Nevada and Northeastern California Greater Sage-Grouse Land Use Plan Amendment and Environmental Impact Statement

Substantive Comments on the Draft LUPA/EIS

US Department of the Interior
Bureau of Land Management

US Department of Agriculture
Forest Service

June 2015
The Bureau of Land Management’s multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

The Forest Service mission is to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.

Cover Photo: Steve Ting
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. NEPA</td>
<td>5</td>
</tr>
<tr>
<td>1.1 General NEPA</td>
<td>5</td>
</tr>
<tr>
<td>1.2 Public Notification</td>
<td>9</td>
</tr>
<tr>
<td>1.3 Coordinating Agency Relationships</td>
<td>11</td>
</tr>
<tr>
<td>1.4 Range of Alternatives</td>
<td>16</td>
</tr>
<tr>
<td>1.5 Best Available Info Baseline Data</td>
<td>38</td>
</tr>
<tr>
<td>1.6 GIS Data and Analysis</td>
<td>54</td>
</tr>
<tr>
<td>1.7 Indirect Impacts</td>
<td>58</td>
</tr>
<tr>
<td>1.8 Cumulative Impacts</td>
<td>61</td>
</tr>
<tr>
<td>1.9 Mitigation Measures</td>
<td>65</td>
</tr>
<tr>
<td>2. FLPMA</td>
<td>72</td>
</tr>
<tr>
<td>2.1 Consistency with other state, county, or local plans</td>
<td>77</td>
</tr>
<tr>
<td>3. OTHER LAWS</td>
<td>83</td>
</tr>
<tr>
<td>4. GREATER SAGE-GROUSE</td>
<td>97</td>
</tr>
<tr>
<td>4.1 NTT report/findings</td>
<td>97</td>
</tr>
<tr>
<td>4.2 Conservation Objectives Team (COT) Report</td>
<td>108</td>
</tr>
<tr>
<td>4.3 Policy Guidance</td>
<td>112</td>
</tr>
<tr>
<td>4.4 Range of Alternatives</td>
<td>116</td>
</tr>
<tr>
<td>4.5 Best Available Info Baseline Data</td>
<td>138</td>
</tr>
<tr>
<td>4.6 Impact Analysis</td>
<td>176</td>
</tr>
<tr>
<td>4.7 Cumulative Impact Analysis</td>
<td>187</td>
</tr>
<tr>
<td>4.8 Mitigation Measures</td>
<td>189</td>
</tr>
<tr>
<td>5. ACECs</td>
<td>195</td>
</tr>
<tr>
<td>5.1 Range of Alternatives</td>
<td>195</td>
</tr>
<tr>
<td>5.2 Best Available Info Baseline Data</td>
<td>196</td>
</tr>
<tr>
<td>6. CLIMATE CHANGE</td>
<td>196</td>
</tr>
<tr>
<td>6.1 Range of Alternatives</td>
<td>196</td>
</tr>
<tr>
<td>6.2 Best available information baseline data</td>
<td>197</td>
</tr>
<tr>
<td>6.3 Impact Analysis</td>
<td>198</td>
</tr>
<tr>
<td>6.4 Cumulative Impact Analysis</td>
<td>198</td>
</tr>
<tr>
<td>7. FIRE AND FUELS</td>
<td>199</td>
</tr>
<tr>
<td>7.1 Range of Alternatives</td>
<td>203</td>
</tr>
<tr>
<td>7.2 Best available information baseline data</td>
<td>207</td>
</tr>
<tr>
<td>7.3 Impact Analysis</td>
<td>211</td>
</tr>
<tr>
<td>7.4 Mitigation Measures</td>
<td>215</td>
</tr>
<tr>
<td>8. FISH AND WILDLIFE</td>
<td>215</td>
</tr>
<tr>
<td>9. OTHER SPECIAL STATUS SPECIES</td>
<td>215</td>
</tr>
<tr>
<td>9.1 Impact Analysis</td>
<td>216</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. LANDS AND REALTY</td>
<td>217</td>
</tr>
<tr>
<td>10.1 Range of Alternatives</td>
<td>217</td>
</tr>
<tr>
<td>10.2 Best available information baseline data</td>
<td>222</td>
</tr>
<tr>
<td>10.3 Impact Analysis</td>
<td>225</td>
</tr>
<tr>
<td>10.4 Cumulative Impact Analysis</td>
<td>228</td>
</tr>
<tr>
<td>10.5 Mitigation measures</td>
<td>228</td>
</tr>
<tr>
<td>11. LEASABLE MINERALS</td>
<td>230</td>
</tr>
<tr>
<td>11.1 Range of Alternatives</td>
<td>230</td>
</tr>
<tr>
<td>11.2 Best available information baseline data</td>
<td>238</td>
</tr>
<tr>
<td>11.3 Impact Analysis</td>
<td>241</td>
</tr>
<tr>
<td>11.4 Cumulative impact analysis</td>
<td>242</td>
</tr>
<tr>
<td>11.5 Mitigation measures</td>
<td>243</td>
</tr>
<tr>
<td>12. LIVESTOCK GRAZING</td>
<td>244</td>
</tr>
<tr>
<td>12.1 Range of alternatives</td>
<td>246</td>
</tr>
<tr>
<td>12.2 Best available information baseline data</td>
<td>274</td>
</tr>
<tr>
<td>12.3 Impact Analysis</td>
<td>291</td>
</tr>
<tr>
<td>12.4 Cumulative impact analysis</td>
<td>297</td>
</tr>
<tr>
<td>12.5 Mitigation measures</td>
<td>299</td>
</tr>
<tr>
<td>13. LOCATABLE MINERALS</td>
<td>299</td>
</tr>
<tr>
<td>13.1 Range of alternatives</td>
<td>299</td>
</tr>
<tr>
<td>13.2 Best available information baseline data</td>
<td>304</td>
</tr>
<tr>
<td>13.3 Impact Analysis</td>
<td>306</td>
</tr>
<tr>
<td>13.4 Cumulative impact analysis</td>
<td>310</td>
</tr>
<tr>
<td>13.5 Mitigation Measures</td>
<td>312</td>
</tr>
<tr>
<td>14. DISTURBANCE CAP</td>
<td>312</td>
</tr>
<tr>
<td>15. RECREATION</td>
<td>313</td>
</tr>
<tr>
<td>15.1 Range of alternatives</td>
<td>313</td>
</tr>
<tr>
<td>15.2 Best available information baseline data</td>
<td>314</td>
</tr>
<tr>
<td>15.3 Impact Analysis</td>
<td>315</td>
</tr>
<tr>
<td>15.4 Cumulative impact analysis</td>
<td>315</td>
</tr>
<tr>
<td>16. SALABLE MINERALS</td>
<td>316</td>
</tr>
<tr>
<td>16.1 Range of alternatives</td>
<td>316</td>
</tr>
<tr>
<td>17. SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE</td>
<td>316</td>
</tr>
<tr>
<td>17.1 Best available information baseline data</td>
<td>316</td>
</tr>
<tr>
<td>17.2 Impact Analysis</td>
<td>321</td>
</tr>
<tr>
<td>17.3 Cumulative impact analysis</td>
<td>345</td>
</tr>
<tr>
<td>18. SOIL</td>
<td>348</td>
</tr>
<tr>
<td>18.1 Impact Analysis</td>
<td>348</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>19.</td>
<td>TRAVEL MANAGEMENT</td>
</tr>
<tr>
<td>19.1</td>
<td>Range of alternatives</td>
</tr>
<tr>
<td>19.2</td>
<td>Best available information baseline data</td>
</tr>
<tr>
<td>19.3</td>
<td>Impact Analysis</td>
</tr>
<tr>
<td>19.4</td>
<td>Mitigation measures</td>
</tr>
<tr>
<td>20.</td>
<td>TRIBAL INTEREST</td>
</tr>
<tr>
<td>20.1</td>
<td>Consultation requirements</td>
</tr>
<tr>
<td>20.2</td>
<td>Impact Analysis</td>
</tr>
<tr>
<td>20.3</td>
<td>Cumulative Impact Analysis</td>
</tr>
<tr>
<td>21.</td>
<td>VEGETATION SAGEBRUSH</td>
</tr>
<tr>
<td>21.1</td>
<td>Range of alternatives</td>
</tr>
<tr>
<td>21.2</td>
<td>Best available information baseline data</td>
</tr>
<tr>
<td>21.3</td>
<td>Impact Analysis</td>
</tr>
<tr>
<td>21.4</td>
<td>Mitigation measures</td>
</tr>
<tr>
<td>22.</td>
<td>VEGETATION RIPARIAN</td>
</tr>
<tr>
<td>22.1</td>
<td>Range of Alternatives</td>
</tr>
<tr>
<td>22.2</td>
<td>Best Available Info Baseline Data</td>
</tr>
<tr>
<td>22.3</td>
<td>Impact Analysis</td>
</tr>
<tr>
<td>23.</td>
<td>WATER</td>
</tr>
<tr>
<td>23.1</td>
<td>Best available information baseline data</td>
</tr>
<tr>
<td>23.2</td>
<td>Impact Analysis</td>
</tr>
<tr>
<td>23.3</td>
<td>Cumulative impact analysis</td>
</tr>
<tr>
<td>24.</td>
<td>WILD HORSE AND BURROS</td>
</tr>
<tr>
<td>24.1</td>
<td>Best available information baseline data</td>
</tr>
<tr>
<td>24.2</td>
<td>Impact Analysis</td>
</tr>
<tr>
<td>25.</td>
<td>WILDERNESS AREAS/WILDERNESS STUDY AREAS</td>
</tr>
<tr>
<td>25.1</td>
<td>Range of Alternatives</td>
</tr>
<tr>
<td>25.2</td>
<td>Best Available Info Baseline Data</td>
</tr>
<tr>
<td>25.3</td>
<td>Impact Analysis</td>
</tr>
<tr>
<td>26.</td>
<td>PREDATION</td>
</tr>
<tr>
<td>27.</td>
<td>NOISE</td>
</tr>
</tbody>
</table>
SUBSTANTIVE COMMENTS ON THE NEVADA AND NORTHEASTERN CALIFORNIA GREATER SAGE-GROUSE DRAFT LUPA/EIS

