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STATE OF NEVADA Sagebrush Ecosystem Program

January 24, 2014

Amy Lueders, Nevada State Director BLM Nevada State Office 1340 Financial Boulevard Reno, NV 89502

William Dunkelberger, Forest Supervisor Humboldt-Toiyabe National Forest 1200 Franklin Way Sparks, NV 89431

RE: Nevada and Northeast California Sub-regional Greater Sage-Grouse Draft Land Use Plan Amendment (LUPA) and Environmental Impact Statement (EIS)

Dear Ms. Lueders and Mr. Dunkelberger,

The Sagebrush Ecosystem Council (SEC) appreciates the opportunity to participate in the review of the above mentioned document. This effort by the Bureau of Land Management (BLM) and United States Forest Service (USFS) represents an unparalleled planning effort to achieve sage-grouse conservation in our state, which complements the efforts of Nevada. The SEC also appreciates the continued close coordination between your staff and the Sagebrush Ecosystem Technical Team (SETT).

The SEC would like to reiterate, through the authority granted us in AB461 (2013 Legislative Session), it is our desire for the State's Alternative (Alternative E) to be selected as the BLM's preferred alternative. Any management alternative as a whole, or components of such, that are inconsistent with the state plan or other plans, policies, controls, or laws of the state of Nevada and local government jurisdictions, must be reconciled as required by National Environmental Policy Act (NEPA), Federal Land Policy Management Act (FLPMA), and respective regulations. The SEC represents a unified, broad, stakeholder effort to produce a plan to protect sage-grouse through a public and transparent process.

The SEC is encouraged that the BLM/USFS has incorporated key elements of Alternative E, such as the Conservation Credit System and coordination with the SETT into the BLM/USFS Alternative (Alternative D). However, the SEC is concerned that the BLM/USFS have currently selected Alternative D as the preferred alternative in the Draft EIS (DEIS) rather than Alternative E. Alternatives D and E share the same overarching goal of no net unmitigated loss of sage-grouse habitat; however the two alternatives propose different visions of how to achieve this goal. The SEC is concerned about the BLM's proposal of a blanket policy to exclude new recreational facilities, utility-scale wind and solar energy facilities, salable mineral development, non-energy leasing minerals, and no-surface occupancy restrictions for fluid minerals, in all sage-grouse habitat. This appears to be regardless of sage-grouse population density, consideration of seasonal habitat requirements, or importance of habitat to individual populations. These proposed actions contradict BLM's and USFS' multiple-use mandate, governed by the Federal Land Policy and Management Act of 1976 and National Forest Management Act of 1976 respectively.

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The SEC recommends the BLM/USFS consider Alternative E's hierarchical decision process of "avoid, minimize, and mitigate" to achieve no net unmitigated loss of sage-grouse habitat in the selection of the final alternative. This includes the SETT consultation process and the Conservation Credit System to assure that this policy is applied consistently throughout the state. The SEC believes this is the best approach because it is pragmatic and effective for achieving sage-grouse conservation, while maintaining the culture and economic vitality of the state.

The BLM/USFS have requested more detail and specificity on elements of the State Alternative to assist in your analysis. To this end, the SEC has approved revisions to the State Plan, and Alternative E, which include more detail on the "avoid, minimize, mitigate" policy and SETT consultation, Site Specific Consultation Based Design Features (further developed from BLM/USFS' Required Design Features), and adoption of sage-grouse habitat objectives (Table 2.6 in the DEIS). The SEC encourages the BLM/USFS to thoughtfully consider these changes when selecting the final plan. The SETT has already submitted these documents to your staff. Please continue to work with them to incorporate these revisions into the Final EIS.

The SEC strongly supports the concept of multiple-use on public lands and is opposed to alternatives that partly or wholly eliminate land uses. Federal law specifically allows certain uses (e.g. grazing, mining, wild horses, and renewable energy) which must be recognized in the selection of the preferred alternative.

In order to provide a more robust description of proper livestock grazing for the BLM/USFS to consider in this section, the SETT is currently working closely with their Science Work Group to develop a revised version of the livestock grazing section of Alternative E based on the best available science. The SETT will continue to work with BLM/USFS staff members to incorporate these revisions into the Final EIS.

In addition the SETT, on behalf of the SEC, will be submitting more detail on the Conservation Credit System, draft Habitat Suitability Map developed by USGS, and updated management maps with revised management categories, for inclusion and consideration in the Final EIS. Please continue to work with the SETT to incorporate these items into the Final EIS.

Specific and detailed comments on the DEIS are attached. The SEC encourages the BLM/USFS to thoughtfully consider the revisions to Alternative E while selecting the final plan for the Final EIS. Thank you again for your time and consideration regarding this matter. If you have any questions concerning these comments, please don't hesitate to contact the SETT at 775-684-8600.

Sincerely,

J.J. Goicoechea, Chairman Sagebrush Ecosystem Council

 cc: The Honorable Brian Sandoval, Governor Mr. Ted Koch, State Supervisor USFWS
 Mr. Leo Drozdoff, Director Department of Conservation and Natural Resources Mr. Tony Wasley, Director Nevada Department of Wildlife
 Mr. Jim Barbee, Director Department of Agriculture
 Mr. Jim Lawrence, Administrator Division of State Lands
 Mr. Tim Rubald, Sagebrush Ecosystem Program Manager

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| General Comment | | | | 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. |
| General Commnet: Livestock Grazing | | | | See Attachment A: Sagebrush Ecosystem Council (SEC) Comments on Livestock Grazing |
| General Commnet: Predation and Predator Control | | | | See Attachment B: Sagebrush Ecosystem Council (SEC) Comments on Predation & Predator Control |
| Ex. Summary | ES.10.1 | xxxviii | Alternative A: No Action | Reword to clarify: the sentence is currently worded as "would develop new management actions <u>for</u> <u>to</u> protect" Suggest removing the word "for" and leaving the word "to". |
| Ex. Summary | ES.10.5 | хххіх | Alternative E | replace "or" with "and" in "avoid, minimize, <u>or</u> mitigate strategy" This correction is obtained from the Nevada State Plan Section 3.1.2 Conservation Policies - "Avoid, Minimize, Mitigate" |

