictions are generally dismissed. The analysis is inadequate.</i>
40		4 4.19.2	4-245 (837)	Economic Impacts section	<i>The analysis presented here is simplistic and an overly optimistic analysis. This analysis is woefully incomplete and inadequate. The economic impacts of Alternatives C, D, and E are exactly the same and not different than Alternative A (No Action). A review of Table 2.5., Description of Alternative Actions, reveals that there are substantial differences in the Alternatives with respect to Locatable Minerals, and therefore, impacts should be different. This demonstrates that the qualitative analysis done in this DEIS is not adequate to allow the public to discern the real difference among alternatives.</i>

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41	5	General Comment			<i>This very qualitative discussion of impacts is inadequate. The qualitative treatment of impacts as “more than,” “less than,” “increase,” “decrease,” etc. is not sufficient to allow the public (or the authorized officer) to determine real impacts and the magnitude of the impacts. This is common for every resource program analyzed. The cumulative effects analysis for Climate Change is quite general. What is the basis for the analysis (no references are included)? It is questionable if the analysis is complete or accurate.</i>
42	1	5.4	17	<i>Issues Eliminated from Detailed Analysis Because They Are Beyond the Scope of the LUPAs:</i>	<p><i>There are issues which are out of the scope of what the BLM and Forest Service have authority to regulate on public lands, but these are not necessarily irrelevant to the DEIS analysis. All factors (indirect, direct, and cumulative) that impact sage-grouse should be analyzed, or at least included, so it is clear to the public (and the agencies) what the significant factors are that are contributing to the decline of sage-grouse populations. This would put the various alternative action items (elements) into perspective as to how important a specific element is to stopping the decline of the species. Only when that entire spectrum of factors per NEPA is analyzed can the public (and the agencies) determine if the eventual selected alternative is sufficient to stem the decline in sage-grouse populations. A summary of population information found that sage-grouse lived longer, have higher winter survival rates, lower rates of reproduction, and are more migratory over greater distances than previously thought¹. As a result, ongoing hunting is likely a contributor to declines in sage-grouse populations. Additionally, new data and research published by Gibson et al. (2011) have refuted the frequently repeated belief that there is a no additive demographic effect of hunting on sage-grouse populations. Thus, the hunting of populations in Nevada and California will have an effect not only on those populations but also on nearby populations that are not hunted but are genetically and demographically linked by dispersal².</i></p> <p>¹John W. Connelly, Christian A. Hagen, and Michael A. Schroeder, <i>Characteristics and Dynamics of Greater Sage-Grouse Populations, in Greater Sage-Grouse Ecology and Conservation of a Landscape Species and its Habitats. Studies in Avian Biology (vol. 38) p. 53 - 67 (Steven T. Knick and John W. Connelly eds., 2011).</i></p> <p>²Gibson, R. M., V. C. Bleich, C. W. McCarthy, T. L. Russi. (2011) <i>Recreational hunting can lower population size in greater sage-grouse. Pp. 307-315 in B.K. Sandercock, K. Martin, and G. Segelbacher (eds.). Ecology, Conservation, and Management of Grouse. Studies in Avian Biology (vol. 39), University of California Press, Berkeley, CA.</i></p>

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43	3	3 . 2 3	1 9 7	Values Associated with Populations of Sage-Grouse	<i>The DEIS, Section 1.5.4. page 18 indicates that "Hunting also provides limited revenue for GRSG conservation." However, there is no mention or disclosure of this in Section 3.23 Socioeconomics and Environmental Justice. This is an oversight and should be included in the DEIS so the public can determine what level of revenue is generated for NDOW in the analysis area. This is needed to put the loss of such revenue into perspective with the loss of revenue that will occur to various other land users with the implementation of any of the alternatives. Such an analysis will likely show that the loss to communities from the restrictions to fluid minerals, mining, livestock grazing, and other land uses will be far greater than the loss of revenue to NDOW if hunting is discontinued. Even though BLM has no jurisdiction over hunting, the socioeconomic impacts of hunting sage-grouse need to be included, not just the socioeconomics of hunting (i.e., deer, elk, upland game, etc.) in general. Because the DEIS uses socioeconomic benefit of hunting as a reason to exclude hunting from further detailed analysis, there is some need to disclose what that benefit is in the Socioeconomic analysis, especially in the section "Values Associated with Populations of Sage-Grouse".</i>
44	A d p i p x e n H	a n p d p i e x	h t u - h g 1 r h o 6	Oil and Gas Reasonably Foreseeable Development	<i>Appendix H specifically references oil and gas activities in the Assumptions for the Reasonably Foreseeable Development Scenario; however; the assumptions are not in agreement with the information industry has submitted to Elko District as part of two proposed actions and the public record. This should be corrected in the FEIS.</i>
45	A p i p x e n O d	a p d p i e x n	0 1 0 1 - 0	Economic Impact Analysis Methodology	<i>As indicated above, the assumptions used on Appendix H are incorrect and gas economic value is not accurate and significantly undervalued. This analysis should utilize the information in the public record in order to accurately analysis the positive economic value of Noble's reasonable and foreseeable development to Elko County, the State of Nevada, and U.S. citizens through BLM mineral royalties.</i>
46	4	4.9	4-129-152 (721-743)	Temporary Non-Renewable (TNR) authorizations	<i>There is no mention of utilizing TNR to assist in addressing the threats of catastrophic wildfire, the establishment of green belts, the protection of in-tact sagebrush communities, and the potential to control the spread of invasive annual grasses, especially in years in which we receive average to above average annual precipitation. We would recommend the adoption of the following language to address the utility of TNR to achieve this objective through a NEPA process in advance of the need to use such TNR's. "To reduce the risk of fire and enhance restoration in large contiguous blocks of cheatgrass-dominated landscapes or sage-grouse habitats that are next to cheatgrass dominated lands, create local NEPA documented plans to use dormant season temporary nonrenewable (TNR) AUM authorizations and stewardship contracted grazing to reduce fuels in areas dominated by invasives."</i>
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