After publishing the Draft Land Use Plan Amendment (LUPA)/Environmental Impact Statement (EIS), the Bureau of Land Management (BLM) and Forest Service held a 90-day public comment period to receive comments on the Draft LUPA/EIS. The BLM and Forest Service received written comments on the Draft LUPA/EIS by mail, email, and submissions at the public meetings and oral comments transcribed at public meetings. Comments covered a wide spectrum of thoughts, opinions, ideas, and concerns. The BLM and Forest Service recognize that commenters invested considerable time and effort to submit comments on the Draft LUPA/EIS and developed a comment analysis methodology to ensure that all comments were considered, as directed by National Environmental Policy Act (NEPA) regulations.

According to NEPA, the BLM and Forest Service are required to identify and formally respond to all substantive public comments. The BLM and Forest Service developed a systematic process for responding to comments to ensure all substantive comments were tracked and considered. Upon receipt, each comment letter was assigned an identification number and logged into the BLM’s comment analysis database, CommentWorks, which allowed the BLM and Forest Service to organize, categorize, and respond to comments. Substantive comments from each letter were coded to appropriate categories based on the content of the comment, retaining the link to the commenter. The categories generally follow the sections presented in the Draft LUPA/EIS, though some relate to the planning process or editorial concerns.

Comments similar to each other were grouped under a topic heading, and the BLM and Forest Service drafted a statement summarizing the issues contained in the comments. The responses were crafted to respond to the comments, and, if warranted, a change to the EIS was made.

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

A substantive comment does one or more of the following:

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

Additionally, the BLM’s NEPA Handbook (H-1790-1) identifies the following types of substantive comments:

- Comments on the Adequacy of the Analysis: Comments that express a professional disagreement with the conclusions of the analysis or assert that the analysis is inadequate are substantive in nature but may or may not lead to changes in the Proposed LUPA/Final EIS (FEIS). Interpretations of analyses should be based on professional expertise. Where there is disagreement within a professional discipline, a careful review of the various interpretations is warranted. In some cases, public comments may necessitate a reevaluation of analytical conclusions. If, after reevaluation, the manager responsible for preparing the EIS (Authorized Officer) does not think that a change is warranted, the response should provide the rationale for that conclusion.