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| Exec Sum | | xxiv (xxxvi) | ES.8.5 Alternative E | The State disagrees that under Alt E, BLM-administered lands in California would be managed similar to Alt A (No Action). The State sees no logical reason why the goals, objectives, and management action for Alt E cannot be extended to BLM-administered lands in California. |
| Exec Sum | | xxvii (xxxix) | ES.10.4 Alternative D; 2nd bullet | It is unclear why BLM would propose excluding all wind and solar energy development, while BLM is also proposing ROW avoidance for the planning area. Wind and solar energy development may not have negative impacts on GRSG in all areas mapped as habitat. The ROW avoidance policy would allow for the BLM to say no to wind and solar projects that would have negative impacts on GRSG and allow those that may have neutral impacts to proceed. |
| 1 | 1.2 | 1-6 and 1- 7 (6 and 7) | Table 1.1., 1.3, | The totals for PPH in these two tables are not the same. It is unclear why they are not the same. In addition the totals do not appear to be summed correctly for PGH and Total Acres in Table 1.1 or for PPH, PGH, and Total Acres in Table 1.3. Even if the sums are corrected they do not match between tables. This should be corrected or clarifying text should be provided. |
| 1 | 1.2 | 1-7 (7) | Table 1.4. | The totals for PPH, PGH, and Total Acres in this table are equal to or greater than the values in Tables 1.1. and 1.3. Because this is just for BLM lands, and not for FS lands, it would be expected that these numbers would LESS than those in Tables 1.1 and 1.3. This should be corrected or clarifying text should be provided. |
| 1 | 1.7.6 | 1-26 (26) | Memorandums of Understanding | " Juniper-Pinyon Partnership Project" should be rewritten as "Pinyon- Juniper Partnership Project" |

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| 1 | 1.6 | 1-20 (20) | Development of Planning Criteria, last bullet item on the page | All discussions of multiple-use seem moot when put in the context of "For Forest Service-administered lands, all activities within GRSG habitat will achieve the GRSG 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. |
| 1 | 1.5.4 | 1-17 (17) | Issues Eliminated from Detailed Analysis Because They Are Beyond the Scope of the LUPAs: | 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. While it is understood that hunting is regulated by the state, to the above end, hunting should be analyzed further within the EIS. In addition the socioeconomic impacts of hunting should be evaluated in Section 3.23 Socioeconomics and Environmental Justice. Following are citations that should be reviewed and included in an analysis of hunting: Connelly et al. (2000a, b); Connelly et al. (2011); Gibson et al. (2011); Sedinger et al. (2010) |
| 2 | 2.4.5 | 2-14 (46) | Alternative E section; 1st paragraph | The State disagrees that under Alt E, BLM-administered lands in California would be managed similar to Alt A (No Action). The State sees no logical reason why the goals, objectives, and management action for Alt E cannot be extended to BLM-administered lands in California. |

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| 2 | 2.8.2 | 2-89 (121) | Table 2.4; asterisk at bottom of table | The State disagrees that under Alt E, BLM-administered lands in California would be managed similar to Alt A (No Action). The State sees no logical reason why the goals, objectives, and management action for Alt E cannot be extended to BLM-administered lands in California. |
| 2 | 2.8.2 | 2-93 (125) | Table 2.5; Action D-SSS-AM 2 | Change to consult with NDOW and SETT |
| 2 | 2.8.2 | 2-131 (163) | Table 2.5; Action D-VEG 19 | What is BLM's justification for this management action? Provide a citation if this action is to remain in the alternative. |
| 2 | 2.8.2 | 2-131 (163) | Table 2.5; Action D-VEG 20 | Add to this action "unless grazing is part of the vegetation treatment design" to match the language in Action D-VEG 20. |
| 2 | 2.8.2 | 2-131 (163) | Table 2.5; Action D-VEG 19 & 20 | The State is greatly concerned about the implications of these management actions. Under this scenario, a permitee would not be allowed to graze their allotment for a total of three years if a vegetation treatment was to occur on their allotment. This may discourage permitees participating in vegetation treatments on their allotments. Taking into consideration that livestock grazing is the most widespread use of public lands in Nevada, this may severely limit the ability to accomplish much needed vegetation management treatments on the ground. It may also discourage permittes from participating in the Conservation Credit System, developed as part of the State Alternative and adopted by the BLM in the Agency Alternative. The State encourages the BLM to consider these implications when selecting the preferred plan. |
| 2 | 2.8.2 | 2-168 (200) | Table 2.5; Action(A-F)-FFM-HFM-7 | There are no actions listed in this row. Remove row. |
| 2 | 2.8.2 | 2-173 (205) | Table 2.5; Action C-FFM-HFM 10 | How is "good or better ecological condition" being defined here and what are the implications for management? |

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| 2 | 2.8.2 | 2-181 (213) | Table 2.5; Action F-FFM-HFM 25 | Does this action really propose constructing livestock exclosures (i.e. fencing) around all post-fire recovery areas? Fires in Nevada can burn in excess of hundreds of thousands of acres. If this is selected then fencing would have to be constructed around these massive burn areas? Who would pay for this? Putting up so much additional fencing would lead to increased strike risk and could negatively impact GRSG populations. These actions may provide habitat protection and be practical for smaller fires. Please specify the fire size this action would apply to. |
| 2 | 2.8.2 | 2-182 (214) | Table 2.5; Action C-FFM-HFM 28 | Clarification is needed on this action. Does this exclude other treatment methods or other existing vegetation in regards to fuels reductions treatments? |
| 2 | 2.8.2 | 2-195 (227) | Table 2.5; Action D-LG 2 | Why does this management action only apply to nesting habitat? What will the BLM do for brood rearing and winter habitat? |
| 2 | 2.8.2 | 2-196 (228) | Table 2.5; Action D-LG 4 | What does the term "future management applications" mean in this context? This is too broad and leaves open to interpretation and inconsistent application across BLM districts. The BLM should add more specificity or eliminate this action. |
| 2 | 2.8.2 | 2-214 (246) | Table 2.5; Action D-LG-D 1 | What does the term "appropriate changes" mean? This is too broad and leaves open to interpretation and inconsistent application across BLM districts. The BLM should add more specificity or eliminate this action. |

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| 2 | 2.8.2 | 2-215 (247) | Table 2.5; Action D-REC 2 | Is there scientific literature on the effects on sage-grouse from development of facilities for recreational activities such as hiking and camping? It is not mentioned in the NTT report. The BLM should have a scientific basis for proposing such a draconian management action, such as not allowing new recreational facilities in all PPMAs and PGMAs. If the BLM does not have scientific justification, then it should be eliminated from consideration in the final plan, particularly since it conflicts with the BLM's multiple-use mandate. |
| 2 | 2.8.2 | 2-268 (300) - 2- | Table 2.5 | This section on the table is repeated. Eliminate from final version |
| 2 | 2.8.2 | 2-322 (354) | Table 2.5; asterisk at bottom of table | The State disagrees that under Alt E, BLM-administered lands in California would be managed similar to Alt A (No Action). The State sees no logical reason why the goals, objectives, and management action for Alt E cannot be extended to BLM-administered lands in California. |
| 2 | 2.9 | 2-332 (364) | Alternative E | Replace "Mitigation Bank Program." with "Conservation Credit System." This is found in the first sentence in column labled Alternative E. |
| 2 | 2.5.2 | 2-18 (50) | "The BLM, Forest Service, and other conservation partners use the resulting information to guide implementation of conservation activities." | Second to last paragraph unclear what "resulting information" is relating to. What information is this sentence referencing? |
| 2 | 2.5.2 | 2-18 (50) | Starting with"Standardization of monitoring methods and implementation" | The bottom three paragraph on this page are poorly written and unclear in what concept is to be conveyed. They are disconnected and inconsistent tense in use. |

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| 2 | 2.5.2 | 2-19 (51) | "Indicators at the fine and site scales will be consistent with the Habitat Assessment Framework; however, the values for the indicators could be adjusted for regional conditions." | Habitat Assessment Framework - needs citation Stiver et al 2010 (this is already in the references section). |
| 2 | 2.5.3 | 2-20 (52) | Starting with, "Adaptive Management Plan The BLM and Forest Service" | It should be stated by when this adaptive management plan will be developed and written. |
| 2 | 2.5.3 | 2-20 (52) | Starting with, "The State of Nevada is updating a plan to provide more" | The reference to State of Nevada monitoring and adaptive management plan is unclear in these two sentences. It states that the "BLM will evaluate this plan to the greatest extent possible" - Does this mean that the BLM intends to adopt it or that potentially the State of Nevada and the BLM may have separated Monitoring and Adaptive Management plans that may be different. Please provide clarification. |
| 2 | 2.8.1 | 2-32 (64) and 2-41 (73) | On both pages, starting with, "In California, the BLM used a mapping method based" | This paragraph is repeated in part on these two pages. In addition, it is then unclear how this mapping method ties into the concept of PPH and PGH. Please provide further clarification. |
| 2 | 2.8.2 | 2-50 (82) | "Sub-Objective D-SSS 3: —" | There is no Sub-objectives listed for Alt D, but seems that the Habitat Objectives Table, and the Monitoring Plan (Appdx E) and the Adaptive Management Plan that are part of this EIS would meet the same end. This Sub-objective should be updated. |
| 2 | 2.8.2 | 2-99 (131) | "Action D-SSS-AM 7: The agencies would coordinate with the Nevada Sagebrush Technical Team on all proposed disturbances within the state of Nevada to meet the mutual goal of | This would be more appropriated categorized as D-SSS-MIT 3 which is currently "D-SSS-MIT 3: -". This action relates more to mitigation than to adaptive management and would then line up with Action E-SSS- MIT 7 which gets at no net loss as well. |

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| 2 | 2.8.2 | 2-100 (132) | Starting with, "Action D-SSS-AM 8: The BLM and Forest Service would coordinate with the Nevada Sagebrush" | This would be more appropriately categorized as D-SSS-MIT 1, which is currently " D-SSS-MIT 1:-". This action relates more to mitigation than to adaptive management and would then line up with "Action E-SSS- MIT 1:" which gets at the conservation credit system as well. |
| 2 | 2.8.2 | 2-123 (155) | Table 2.5; Action E-SSS 3: TMA 9.4 | The State of Nevada currently has 5,000 raven take permits allocated anually, not the 2,000 as specified in the description of alternative actions. Change the second sentence from the current "2,000 bird limit"to "5,000 bird limit". Also, review the third sentence and consider removing it, due to redundancy. |
| 2 | 2.8.2 | 2-134 (166) | Table 2.5; Action E-SSS-MIT 1: PMA-3 | The phrases "Mitigation Bank Program" and "central mitigation bank" to be replaced with "Conservation Credit System" |
| 2 | 2.8.2 | 2-137 (169) | Table 2.5; Alternative E; TMA-21.1 | The phrases "Mitigation Bank Program" and "central mitigation bank" to be replaced with "Conservation Credit System" |
| 2 | 2.8.2 | 2-142 (174) | Table 2.5; Action E-SSS-ACDM 4 | Change third bullet point from "Mitigation Bank Program." to "Conservation Credit System." |
| 2 | 2.8.2 | 2-144 (176) | Table 2.5; Alternative E | Change second bullet point wording that currently reads as "Mitigation Bank Program (PMA-3)" to "Conservation Credit System (PMA-3)" |
| 2 | 2.8.2 | 2-146 (178) | Table 2.5; Alternative E | At the top of the column, replace "Mitigation Bank Program" with "Conservation Credit System" |
| 2 | 2.8.2 | 2-152 (184) | Table 2.5; Alternative E; TMA-21.1 | In the first sentence of this section, replace "Mitigation Bank Program" with "Conservation Credit System". In the second sentence replace "this central mitigation bank," with "this state operated conservation credit system," |
| 2 | 2.8.2 Table 2.4 | 2-66 (98) | Objective D-VEG 1 and Objective D-LG 2 | 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. |

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| 2 | 2.8.2 Table 2.4 | 2-80 (112) | Objective E-LG 2: TMA-12.2 | This provides an appropriate focus on a mix or range management tools as recommended in Wyman et al (2006) and Swanson et al. (accepted). |
| 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. |
| 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. |
| 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. |
| 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. |
| 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). |
| 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). |
| | 2.8.2 Table | | Action B-LG 10, Action D-LG 10, Action E- | 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 |
| 2 | 2.5 | 2-200 (232 | LG 10: TMA-12.2 | so. |
| 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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| 2 | 2.8.2 Table 2.5 | 2-201 (233) | Action B-LG 13 | 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. |
| 2 | 2.8.2 Table 2.5 | 2-202 (234) | Action F-LG 15 | This puts continuity of riparian areas above all else which may not be optimal. |
| 2 | 2.8.2 Table 2.5 | 2-206 (238) | Action D-LG 20 | 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). |

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| | | | | (1 of 2) Eccusing management on allowable use levels where not meeting |
| | | | | (1 of 5) Focusing management of anowable use levels where not meeting |
| | | | | 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. |
| | | | | Inis 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 |
| | 2 8 2· Table | 2-321 | | people out monitoring in mid-season and this has repeatedly not worked. |
| 2 | 2.0.2, Table | 2-324 (256) | Table 2.7 (1 of 2) | where utilization is needed because of longer grazing seasons, a better |
| 2 | 2.7 | (356) | Table 2.7 (1 OT 3) | approach is to have triggers followed up by end point indicators. |

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| | | | | (2 of 3) 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 |
| | | | | namagement is the cause of the problem. Even then, an alternative more |
| | | | | 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 some late spring to |
| | 2.8.2; Table | 2-324 | | early summer grazing benefits sage grouse by managing forb phenology, |
| 2 | 2.7 | (356) | Table 2.7 comment continued (2 of 3) | nutritional value to chicks, and availability (Evans 1986). |

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| Ch/ App | Section | Page # | Text Referencing | (3 of 3) 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. (accepted) 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 |
| | 2.8.2; Table | 2-324 | | 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 |
| 2 | 2.7 | (356) | Table 2.7 comment continued (3 of 3) | Nevada Range management School for more than a decade. |
| | | 2-326 | | "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 |

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| | | | | 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- |
| | | 2-327 | | rearing habitat for GRSG. Another important sentence. Alternative E |
| 2 | 2.9 | (359) | Alternative E | embraces more riparian management tools. |
| | | 2-327-328 | | "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). |
| 2 | 2.9 | (359-360) | Alternative A | Consistently, AML has been not been met. |
| 2 | 2.8.2 Table 2.5 | General Comment | All Alternatives | 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. 2013 and Swanson et al. accepted). |
| 2 | 2.8.2 Table 2.4 | 2-72 (104) | Objective D-VEG-D 1 | 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. |