- Comments That Identify New Impacts, Alternatives, or Mitigation Measures: Public comments on a Draft EIS that identify impacts, alternatives, or mitigation measures that were not addressed in the draft are substantive. This type of comment requires the Authorized Officer to determine whether it warrants further consideration. If it does, the Authorized Officer must determine whether the new impacts, new alternatives, or new mitigation measures should be analyzed in the FEIS, a supplement to the Draft EIS, or a completely revised and recirculated Draft EIS.

- Disagreements with Significance Determinations: Comments that directly or indirectly question, with a reasonable basis, determinations regarding the significance or severity of impacts are substantive. A reevaluation of these determinations may be warranted and may lead to changes in the FEIS. If, after reevaluation, the Authorized Officer does not think that a change is warranted, the response should provide the rationale for that conclusion.
Comments that failed to meet the above description were considered nonsubstantive. Many comments received throughout the process expressed personal opinions or preferences, had little relevance to the adequacy or accuracy of the Draft LUPA/EIS, represented commentary regarding resource management and/or impacts without any real connection to the document being reviewed, or were considered out of scope because they dealt with existing law, rule, regulation, or policy. These comments did not provide specific information to assist the planning team in making changes to the alternatives or impact analysis in the Draft LUPA/EIS and are not addressed further in this document. Examples of nonsubstantive comments include the following:

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

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

Comments citing editorial changes to the document were reviewed and incorporated. The Proposed LUPA/FEIS has been technically edited and revised to fix typographic errors, missing references, definitions, and acronyms, and other clarifications as needed.

Copies of all comment documents received on the Draft LUPA/EIS are available by request from the BLM’s Nevada and California State Offices. Comments received by mail, email, and at meetings, or delivered orally during the public meetings are tracked by commenter name and submission number.

**Campaign Letters**

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

**How This Report is Organized**

This report is organized by the primary topic and then by specific issue subtopics that relate to an aspect of NEPA, the BLM and Forest Service planning processes, or specific resources and resource uses. For example, all comments that relate to aspects of the alternatives fall under the heading, “1.2.2 Alternatives.” This includes subsections such as Design Features and Best Management Practices, the Elimination Criteria, and any of the alternatives. Comments for baseline information (such as the information found in Chapter 3, Affected Environment) and impact analysis (Chapter 4) of the Draft LUPA/EIS are found under the respective resource topic. For example, comments related to the affected environment and impact analysis on cultural resources are under the “Cultural Resources” heading. Each topic or subtopic contains the substantive comments identified for that topic area. These topic categories are numbered as they appear in CommentWorks. See example below.

<table>
<thead>
<tr>
<th>Topic or subtopic name</th>
<th>4.4 Range of Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique CommentWorks database code</td>
<td></td>
</tr>
<tr>
<td>Comment Number: NVCASG-14-0003-9</td>
<td></td>
</tr>
<tr>
<td>Comment Excerpt Text: BLM’s description of the No Action Alternative is completely inadequate and must be revised. Without knowing where these existing management actions do and do not occur is vital in order to assess the potential impacts of these existing management actions, goals and objectives to sage-grouse populations. Table 2.4’s No Action Alternative descriptions are completely inadequate, and provide no information to compare to the action Alternatives. As the No Action Alternative is currently described and analyzed throughout the DLUPA/DEIS it requires the reader to review each of the 13 LUPAs individually and significantly diminishes the usefulness of the document, which could make the BLM vulnerable to legal challenges.</td>
<td></td>
</tr>
</tbody>
</table>


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

1.1 GENERAL NEPA

Comment Number: NVCASG-14-0003-2
Comment Excerpt Text:
In addition to being inconsistent with FLPMA and the General Mining Law, Alternatives B, E and F propose surface-disturbing restrictions that are not scientifically supported as required by the regulations that implement the National Environmental Policy Act (NEPA) at 40 C.F.R §1502.24.

Comment Number: NVCASG-14-0224-8
Comment Excerpt Text:
Under NEPA, the BLM/FS must analyze the impacts of a proposed federal action. The process requires the agencies to address their divergent missions, laws and policies early in the NEPA process. The process should not have moved forward until differences were addressed in an agreed-upon methodology as provided for in the CEQ report Modernizing NEPA Implementation (September, 2003). In accordance with 40 CFR Section 1501.6(a) (2), the lead agency must use, to the maximum extent practicable, the environmental analysis and recommendations of cooperating agencies consistent with its own responsibilities as lead agency. Otherwise, the EIS can be found to be inadequate.

Comment Number: NVCASG-14-0285-53
Comment Excerpt Text:
In Priority Habitat, the NSO Condition of Approval of 4 miles from a lek is prescribed in the NTT recommendations. The lack of any lek buffer as a COA in sage grouse habitats under the Preferred Alternative will result in major impacts to active leks within the PPMA, as this proximity results in significant impacts to breeding grouse on the lek and will result in development occurring in the midst of the most prime nesting habitats that surround the affected 34 lek. All new roads should also be located farther than 1.9 miles from active leks, preferably using the 4-mile lek buffer prescribed in the NTT Report at minimum to protect both breeding and nesting habitat. Seismic activity should be limited to periods outside the breeding/nesting or winter use season, for breeding/nesting and winter concentration habitats, respectively. Allowing heliportable geophysical exploration in Priority Habitat only outside the season of use is the minimum necessary standard. This is a reasonable alternative, recommended by NTT (2011) and indeed incorporated into the Preferred Alternative for other RMP amendments, yet is not incorporated into the Preferred Alternative in the Nevada – Northeastern California DEIS.

Comment Number: NVCASG-14-0285-56
Comment Excerpt Text:
We strongly urge the federal agencies to prohibit vegetation treatments in Priority Habitats except where they are consistent with maintaining optimal sage grouse habitat (NTT 2011). There is a growing scientific consensus that burns and mechanical treatments are deleterious to sage grouse. The agencies also need to assess non-native seedings and restore them to native vegetation if this is the most optimal option for sage grouse habitat, as has been proposed under the Northwest Colorado RMP Amendment Preferred Alternative.