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| | | | | (1 of 2) 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. 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 forplant 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 |
| | 2.8.2 Table | 2-150 | (1 of 2) Action D-VEG-D, Action D-VEG-D | periods without rest years. Rest years can create fuels issues that could be |
| 2 | 2.5 | (182) | 3, Action D-LG 28 | avoided or lessened with short duration use. (2 of 2) 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 |
| | 2.8.2 Table | 2-150 | (2 of 2) Action D-VEG-D, Action D-VEG-D | use periods often requires water development for larger herds in |
| 2 | 2.5 | (182) | 3, Action D-LG 28 continued | smaller areas (with fewer locations for watering) for a shorter time. |

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| 2 | 2.9 | 2-327-328 (359-360) | Alternative A; "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. |
| | | | | (1 of 2) 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 (Knapp 1995). Although they can come in the wet year after things dry up as in 2006. |
| 2 | 2.9 | 2-330-331 (362-363) | (1 of 2) Alternative D; 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 | 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). |

| Ch/ App | Section | Page # | Text Referencing | Comment |
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| 2 | 2.9 | 2-330-331 (362-363) | (2 of 2) Alternative D; 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 | (2 of 2) 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. In addition strategic and targeted grazing can be used as a tool to reduce fine fuel loads and create and maintain greenstrips. For example, Carson City has worked with a regional sheep producer to reduce fine fuels (cheatgrass, perennial bunch grasses, etc.) along the wildland urban interface located west of the city. Work was initiated in 1999 (Smith and Davison 1999) and grazing has occurred annually since 2006. This process creates a green strip between the wildland and the urban interface and can adapted for maintenance of green strips in sagebrush habitat. 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. |
| 2 | 2.8.2 | 2-254 (286) | Table 2.5; Action B-LOC 1; 1st bullet | 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. |

| 22.8.2(288)Table 2.5; Action B-LOC 2The mandatory application of BMPs from the NTT Report s be considered. BMPs should be applied on a case-by-case I relevant to the action being considered. These types of "or all" regulatory prescriptions are contrary to DOI and BLM g the Data Quality Act." | |
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| | should not basis, as ne-size-fits- guidelines on |
| The option of re-opening grazing privileges if a new permit a ranch/allotment where grazing privileges have been retir be considered. This action element is based on the assump grazing is always negative with respect to impacts to sage-their habitat. Voluntary retirement of grazing privileges by operator may not be economical or environmentally viable next operator. In addition, these areas should not be "retir put in voluntary non-use status so they can be re-opened t a later date. These areas may provide important livestock a later date. These areas may provide important livestock a later date. These areas may provide important livestock a later date. These areas may provide important livestock a later date. These areas may provide important livestock a later date. These areas may provide important livestock a later date. These areas may provide important livestock a later date. These areas may provide important livestock a later date. These areas may provide important livestock are moved out of other pasting 2-207 207, Alternative B Action B-LG 23 and a later date. These areas and provide grazing lands for permittees when wildfire in closure of other pastures, either associated with the allo date and be aread and and and and and and and and and a | ttee acquires red should otion that grouse and one e for the red" but be to grazing at grazing in asture early, has resulted otment or |

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| 2 | 2.8.2 | 2-194 - 2- 214 (226 - 246) | Table 2.5; Livestock Grazing Actions | There is no mention of utilizing Temporary Non-Renewable (TNR) authorizations 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 in the analyzed actions 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." |
| 4 | 4.3.1 | 4-13 (605) | 8th bullet starting with "Short-term impacts" | How did BLM arrive at the conclusion that short-term impacts are up to ten years and long-term impacts exceed ten years. This seems arbitrary. Please include a citation if this is to remain in the document. |
| 4 | 4.3.1 | 4-13 (605) | 9th bullet starting with " Because GRSG are highly" | The first part of this sentence is scientifically accurate but the conclusion is a faulty and misguided assumption to base the analysis of the alternatives on. What type of "disturbances" are being referred to here? A vegetation manipulation project can be considered a disturbance but is proposed throughout the BLM and other alternatives. What type of "protections" are being referred to here? This is unclear and may lead to an underlying faulty analysis of the alternatives. |

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| 4 | 4.3.2 | 4-15 (607) | Livestock Grazing Management subsection | The effects of livestock grazing are being misrepresented in this section. Livestock grazing can have a not only a negative effect on sage-grouse and their habitat, but also a neutral or positive effect as well. This extends far beyond reducing fuel loads as is suggested here. The statement that "grazing restrictions" only will enhance GRSG habitat and sagebrush ecosystem health is misleading and does not fully capture the breath of published peer-reviewed scientific literature on this matter. Please refer to the literature synthesis on this subject: Davies et al (2001) |
| 4 | 4.3.2 | 4-16 (608) | 2nd paragraph; 3rd sentence | This statement needs a citation |
| 4 | 4.3.2 | 4-18 (610) | Land Uses and Realty Management subsection | The BLM states here that "exclusion areas may result in more widespread development on private lands if government management lands could not be used", yet the BLM's own alternative proposes extensive exclusion areas (all PPMAs and PGMAs) for new recreational facilities, utility-scale wind and solar energy facilitates, salable mineral development, and non-energy leasing minerals. This is an inconsistency that BLM should consider when selecting their preferred plan. |
| 4 | 4.3.2 | 4-20 (612) | Comprehensive Travel and Transportation Management subsection; 1st paragraph; last sentence | This statement needs a citation |
| 4 | 4.3.8 | 4-44 (636) | 1st paragraph; last sentence | Alt E does not limit habitat disturbances to not more than five percent per year, per SGMA, unless habitat treatment show credible positive results. Please refer to the letter submitted to BLM/ USFS dated July 1, 2013 as part of the ADEIS review. Please strike mention on this anywhere it appears throughout the document. |
| 4 | 4.3.8 | 4-45 (637) | Table 4.25 | Table 4.25; 4.26, and 4.27 essentially convey the same information and do not need to be repeated three times. |