Comment Number: NVCASG-14-0285-66
Comment Excerpt Text:
The Nevada – Northeastern California RMP amendment should implement its management standards such that this direction is achieved. Furthermore, we recommend that BLM should include a provision to retire livestock grazing allotments on a willing-permittee basis when they come up for renewal under all alternatives, as is included under all alternatives in the BLM’s South Dakota RMP Draft EIS. Allowing retired allotments to be purchased and taken out of service is a far preferable outcome for grouse. Therefore, language in Alternative D conditioning retirement of grazing permits on sage grouse habitat enhancement objectives is unnecessary and irrelevant; unless the agency can articulate a justification for sage grouse habitat objectives not being enhanced by permit retirement, it should presumptively accept that improvements in native understory composition,
residual grass height, forb production, alleviation of soil compaction, alleviation of biological soil crust destruction, and alleviation of cheatgrass expansion will necessarily improve sage grouse habitats.

Comment Number: NVCASG-14-0285-86  
Comment Excerpt Text:
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.  

For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks)
unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site's capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12% cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment).

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and
resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

Comment Number: NVCASG-14-0292-1
Comment Excerpt Text:
Neither of the Draft LUPA EISs analyzes whether the greater sage-grouse meets the ESA definitions for listing as endangered or threatened. Thus, both fail to meet the overriding purpose for the EISs. To evaluate whether the greater sage-grouse presently meets the criteria to be listed as endangered or threatened under the ESA, one must answer two questions: 1) How many greater sage-grouse are needed to safeguard the species against extinction; and, 2) Do current greater sage-grouse population numbers and trends put the greater sage-grouse at risk for imminent extinction or for eventual extinction in the foreseeable future?

Comment Number: NVCASG-14-0292-3
Comment Excerpt Text:
Inexplicably, when responding to scoping comments the Draft LUPA EISs claim that analysis of greater sage-grouse population levels is beyond the scope of the project, stating that comments “questioned population levels and the need to incorporate rangewide conservation measures” and concluding that such concerns “relate to decisions under the purview of the USFWS and are not (will not be) addressed” by the Draft LUPA EISs. See ID Draft LUPA/EIS2, page 1-33 and NV Draft LUPA/EIS1, page 1~18. Thus, the Draft LUPA EISs irrationally conclude that the overriding purpose and need identified for the project is itself beyond the scope of the project. As a result of this irrational decision, the Draft LUPA EISs devote little or no effort to disclose, discuss, or analyze greater sage-grouse population levels, viability, or persistence.

Comment Number: NVCASG-14-0306-10
Comment Excerpt Text:
The DEIS fails to take a hard look at the nature and magnitude of this socioeconomic harm and as such must be rejected as meeting the basic requirements
of an environmental analysis prepared pursuant to NEPA and its implementing Council on Environmental Quality (“CEQ”) regulations at 40 CFR 1500 - 1508.

Comment Number: NVCASG-14-0311-27
Comment Excerpt Text:
As noted in the introductory comments, Y -3 II straddles the Idaho and Nevada border and operates a single ranching entity to coordinate grazing on BLM allotments in both states. BLM, however, states that planning for the land use plans covering this part of both Idaho and Nevada will occur through the Nevada FEIS and Record of Decision but will be implemented and administered through the Jarbidge and Burley (Idaho) FEIS and Record of Decision. See Section ES.2. Additionally, the decisions and analyses for that portion of Y -3 II’s allotments in Nevada will occur through the Nevada DEIS and will end at the Nevada state line apparently leaving decisions and analysis for Y-3 II’s ranch operations north of the Nevada border to the Idaho DEIS. Id. This is confusing because just a few sentences earlier it is stated that planning for both Idaho and Nevada land use plans will occur through the Nevada DEIS. Id. Thus, within a few short sentences it is unclear how the lands utilized by Y -3 II in Nevada and Idaho are being analyzed, decided, implemented, and administered. If read correctly, it appears that actual management decisions are being made in each state’s OEIS, but that Idaho will administer both Idaho’s management decisions and Nevada’s management decisions as they relate to Y-3 II. Consequently, Y-3 II must analyze and comment on both the Nevada and Idaho OEISs.

Comment Number: NVCASG-14-0312-3
Comment Excerpt Text:
Alternative A: No Action.

Comment: Table 3.79 shows the average actual use billing over a 12 year period to be only 62% of the permitted use, however it doesn’t disclose or show any reason for this causing the casual reader to assume that the use was reduced voluntarily and that it was not needed or necessary to the permittees. This puts forth the wrong message as the reduction in actual use may be due to drought, fire, temporary closures or other restrictions outside of the permittees control. This should be pointed out in the DEIS and was not disclosed per NEPA requirements.

Comment Number: NVCASG-14-0367-13
Comment Excerpt Text:
The DEIS states that BLM and the FS recognize the importance of state and local plans, as well as plans developed by other federal agencies and tribal governments, and will strive to be consistent with or complementary to the management actions in these plans whenever possible. However, it appears that the agencies did not consider how their following planning efforts conflict with: (1) the BLM Manual 6840 Special Status Species Management; and (2) Wind PEIS and BMP approach. See 40 CFR 1502.16(c) (requiring the consideration of “[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned”).

Comment Number: NVCASG-14-0376-1
Comment Excerpt Text:
Alternative C and Alternative F are not acceptable. They represent preservationist ideology termed “passive restoration or natural healing” as they advocate for the termination of all livestock grazing on public lands. While Alternative C eliminates all grazing of cattle, F calls for an across the board 25% cut along with establishing reserves. Neither uphold the Multiple Use concept that is the guiding principle of the Bureau. Either of these alternatives would result in takings of water rights, salable minerals rights, ROW and other economic opportunities on the interspersed private lands that exist scattered throughout the public allotment.

I.2 PUBLIC NOTIFICATION

Comment Number: NVCASG-14-0028-1
Comment Excerpt Text:
there was inadequate public notification about the intent to amend the Land Use Plan to accommodate
this non-ESA designated species. BLM held seven meetings throughout Nevada and northeastern California to inform the public of the intention to change the plan. However, only one meeting was conducted in the major population area of northern Nevada.

Comment Number: NVCASG-14-0083-10
Comment Excerpt Text:
Ch: Exe. Sum, Sec: ES.5, Pg. No.: xiv

Text Referencing: Scoping - The scoping process is an excellent method for opening dialogue between the BLM, Forest Service, and the general public about management of GRSG and their habitats on public lands and for identifying the concerns of those who have an interest in GRSG conservation and habitat.

Comment: The BLM / USFS has failed to present the Greater Sage-Grouse listing issue to the general public in such a manner that identifies the negative impacts to the regional and local economies and cultures. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) Much of the public are still confused and unaware of the impacts that the changes to be made to the Land Use Plans and Resource Management Plans will affect all aspects of current and future uses on Public Lands throughout the Western States. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0083-78
Comment Excerpt Text:
Ch: 6, Sec: 6.4, Pg. No.: 14

Text Referencing: Public Involvement

Comment: The BLM /USFS did not fulfill this mandate. Local area working groups, local governments and special interest groups provide far more forum and public meeting that the federal land managers to seek and solicit comment and provide direction. The BLM / USFS offered short work shop meet and greet sessions instead of round table workshops that would have provided more comment and direction to the authors.

Comment Number: NVCASG-14-0083-79
Comment Excerpt Text:
Ch: 6, Sec: 6.4.2, Pg. No.: 

Text Referencing: Future Public Involvement

Comment: Elko County does not believe that proper attention was given to the public or state and local governments during the DEIS / LUPA process. Elko County would ask and encourage the BLM /USFS to further expand their efforts to include the general public, local and state governments and special interest groups in the development of the FEIS / LUPA or ADEIS if applicable. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0109-6
Comment Excerpt Text:
8, All, ES.7, xix

There is nothing in the planning criteria that lends credence to or calls for inputs from local sources, including ranchers with decades or generations of experience and knowledge with respect to sage-grouse and their local habitat, locations of leks, observations of predation, climatic events (i.e. wildfires), and the impacts, including vegetation changes. This leaves a huge gap in the search for sound, credible information that can assist in effective planning as the process advances.

Comment Number: NVCASG-14-0342-25
Comment Excerpt Text:
As an example of the possibility of no meaningful public participation in this process, the Commenters note that the BLM public meeting in Reno, Nevada, on December 5, 2013 was merely an "open house" format attended by representatives of the Commenters. There was no formal presentation provided to the public, although representatives of
BLM were available for questions. The graphic information provided by BLM at that meeting did not include any comparative discussion whatsoever of Alternative A, the No Action alternative, which calls into question whether the agency is seriously considering it as an alternative.

1.3 **COOPERATING AGENCY RELATIONSHIPS**

**Comment Number: NVCASG-14-0040-30**

Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG-CC 1: As climate change data become available through REAs or other ecological studies, identify areas of unfragmented GRSG habitat and key habitat linkages that provide the life-cycle and genetic transfer needs for GRSG. Manage the identified areas as PPMAs.

CCA & CFBF Recommended Alternative: Delete Action L-CC 1

Comments: Current mapping developed by state wildlife agencies and sage-grouse planning groups have accounted for key habitat linkages and genetic transfer needs for GRSG. This proposed action circumvents the State’s authority to manage wildlife through mapping of priority habitat and should be eliminated.

**Comment Number: NVCASG-14-0040-31**

Comment Excerpt Text:

CCA & CFBF Recommended Alternative: Delete Action L-CC 2

Comments: See above comments to D-LG-CC 1

**Comment Number: NVCASG-14-0083-12**

Comment Excerpt Text:
Ch: Exe. Sum, Sec: ES.7, Pg. No.: xix

Text Referencing: Development of Planning Criteria - The LUPAs will be developed using an interdisciplinary approach to prepare reasonable foreseeable development scenarios, ensure cooperating agency review of the proposed alternatives, and analyze resource impacts, including cumulative impacts on natural and cultural resources and the socio-economic environment.

Comment: NEPA and the DEIS /LUPA development process provides excessive authority to the BLM / USFS in the determination of land use policies and plans. More local and state jurisdiction and participation should be provided with final decisions being concluded on a legislative level. The management agencies should not have direct authority to make final decisions without further repercussion from local and regional constituents.

**Comment Number: NVCASG-14-0083-13**

Comment Excerpt Text:
Ch: Exe. Sum, Sec: ES.7, Pg. No.: xix

Text Referencing: Management Alternatives

Comment: Many Environmental Conservation groups were afforded opportunity to develop “Alternatives” specific to their agenda. Question: Why weren’t the local governments and local / regional constituents afforded the same opportunity? Local Sage Grouse Conservation Plans were eliminated from review and consideration without specific identification or reasoning.

**Comment Number: NVCASG-14-0083-18**

Comment Excerpt Text:
Ch: I, Sec: I.6, Pg. No.: 21

Text Referencing: Development of Planning Criteria - The BLM and Forest Service will coordinate and communicate with state, local, and tribal governments to ensure that the BLM and Forest Service consider provisions of pertinent plans, seek to resolve
inconsistencies between state, local, and tribal plans, and provide ample opportunities for state, local, and tribal governments to comment on the development of amendments.

Comment: Elko County disagrees that this objective and task has been fulfilled. The BLM / USFS did not communicate planning strategies and include local governments in the development of the “Alternatives” proposed in the DEIS / LUPA. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0083-23
Comment Excerpt Text:
Ch: 2, Sec: 2.5, Pg. No.: 16

Text Referencing: Management Common to All Alternatives - Collaborate with adjacent landowners, federal and state agencies, tribes, communities, other agencies, and other individuals and organizations, as needed, to monitor and implement decisions to achieve desired resource conditions

Comment: Elko County proposes that the BLM / USFS should collaborate on a higher level other than public meet and greet sessions. Elko County as a Coordinating Agency was not afforded extensive and warranted input or direct collaboration during the Alternative Development for the DEIS / LUPA.