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| | 4.3.8 | 4-44 (637) | Impacts from Vegetation and Soils Management subsection; 1st | The State disagrees that under Alt E, BLM-administered lands in California would be managed similar to Alt A (No Action). The State sees no logical reason why the goals, objectives, and management |
| 4 | | | paragraph; 1st sentence | action for Alt E cannot be extended to BLM-administered lands in California. |
| 4 | 4.3.8 | 4-46 (638) | Impacts from Leasable Minerals Management subsection; 1st paragraph: 2nd sentence | Alt E does not include NSO stipulations |
| 4 | 4.3.8 | 4-47 (639) | Impacts from Leasable Minerals Management subsection | It is unclear what the findings of this subsection are. |
| 4 | 4.3.8 | 4-47 (639) | Impacts from Salable Minerals Management subsection; 1st paragraph; 2nd sentence | Alt E does not limit habitat disturbances to not more than five percent per year, per SGMA, unless habitat treatment show credible positive results. Please see previous comments. |
| 4 | 4.3.8 | 4-47 (639) | Impacts from Salable Minerals Management subsection | It is unclear what the findings of this subsection are. |
| 4 | 4.3.8 | 4-48 (640) | Impacts from Land Uses and Realty Management subsection; 1st paragraph | Alt E does not limit habitat disturbances to not more than five percent per year, per SGMA, unless habitat treatment show credible positive results. Please see previous comments. |
| 4 | 4.3.8 | 4-48 (640) | Impacts from Land Uses and Realty Management subsection; last sentence | The State disagrees that Alt E is similar to Alt A in this instance and would provide few regulatory mechanisms to reduces impacts to GRSG. Alt E's avoid, minimize, mitigate policy is equivalent to a ROW avoidance. The State respectively requests the BLM reconsiders the analysis of this subsection. |
| 4 | 4.3.8 | 4-48 (640) | Impacts from Renewable Energy Management; last sentence | The State disagrees that there would be <u>more</u> wind and solar energy development under Alt E than Alt A. The State requests clarification on how BLM arrived at this conclusion. |
| 4 | 4.4.8 | 4-69 (661) | Impacts from Vegetation and Soil subsection; sentence starting with," However, this alternative would limit" | Alt E does not limit habitat disturbances to not more than five percent per year, per SGMA, unless habitat treatment show credible positive results. Please see previous comments. |

| Ch/ App | Section | Page # | Text Referencing | Comment |
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| 4 | 4.4.8 | 4-70 (662) | 1st paragraph; sentence starting, "The dominance of chaetgrass" | The BLM states here that the dominance of cheatgrass and medusahead cannot be rectified by simply removing cattle or by reducing their numbers. However, the BLM's alternative relies heavily on adjusting allowable use levels when allotments are not meeting GRSG habitat objectives (Table 2.6). By the same token, the BLM is considering two alternatives that would either eliminate grazing from public lands completely or reduce it by 25%. The BLM should carefully consider their own words stated here when selecting their preferred plan for livestock grazing. |
| 4 | 4.4.8 | 4-70 (662) | Impacts from Wild Horse and Burro Management subsection | The State disagrees that Alt E for wild horse and burro management is the same as Alt A. Alt E proposes goals, objectives, and management actions that emphasize impacts to GRSG and their habitat in wild horse and burro management. |
| 4 | 4.4.8 | 4-71 (663) | Impacts from Locatable and Salable Minerals Management subsection | Alt E's goal for no net loss of GRSG habitat and the Conservation Credit System needs to be included in the analysis of this section. |
| 4 | 4.4.8 | 4-71 (663) | Impacts from Land Uses and Realty Management subsection | Alt E's goal for no net loss of GRSG habitat and the Conservation Credit System needs to be included in the analysis of this section. |
| 4 | 4.4.8 | 4-71 (663) | Impacts from Renewable Energy Management subsection | Alt E's goal for no net loss of GRSG habitat and the Conservation Credit System needs to be included in the analysis of this section. |
| 4 | 4.5.8 | 4-91 (683) | Impacts from Wild Horse and Burro Management subsection | The State disagrees that Alt E would be equivalent to Alt A (no action.) The State contends that Alt E would be similar to Alt D in this instance. |
| 4 | 4.5.8 | 4-92 (684) | 1st sentence | Alt E does not limit habitat disturbances to not more than five percent per year, per SGMA, unless habitat treatment show credible positive results. Please see previous comments. |
| 4 | 4.5.8 | 4-92 (684) | Impacts from Land Uses and Realty Management subsection | Alt E's policy of avoid, minimize, mitigate is equivalent to ROW avoidance. |

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| 4 | 4.8.8 | 4-125 (717) | 1st paragraph; 1st sentence | The State disagrees that under Alt E, BLM-administered lands in California would be managed similar to Alt A (No Action). The State sees no logical reason why the goals, objectives, and management action for Alt E cannot be extended to BLM-administered lands in California. |
| 4 | 4.8.8 | 4-126 (718) | Impacts from Livestock Grazing Management subsection | The State disagrees that Alt E would be the same as Alt A in this instance. Please refer to TMA-12 of the State Alternative originally submitted to the BLM. This provides for the use of livestock grazing for fuels reduction. |
| 4 | 4.9.8 | 4-148 (740) | last paragraph; last sentence; "Alternative E does not contain the BLM regulatory mechanism." | The State requests clarification on what exactly "the BLM regulatory mechanism" is. |
| 4 | 4.12.8 | 4-170 (762) | Impacts from Lands Uses and Realty subsection | Alt E also includes an objective of no net loss of GRSG habitat and is similar to ROW avoidance. This needs to be considered in the analysis. |
| 4 | 4.13.8 | 4-179 (771) - 4- 180 (772) | Alternative E section; 1st paragraph | This section fails to include Alternative E's overarching avoid, minimize, mitigate policy in the analysis. This is necessary in order for a complete and through analysis of Alternative E. |
| 4 | 4.13.8 | 4-180 (772) | Impacts from Land Uses and Realty Management subsection; 1st sentence | Alternative E's policy of avoid, minimize, mitigate is equivalent to ROW/ SUA avoidance. Therefore, impacts from Alternative E would be similar to Alternative D and not Alternative A (no action). |
| 4 | 4.14.1.5 | 4-187 (779) | Impacts from Land Uses and Realty and Leasable Minerals Management subsections | The State contests that Alternative E's impacts on fluid minerals would be <i>less</i> than those described in Alternative A. Alternative E details an avoid, minimize, mitigate policy that would provide more restrictions than current management (Alternative A), not less. |
| 4 | 4.14.2.4 & 4.14.2.5 | 4-191 (783) | Alternative D and Alternative E sections | Under Alternative D, it states that mitigation <i>could</i> be requested and under Alternative E is states that mitigation <i>would</i> be requested for locatable minerals. Please clarify the distinction between alternatives. In this instance Alternative E would be stronger than Alternative D. |

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| 4 | 4.16.8 | 4-212 (804) - 4- 214 (806) | Alternative E section - total | The State disagrees with the analysis of Alternative E's impacts on water resources. The underlying indicators that BLM includes in the methods and assumptions section for water resources include that indicators of impacts on water resources include 1)reduced activities that result in surface disturbance causing erosion and sedimentation and 2) more areas treated for fuels and invasive species. Alternative E includes an avoid, minimize, mitigate policy for anthropogenic disturbances that would address point one and extensive fire and fuels management and vegetation management, including invasive species that would address point two. Moreover, this section is inconsistent in the fact that many of the subsections conclude that Alternative E would result in fewer impacts than Alternative A, yet the overall conclusion of this section is that Alternative E is the same as Alternative A. BLM needs to reconsider its conclusion from the analysis already completed in the section and address these inconsistencies. |
| 4 | 4.16.8 | 4-213 (805) | Impacts from Wild Horse and Burro Management subsection | Alternative E's section for Wild Horse and Burro Management have been inaccurately interpreted here. Alternative E maintains the existing herd areas, herd management areas, and wild horse territories, and emphasizes maintaining AML, with focus on SGMAs. |
| 4 | 4.16.8 | 4-213 (805) | Impacts from Locatable Mineral Management subsection | This subsection concludes that Alternative E could result in fewer impacts than Alternative A and the same impacts as Alternative A. Please clarify which one it is. |
| 4 | 4.16.8 | 4-213 (805) | Impacts from Salable Mineral Management subsection | This subsection concludes that Alternative E could result in fewer impacts than Alternative A and the same impacts as Alternative A. Please clarify which one it is. |