Comment Number: NVCASG-14-0083-77
Comment Excerpt Text:
Ch: 6, Sec: 6.2, Pg. No.: 11, Text Referencing: 6.2. Collaboration

Comment: Elko County believes that the BLM / USFS collaboration was less than stellar, given the magnitude of the issues and consequences of the proposed DEIS / LUPA. Elko County and much of the public were not apprised of the proposed actions and afforded the opportunity to directly assist in the development of Alternatives that will ultimately impact all constituency in the planning area. Extreme measures should have been utilized by the BLM / USFS to ensure public opinion and local government coordination was accomplished.

Comment Number: NVCASG-14-0083-78
Comment Excerpt Text:
Ch: 6, Sec: 6.4, Pg. No.: 14, Text Referencing: Public Involvement

Comment: The BLM / USFS did not fulfill this mandate. Local area working groups, local governments and special interest groups provide far more forum and public meeting that the federal land managers to seek and solicit comment and provide direction. The BLM / USFS offered short work shop meet and greet sessions instead of round table workshops that would have provided more comment and direction to the authors.

Comment Number: NVCASG-14-0083-79
Comment Excerpt Text:
Ch: 6, Sec: 6.4.2, Pg. No.: Text Referencing: Future Public Involvement

Comment: Elko County does not believe that proper attention was given to the public or state and local governments during the DEIS / LUPA process. Elko County would ask and encourage the BLM / USFS to further expand their efforts to include the general public, local and state governments and special interest groups in the development of the FEIS / LUPA or ADEIS if applicable. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0083-9
Comment Excerpt Text:
Ch: Exe. Sum, Sec: ES.1, Pg. No.: xi, Text Referencing: Introduction

Comment: Elko County does not believe that proper attention was given to the public or state and local governments during the DEIS / LUPA process. Elko County would ask and encourage the BLM / USFS to further expand their efforts to include the general public, local and state governments and special
interest groups in the development of the FEIS / LUPA or ADEIS if applicable. Many agencies were listed as cooperating agencies during the Scoping process. The BLM and USFS have not specifically included these agencies including Elko County during the development of the DEIS.

**Comment Number: NVCASG-14-0086-2**
**Comment Excerpt Text:**
The Proposed Action identified in this LUPA/EIS circumvents already existing species and species habitat conservation processes and measures under the Endangered Species Act. The Endangered Species Act (ESA) is designed to allocate resources of the federal and state governments in order to offer the most benefit in species conservation. See 16 U.S.C. § 1531. This is the logic behind the listing process in which, species are evaluated based on their populations, threats to the population and importance to the general ecosystem and other species connected on the food chain. See 16 U.S.C. § 1533. Through the listing process species are order based on these numerous criteria in order to determine the best use of conservation resources. The sage grouse is currently an unlisted species. The Fish and Wildlife Service (“FWS”) has determined that although independently, sage grouse may have a need for protection, at this time there are too many other species that are more imminently threatened. Based on this analysis the FWS designated the sage grouse as a candidate species, or “warranted, but precluded.” 75 Fed. Reg. 13909.

**Comment Number: NVCASG-14-0091-29**
**Comment Excerpt Text:**
Action D-SSS-AM 2 and D-SSS-OPM 4
Add “coordination with local entities including but not limited to counties and conservation districts.”

**Comment Number: NVCASG-14-0091-5**
**Comment Excerpt Text:**
There has been no effort by BLM or USFS to consult with the Eureka County entities, primarily the Weed District which has legal authority, through Nevada law, over weed control in Eureka County.

**Comment Number: NVCASG-14-0091-6**
**Comment Excerpt Text:**
Inconsistency with NRS 278.243 and 278.246
NRS 278.243 states that a “A…county whose governing body has adopted a master plan pursuant to NRS 278.220 may represent its own interests with respect to land and appurtenant resources that are located within the…county and are affected by policies and activities involving the use of federal land.”
NRS 278.246 empowers the County to “bring and maintain an action…before any federal agency, if an action or proposed action by a federal agency or instrumentality with respect to the lands, appurtenant resources or streets that are located within the…county impairs or tends to impair the traditional functions of the…county or the carrying out of the master plan.”
Eureka County has adopted a master plan pursuant to NRS 278.220 and is therefore empowered to represent its own interests regarding the DEIS alternatives “involving the use of federal land.”
Also, the DEIS alternatives “impairs or tends to impair the traditional functions of the…county or the carrying out of the master plan.”
BLM and USFS must document in the EIS that since we have represented our own interests in the process, there has been a failure to bring the
alternatives in compliance with our represented interest through honoring of the County’s plans, policies, requests and proposed measures and the DEIS alternatives “impairs or tends to impair the traditional functions of the…county or the carrying out of the master plan.” However, we believe these inconsistencies can be diminished or removed altogether by BLM and USFS coordinating with Eureka County to implement our plans and policies and reach consistency as required.

Comment Number: NVCASG-14-0095-8
Comment Excerpt Text:
22. LUPA/DEIS fails to specify what if any effort has been completed to fulfill the lawful requirement to resolve inconsistencies between local plans and this federal proposal through the process of “coordination”. FLPMA and NEPA both have clear requirements for federal officials to complete coordination.

Comment Number: NVCASG-14-0151-I
Comment Excerpt Text:
The County is disappointed that the BLM document is silent on coordination with this group and similar local groups throughout the planning area. This is a major oversight that should be corrected in the final document as the people on these groups represent the best indigenous knowledge of the area and the history of its habitats and wildlife.

Comment Number: NVCASG-14-0196-1
Comment Excerpt Text:
As you are aware, the State of Nevada is currently in the process of developing a mitigation banking system, the Conservation Credit System, which is identified in Alternatives D and E. Although Alternative D directs the BLM/USFS to coordinate with the Nevada Sagebrush Ecosystem Technical Team (SETT) - the entity working to develop and implement the Conservation Credit System - the DEIS should more directly include consultation with the SETT and implementation of the Conservation Credit System. For example, if approved, the proposed “WAFWA Management Zone Implementation Teams” identified in Appendix D should include members of the Nevada SETT.