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| 4 | 4.17.8 | 4-224 (816) - 4- 225 (817) | Alternative E section for Tribal Interests | The analysis in this section is inconsistent with the analysis in the rest of this document. 1) Several subsections conclude that impacts from Alternative E would lead to decreases in GRSG populations. How did BLM arrive at this conclusion and why is it stated nowhere else in the document? 2) Why does the riparian areas, wetlands, and water resources subsection only take into account management actions for drought? This is dissimilar from analysis done elsewhere in this chapter. While Alternative E does not specify management actions for drought, it does specify other actions related to riparian areas, such as maintaining PFC. 3) It is incorrect that Alternative E does not have goals and objectives for livestock grazing and comprehensive travel and transportation management. |
| 4 | 4.18.8 | 4-235 (827) | Alternative E section for Climate Change | While Alternative E does not identify management actions for climate change, it does constrain resource use and would decrease any GHG emissions associated with a particular use, similar to those described in the section for Alternative D. Therefore, Alternative E would not be the same as Alternative A. |
| 4 | 4.19.2 | 4-248 (840) | Impacts from Management Action Affecting Wind Energy Development | Why is BLM unable to quantify these impacts at this time? Will BLM have sufficient data to analyze by the Final EIS? |
| 4 | 4.3.8 | 4-45 (637) | Table 4.25 | The citation "BLM and Forest Service 2013" is not in the References Section. However, there is a "BLM and Forest Service GIS 2013" which may be the correct citation. Please either add it or correct it. |
| 4 | 4.3.1 | 4-13 (605) | Third bullet. (VDDT is first presented in Chapter 3 p 3-26 but provides no real explaination.) | I was unable to find detailed methods and output on the VDDT modeling. As this modeling effort is critical to the analysis and conculsions reached in Chapter 4, additional detail should be provided to assure transparency of information and so that the reader can more easily understand what the VDDT modeling is, how it "works", and how conculsions were reached. |

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| | | | | |
| | | | | This very qualitative discussion of impacts would be unacceptable to |
| | | | | the BLM if it was 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 |
| | Comonal | | | among the alternatives, or acreages of allotments within sage-grouse |
| 1 | General | | | nabitat, etc. There must be some quantification to create meaning and |
| 4 | Comment | | | to allow the public to discern differences between alternatives. |
| | | | | 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 |
| | | 4-188 | | that could make development infeasible." Yet in the analysis, these |
| 4 | 4.14.2 | (780) | Loctable Minerals section - General | restrictions are generally dismissed. The analysis is inadequate. |
| | | 4-245 | | 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 |
| 4 | 4.19.2 | (837) | Economic Impacts section | public to discern the real difference among alternatives. |

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| 5 | General Comment | | | This very qualitative discussion of impacts is inadaquate. 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. |
| 7 | | 7-39 (955) | "Epanchin-Niell, R. S., M. B. Hufford, C. E. Aslan, J. P. Sexton, J. D. Port, and T. M. Waring. 2009. "Controlling invasive species in complex social landscapes." Front. Ecol. Environ. doi:10.1890/090029." | This citation is not correct- it is a paper on yellow star thistle. The intended citation is likely: "Epanchin-Niell, R., J. Englin, and D. Nalle. 2009. Investing in rangeland restoration in the Arid West, USA: Countering the effects of an invasive weed on the long-term fire cycle. Journal of Environmental Management 91:370-379." |
| Н | | H-1 - H-6 | Oil and Gas Reasonably Foreseeable Development Scenario | 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. |
| 0 | | 0-1 - 0-6 | Economic Impact Analysis Methodology | 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 reasonable and foreseeable development. |

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Attachment A: Sagebrush Ecosystem Council (SEC) Comments on Predation & Predator Control

The Sagebrush Ecosystem Council (SEC) understands the federal land management agencies have decided that, since predator control is "outside the scope of the plan amendment" (see Executive Summary, *p. xvii* and Chapter 1, p. 18), it would not be addressed in the DEIS. However, consulting the BLM Handbook H1790-1 (NEPA Handbook), this issue seems to fall readily "within scope" under the two bullets on page 41. That language is displayed below, verbatim in *Tahoma font and italicized*:

6.4.1 Identifying Issues for Analysis

Preliminary issues are frequently identified during the development of the proposed action through internal and external scoping. Additionally, supplemental authorities that provide procedural or substantive responsibilities relevant to the NEPA process may help identify issues for analysis. See Appendix 1, Supplemental Authorities to Be Considered, for a list of some common supplemental authorities. There is no need to make negative declarations regarding resources described in supplemental authorities that are not relevant to your proposal at hand.

While many issues may arise during scoping, not all of the issues raised warrant analysis in an EA or EIS. Analyze issues raised through scoping if:

• Analysis of the issue is necessary to make a reasoned choice between alternatives. That is, does it relate to how the proposed action or alternatives respond to the purpose and need? (See section 6.6, Alternatives Development).

• The issue is significant (an issue associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of impacts).

When identifying issues to be analyzed, it is helpful to ask, "Is there disagreement about the best way to use a resource, or resolve an unwanted resource condition, or potentially significant effects of a proposed action or alternative?" If the answer is "yes," you may benefit from subjecting the issue to analysis.

It can be demonstrably argued that predation, previously identified as a USFWS-identified threat (Chapter 2, Table 2.1, p. 11) is a significant issue (see following paragraphs) and that analysis of this issue is necessary to make a reasoned choice between alternatives (bullet 1 above), especially since the State's Alternative (Alternative E) includes scientifically-based predator control. Predation and predator control are arguably considered by many to be significant issues, i.e., issues associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of impacts (bullet 2 above). Therefore, based on guidelines of the BLM NEPA Handbook, it seems that the BLM has at least the option if not the obligation/requirement to analyze predation even though ravens (a primary sage-grouse predator) are under the authority of the USFWS and most other predators are managed by NDOW. The SEC also maintains that omission of predator control from the

analysis would be viewed as a liability in the court of public opinion, and as such would detract from the credibility of the EIS document.

Based on a literature review by Manier et al. (2013), the impacts of predation on sage-grouse are variable. However, there seems to be general agreement in the scientific literature that anthropogenic subsidies have resulted in an increase in the numbers of some predators, especially red fox and ravens. As an example, Coates and Delahanty (2010) indicated that raven numbers have increased by 600% or more since the 1960s and that ravens are a primary nest predator. High predator numbers can negatively affect sage-grouse productivity in other ways than just direct mortality, with harassment reducing the time female grouse would otherwise devote to incubation (Coates 2007). In areas that are fragmented and/or have inadequate herbaceous cover, predation impacts are likely to be higher.

The literature also shows that predation may be limiting in some situations (Connelly et al. 2004; Coates et al. 2008), and that indeed predation is the primary cause of mortality in some areas, accounting for 90% of all mortality during a multi-year study in central Nevada (Blomberg et al. 2014). Although predator control can be modestly effective (Baxter et al. 2013), the authors warned that predator control should be approached cautiously. Predator numbers can rebound quickly without continual control (Coates 2007; Hagen 2011). Nevertheless, Manier et al. (2013, p.115) concluded that predator control (removal) "may be warranted in areas with low habitat quality (that is, heavily fragmented areas of high anthropogenic disturbance) supporting inflated numbers of synanthropic predators..." Similarly, the COT report (USFWS 2013, p. 11) states that predator management has been effective on local scales for short periods, but its efficacy over broad ranges or over long time spans has not been demonstrated (Hagen 2011). **In areas of compromised habitats and high populations of synanthropic predators, predator control may be effective to ensure sage-grouse persistence until habitat conditions improve (USFWS 2013).**

The SEC recommends that scientifically-based predator control should be considered, especially in areas of critical sage-grouse habitat, for the following reasons: (1) restoration of sagebrush habitat is a slow process, with disturbed areas requiring 25 – 100 years to rebound (Baker 2011); and (2) population recovery of sage-grouse may be relatively slow even if environmental and habitat conditions improve (Connelly and Braun 1997). Predator control may be considered a tourniquet that is applied concurrently while habitat restoration or enhancement is in progress. **Predator control implemented concurrently with habitat restoration seems wise since the SEC has been asked repeatedly by the USFWS to recommend actions that would "stop the bleeding" (i.e., the decline of both sage-grouse population numbers and habitat).**

The EIS emphasizes reduction of anthropogenic subsidies that provide artificial nest sites, hunting perches, and food sources. The SEC is fully supportive of these measures, but time is of the essence. It defies both scientific logic and common sense that we would not implement at least site-specific control for ravens concurrently with attempts to restore sage-grouse habitat and mitigate man-caused subsidies for ravens. The SEC is also keenly aware of the challenge to implement meaningful raven control because of the protection this species receives under the Migratory Bird Treaty Act. However, permits to "take" ravens can and are being issued, so this challenge can be addressed.

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Attachment B: Sagebrush Ecosystem Council (SEC) Comments on Livestock Grazing

The Sagebrush Ecosystem Council (SEC) views the analysis of livestock grazing management in the DEIS as seriously flawed. Whereas the document includes, for the most part, excellent wildlife science supported by appropriate references, much of the pertinent literature regarding livestock grazing is simply missing. The inclusion of pertinent scientific literature citations in this DEIS, a document of significant importance to the citizens of Nevada and northern California, is absolutely essential to enable a relationship of trust required for successful collaborative partnerships focused on maintaining and enhancing habitat for the greater sage-grouse.

Detailed below are important references missing from the DEIS. In particular, the document lacks pertinent citations on livestock grazing management as related to the functionality and sustainability of sagebrush/perennial herbaceous plant communities and meadows within the sagebrush ecosystem. Regarding the first point, repeated statements throughout the document infer or directly indicate that grazing can have adverse impacts on herbaceous vegetation and, by implication, sage-grouse. The SEC is in complete agreement that heavy or abusive livestock grazing negatively impacts sage-grouse habitat. However, in the DEIS, even when the merits of managed/proper/moderate grazing are mentioned, supporting scientific references are often missing, even though they are available in the scientific literature. This substantially weakens the case for proper grazing management.

Specific and obvious examples of missing references are papers by Davies et al. 2009 and Davies et al. 2010, both of which demonstrated through field research that moderate levels of grazing can increase the resiliency of sagebrush habitats, reduce the risk and severity of wildfire, and decrease the risk of exotic weed invasion. Exclusion of livestock and implementation of moderate grazing over a >70 year period in sagebrush steppe plant communities resulted in essentially the same plant community, other than a buildup of fine fuels in the non-grazed areas (Davies et al. 2009). In the absence of fire, well-managed livestock grazing and long-term grazing exclusion produced similar plant community composition, productivity, and densities. Similarly, Courtois et al. (2006, p. 574) indicated that, for 16 Nevada sites (13 of which were sagebrush communities), "Few changes in species composition, cover, density, and production inside and outside exclosures have occurred in 65 years, indicating that recovery rates since pre-Taylor Grazing Act conditions were similar under moderate grazing and grazing exclusion..."

Davies et al. (2009 and 2010) also found that long-term rest increases the likelihood of fireinduced mortality of perennial bunchgrasses because more fuel resides on the root crown of perennial bunchgrasses and that post-fire exotic annual grass invasion was greater in sagebrush plant communities where livestock grazing had been excluded for more than half a century compared to moderately grazed areas.

In another paper, **Davies et al. (2011, p. 2575) concluded based on literature review that "Though appropriately managed grazing is critical to protecting the sagebrush ecosystem, livestock grazing per se is not a stressor threatening the sustainability of the ecosystem.** **Thus, cessation of livestock grazing will not conserve the sagebrush ecosystem.**" Although these authors were not addressing sage-grouse habitat per se, it is obvious that the sustainability and conservation of the ecosystem are necessary to provide resistance to weed invasion and resilience after disturbance (McAdoo et al. 2013) that in turn provide sage-grouse habitat across landscapes and over time (Miller and Eddleman 2001). The paper by Davies et al. (2011) is cited in the DEIS, but only within Table 2.4, for Alternative B, pp. 174 and 204, with regard to strategically grazing fine fuels and grazing seedings as a component of a grazing system. Four of the paper's six authors are prominent range scientists and the other two are prominent sage-grouse researchers.

A "hot off the press" review paper by Svejcar et al. (2014), not available when the DEIS was being written, acknowledges that "Because grazing is a complex ecological process, synthesis of scientific literature can be a challenge." The authors (27 prominent range scientists from 10 western states) also opine that "Legacy effects of uncontrolled grazing during the homestead era further complicate analysis of current grazing impacts…" The authors maintain that, although there are areas on the landscape where grazing impacts can be identified, there are also vast grazed areas where impacts are minimal. Over the last 20-50 years land managers have actively sought to bring populations of native and domestic herbivores in balance with the potential of vegetation and soils (Svejcar et al. 2014)

Regarding livestock grazing of meadows and riparian areas, the cautionary tone of the document is understandable, but great strides have been made in the last two decades to address grazing issues in these areas. That said, the use of livestock as a tool for meadow enhancement is documented in literature, but essentially ignored or mentioned without appropriate citations in the DEIS. As an example, Chapter 4, p. 83 includes the following statement that should be buttressed with literature citations: "Disturbance such as that created by livestock grazing may be required to increase forb diversity (note that forb diversity on meadows can increase with grazing)." **Studies by Neel (1980), Klebenow (1982), and Evans (1986) demonstrated that cattle grazing can be used to stimulate forb production. These studies were all conducted in Nevada, focusing on livestock use of upland meadows frequented by sage-grouse. Also, in Chapter 4, p. 86, the following statement is very incomplete:**

"Long-term impacts of no grazing on riparian plant communities are less clear. Some studies show that plant productivity, especially in meadows, can decline over time in the absence of grazing (Bryant 1985). However, in a review of the literature on the subject, Belsky (1986) concluded that strong evidence for a positive relationship between herbivory and plant fitness is lacking (Belsky 1986). Thus, no livestock grazing would likely be positive to riparian areas and wetlands initially, but long-term impacts are less certain."