Comment Number: NVCASG-14-0226-6
Comment Excerpt Text:
…the DEIS does adequately review and analyze certain threats as stated by USFWS.

Comment Number: NVCASG-14-0259-13
Comment Excerpt Text:
Page 99; 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 no unmitigated loss." If this goal is enacted, proposed disturbances will be reported separately to three agencies, resulting in unnecessary duplication and potential errors. The BLM, USFS, and State of Nevada need to implement a coordinated system that will not create time delays and cost increases for project proponents.

Comment Number: NVCASG-14-0259-14
Comment Excerpt Text:
Page 102; Action E-SSS-MIT 1: PMA-3: "The Nevada Sagebrush Ecosystem Mitigation Bank Program, a centralized mechanism to coordinate mitigation and pre-impact mitigation across all jurisdictions and land ownerships, will be the system to validate the success of all conservation efforts of GRSG populations and the sagebrush ecosystem in Nevada. The Nevada Sagebrush Ecosystem Council, through the Nevada Sagebrush Ecosystem Technical Team, will develop a set of metrics and credits to ensure that appropriate mitigation measures are applied consistently and transparently. By establishing this central mitigation bank, the State of Nevada will have a robust system that provides for consistent evaluation, oversight, monitoring, reporting of progress, and adaptive management for long-term certainty." The Draft LUPA/EIS needs to explain the relationship between the BLM, USFS, and the State of Nevada. It also needs to be clear that the mitigation bank system will not create time delays for project proponents. The BLM, USFS, and State of Nevada need to implement a coordinated system for mitigation banking that will
not create time delays and cost increases for project proponents.

Comment Number: NVCASG-14-0265-7
Comment Excerpt Text:
In 2010 the Elko County Board of Commissioners addressed changes to federally managed public land use management policies in the Elko County Public Land Use and Natural Resource Management Plan and again in 2012 in the Elko County Greater Sage-Grouse Management and Conservation Strategy Plan. These two plans along with many others, prepared by local agencies were provided to the BLM and USFS for review and consideration during preparation of the GRSG DEIS / LUPA as per NEPA requirement. The plans submitted by Elko County contained realistic professionally prepared information concerning federal land management policy changes and their impacts to the local, state and regional economies; The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11). Elko County again was more than frustrated that neither of these professional documents were given any consideration in the GRSG DEIS / LUPA. The documents provide professionally established information that proves and corroborates that Alternatives A, B, C, D and F proposed GRSG DEIS / LUPA will serve severe economic impacts not only to Elko County but the entire planning area and all western states with GRSG habitat and populations.

Comment Number: NVCASG-14-0268-2
Comment Excerpt Text:
In an effort to be engaged in the NEPA process, the Summit Lake Paiute Tribe became a Cooperating Agency for this DEIS. However this process was rigidly controlled and did not provide the opportunities for input that the Tribe expected. As a Cooperating Agency, the Tribe outlined several concerns in Chapters 2 and 3 of the Administrative Draft Environmental Impact Statement in documents dated June 25, 2013. Previous to that, the Tribe submitted comments on Alternative D as a Cooperating Agency on May 8, 2013. The Tribe is pleased to see that the comments from May 8, 2013 were acknowledged in Table 3.66 (page 539) of the DEIS. However, these concerns were not specifically addressed throughout the rest of the document. As they are still of great concern to the Tribe

Comment Number: NVCASG-14-0288-6
Comment Excerpt Text:
Many counties have obtained cooperating agency status with the BLM and USFS in the sage grouse issue, yet there input has largely been overlooked in the development of the LUP and its alternatives. We maintain that the agencies should truly utilize the expertise and local knowledge afforded to them through this status, both in the selection of the final alternative and in its implementation.

Comment Number: NVCASG-14-0311-25
Comment Excerpt Text:
Finally, NEPA requires BLM to seek out and consider in the FEIS the special expertise of other federal agencies including the NRCS, APHIS Wildlife Services regarding predators, and other special expertise held by sister agencies of BLM. See 42 U.S.C. § 4332(2)(c); 40 C.F.R. § 1503.1(a)(l). This includes the expertise of

Comment Number: NVCASG-14-0401-1
Comment Excerpt Text:
The Fort McDermitt Paiute and Shoshone Tribe demands to have meaningful consultation and the NV-BLM has failed to consult with the Tribe on matters related to Sage Grouse.

1.4 RANGE OF ALTERNATIVES

Comment Number: NVCASG-14-0003-14
Comment Excerpt Text:
The BLM must prepare a revised DLUPA/DEIS that includes full and detailed analysis of an additional alternative that incorporates and analyzes a full range of conservation measures, including better implementation of existing strategies and improved collection of future monitoring data in order to satisfy USFWS’ requirements. AEMA contends that this additional alternative would fit the Purpose, Need, and Objectives of the DLUPA/DEIS and would be consistent with FLPMA, the Mining Law of 1872, the Mining, and Minerals Policy Act of 1970, and BLM’s sage-grouse conservation goals and objectives.

Comment Number: NVCASG-14-0003-35
Comment Excerpt Text:
Furthermore, BLM’s proposal that anthropogenic disturbances be limited to 3% of the total habitat regardless of ownership (Ch.4 at l18) are derived from flawed studies, and in some cases are completely arbitrary (see discussion supra Section 2(D)).34 BLM must provide how and where these thresholds were determined, and re-evaluate the impacts they will have on other resources in the planning area as well as the socioeconomic impact they will have on the planning area, or else the Final EIS documents will not likely withstand legal or scientific scrutiny.

Comment Number: NVCASG-14-0003-6
Comment Excerpt Text:
AEMA maintains that BLM failed to develop an alternative that supports responsible resource development in the Planning Area, and that Alternative D, the Preferred Alternative only masks BLM’s use of the NTT Report. As a result, failure to include consideration and detailed analysis of conservation measures other than those in the NTT Report represents a pre-determined decision by BLM to implement the NTT conservation measures without giving proper and detailed analysis to alternative conservation measures which may produce equal or better results for sage-grouse conservation, while complying with FLPMA.