What the DEIS fails to mention is that Evans (1986) and Klebenow (1985, 2001) reported that sage-grouse use of moderately grazed meadows was higher than their use of both ungrazed meadows and heavily grazed meadows. Oakleaf (1971) acknowledged that grazing should be used as a tool for meadow enhancement, warning however that heavy grazing would be detrimental.

Other examples of pertinent grazing management literature missing from the DEIS are as follows: [Please note that this list is not yet complete]

Bates et al. 2009 – Concluded that properly applied livestock grazing after low severity prescribed fire will not hinder the recovery of herbaceous plant communities in Wyoming big sagebrush steppe.

Knopf 1996 - Season of grazing is more important than intensity of grazing. Late-season grazing on dormant vegetation has little effect on bird communities (Knopf 1996).

Johnson et al. 2011 - Moderate and low stocking rates of cattle grazing on bunchgrass communities in northeastern Oregon caused no negative impacts to ground-nesting songbirds. These stocking rates generally provided suitable habitat for all species studied and results were similar to the no grazing treatment.

Whitehurst and Marlow 2013 – In mountain big sagebrush habitat, higher forb nutrient density that is critical for pre-incubating sage-grouse hens and survival of young broods can be achieved with targeted cattle grazing and selective thinning of mature mountain big sagebrush stands.

West et al. 1984 - Found no significant increases in perennial grasses with long-term rest and cautioned managers that livestock exclusion will not result in a rapid improvement of native herbaceous component on sites dominated by woody vegetation.

Sneva et al. 1984 - Noted some slight increases in perennial grasses with thirty years of livestock exclusion in the sagebrush steppe, but this increase was less than what occurred on an adjacent grazed site, and after 35 years grass frequency had become slightly higher on the area outside the exclosure. The authors concluded that direct reductions in sagebrush would be required to greatly increase perennial grasses.

Holechek & Stephenson 1983 - Sagebrush communities in New Mexico rested for twenty-two years compared to moderately grazed areas had minimal vegetation differences and the differences that did occur included greater perennial grass cover in the grazed areas. This suggests that moderate grazing may have been beneficial. Thus, it remains unclear if long-term grazing rest will facilitate increases in the perennial herbaceous understory in communities with dense sagebrush overstories.

Laycock 1967 - found that fall grazing (with sheep) and grazing exclusion resulted in a 30% increase in production of perennial grasses and perennial forbs compared to spring use. In this case, a change in the timing of grazing had the same effect as the long-term exclusion of grazing.

In addition to pertinent grazing management literature that is missing in the DEIS, another concern is the inappropriate contextual interpretation of some cited literature. As a case in point, there is mention in Chapter 4, p. 15 that "livestock may also trample nests and disturb GRSG behavior (NTT 2001, p.14)." Certainly livestock may trample sage-grouse nests, but the magnitude of the issue is highly questionable. Reference is apparently to Beck and Mitchell 2000, which was cited in both the NTT report (NTT 2011) and the more recent USGS/BLM

report (Manier et al. 2013), which stated. "...sheep and cattle trampled nests and caused nest desertions (Beck and Mitchell, 2000)." The information in Beck and Mitchell was cited from a single article by Rasmussen and Griner 1938. Our search of this document showed that, of 41 nests impacted by various causes, 2 (4.9%) were destroyed by livestock, 23 by carnivores, 7 by ravens, 7 by undetermined causes, and 2 by human causes. This same study found 23 deserted nests, 5 (21.7%) of which were attributed to livestock. For proper context we must also acknowledge that ravens have increased dramatically since the 1930's, livestock numbers have decreased dramatically since the 1930's, and livestock grazing has changed from season/yearlong to managed systems that defer or rest much of the landscape from grazing during the sage-grouse nesting season. For ground nesting birds in general, Schultz (2010), by way of literature review, concluded that there is "limited experimental science about the effect of livestock on nests and eggs and virtually none comes from sagebrush-grass plant communities. A review of published research suggests that while trampling is possible, the conditions under which it occurs probably are uncommon on the large grazing allotments that typify the low production western rangelands, composed of shrubs and perennial grasses."

A few more comments are also in order. Based on input from Dr. Sherm Swanson (UNR Range Ecologist), the DEIS focus on utilization, apparently as an objective in some cases, is largely in appropriate. Specifically in regard to Table 2.7, 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 intended, 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 with revision 2014) 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 if and 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 de-motivates ranchers and range management specialists to find solutions that will work much more effectively. Those solutions, taught in the interagency Nevada Range Management School (led by Cooperative Extension, and including team members from the NRCS, BLM, USFS, EPA, and the ranching industry), are founded on plant growth science and grazing management based on season and duration of use (McAdoo et al. 2010). These management principles are especially appropriate for large pastures (which were not the focus of Briske et al. 2008) that are typical in sage grouse habitats.

The terms and conditions column suggests that agencies will have people out monitoring in midseason and this has repeatedly not worked. Where utilization is needed because of longer grazing seasons, a better approach is to have triggers to help ranchers see when to move animals followed up by end point indicators for quantitative monitoring. Both were described in the Nevada Rangeland Monitoring Handbook (Swanson et al. 2006) adopted by the BLM and USFS, along with other state and federal agencies in 2007. 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 the Table 2.7 approach is to provide incentive to have grazing make progress toward objectives (if other grazing management can get to the objectives then grazing utilization can be more flexible), 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 to avoid stressing the important forage plants by either: (1) Utilization levels such as those proposed OR (2) Short use periods with no livestock grazing during substantial parts of the growing season and use periods at different seasons in different years.** These ideas are taught in Range Management School and Cooperative Permittee Monitoring workshops around Nevada, using the Grazing Response Index (USDA USFS, 1996) described in the Nevada Ranchers' Monitoring Guide (Perryman et al. 2006).

Also, according to Dr. Swanson, the language "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 damage the physical functioning of riparian areas, especially in large pastures with limited riparian waters/areas. Grazing before May 15 may cause riparian areas to not be grazed because upland forage is preferred then (Swanson et al (accepted with revisions 2014), and some late spring to early summer grazing benefits sage-grouse by managing forb phenology, nutritional value to chicks, and availability (Evans 1986). 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. (accepted with revision 2014), 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 riparian stabilizers or maintain 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 BLM 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 then 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 almost a decade.

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