Comment Number: NVCASG-14-0003-8
Comment Excerpt Text:
Alternatives B, C, D and F do not satisfy the Purpose and Need for the RMP revision, which is to identify and incorporate conservation measures which will enhance and conserve sage-grouse habitat and should therefore, be revised to demonstrate that they are legal and fit the Purpose and Need in a revised DLUPA/DEIS that is made available to the public for review and comment.

Comment Number: NVCASG-14-0003-9
Comment Excerpt Text:
BLM’s description of the No Action Alternative is completely inadequate and must be revised. Without knowing where these existing management actions do and do not occur is vital in order to assess the potential impacts of these existing management actions, goals and objectives to sage-grouse populations. Table 2.4’s No Action Alternative descriptions are completely inadequate, and provide no information to compare to the action Alternatives. As the No Action Alternative is currently described and analyzed throughout the DLUPA/DEIS it requires the reader to review each of the 13 LUPAs individually and significantly diminishes the usefulness
of the document, which could make the BLM vulnerable to legal challenges.

**Comment Number: NVCASG-14-0015-2**

*Comment Excerpt Text:*
The Draft LUPA/EIS provides an inadequate description and analysis of Alternative A, the No-Action Alternative. The two-paragraph description of the No-Action Alternative fails to include a thorough discussion of the significant and substantial measures that have been and are being implemented by BLM, USFS, and the State of Nevada to conserve the sage-grouse and its habitat. Draft LUPA/EIS, Ch. 2 at 12 (44). Likewise, the treatment of the No-Action Alternative in Table 2.4 is incomplete and misleading.

**Comment Number: NVCASG-14-0015-4**

*Comment Excerpt Text:*
Second, it is unclear how the 3 percent cap would be applied. Some of the references to the cap in the Draft LUPA/EIS seem to indicate that the disturbance would be quantified on the basis of individual PPMAs. Draft LUPA/EIS, Ch. 2 at 221 (253) (referring to a 3 percent cap “for that area”). However, the identification of PPMAs in Figure 2-2 is not at a sufficient scale to determine where one PPMA begins and another ends. How these areas would be delineated could have significant impacts on whether and how a proposed action may be implemented. The imposition of a disturbance cap on PPMAs that vary in size also would have the potential for inequitable results (e.g., a small disturbance in a small PPMA could exceed the cap, but a large disturbance in a large PPMA might not). Other references to the disturbance cap are based on the section in which the proposed action is located. Draft LUPA/EIS, Ch. 2 at 246 (278). It is not clear why the section boundaries are relevant for some management actions but not others. Finally, some of the references simply refer to “3% for that area” without indicating how “that area” is defined. Draft LUPA/EIS, Ch. 2 at 248 (280). This lack of clarity and potential for inequity justify the rejection of a disturbance cap.

**Comment Number: NVCASG-14-0052-3**

*Comment Excerpt Text:*
Alternative E, based on the State of Nevada’s Conservation Plan for GRSG in Nevada, focuses on state-level planning efforts in the State of Nevada only. The Plan has very specific actions and it focuses on fire, weeds, destruction of habitat, and restoration of habitat. It is a very ambitious plan that will require state and federal funding to accomplish. Many of the cells in Table 2-5, contain a "- ", which indicates "that there is no similar goal, objective, or action to the other alternatives." Many times, Alternative E has an action and the other alternatives do not. This indicates an attempt by the State of Nevada to provide actions and solutions, rather than just stating Greater Sage-Grouse habitat needs to be restored. If this alternative is selected as preferred, lands in California would be managed as described under the No-Action Alternative or current management actions. This Alternative may not provide the amount of protection and habitat restoration that is necessary in California. Therefore, a complementary planning effort should be undertaken in northern California so there is seamless planning and resource management across state lines. Churchill County supports Alternative E, if it is combined with actions from other alternatives that will address issues in California.

**Comment Number: NVCASG-14-0071-4**

*Comment Excerpt Text:*
The disturbance cap concept would limit development within a certain area based on an arbitrary percentage of land which could be developed. If that percentage was already met, it would preclude development of valid existing rights and new mineral finds entirely. It is not clear at all how this cap for development in sage-grouse lands has been calculated. The concept of an artificial disturbance cap has been disavowed in regulatory schemes throughout the country and is fatally flawed. How does one apply a fixed limit on development within a non-quantified amount of land? What is the unit we are measuring the allowed percentage of impact against? One claim, one property, one section (360 acres), one "sage-grouse unit"? Even from a
sage-grouse protection viewpoint, this concept does not take into account site-specific qualities of the landscape and applies a one-size-fits-all mentality - meaning sometimes sage-grouse would win and other times they would lose.

**Comment Number: NVCASG-14-0083-14**  
**Comment Excerpt Text:**  
Ch: Exe. Sum, Sec: ES.8.1, Pg. No.: xxi

Text Referencing: Alternative A, No Action - Alternative A meets the CEQ requirement that a No Action Alternative be considered. This alternative continues current management direction and prevailing conditions derived from the existing field/district office and forest planning documents.

Comment: If a No Action Alternative is required by NEPA and the CEQ; Why is No Action not truly considered? The county knows the answer as given by the BLM /USFS but rejects the reasoning given for no consideration. Why does the CEQ require a No Action Alternative?

**Comment Number: NVCASG-14-0083-21**  
**Comment Excerpt Text:**  
Ch: 2, Sec: 2.4.6, Pg. No.: 15

Text Referencing: Alternative “F”

Comment: Elko County does not believe that Alternative F as written fulfills the NEPA and FLPMA Multiple Use mandates. In our judgment the BLM /USFS did not have the authority under NEPA to change Alternative C and create Alternative “F” as written and should have dismissed Alternative C as unacceptable due to noncompliance of NEPA requirements to meet the multiple use mandates of the FLPMA (43 CFR 1716), MUSYA and NFMA

**Comment Number: NVCASG-14-0083-29**  
**Comment Excerpt Text:**  
Ch: 2, Sec: 2.6.3, Pg. No.: 23

Text Referencing: Alternatives Eliminated from Detailed Analysis Increased Grazing Alternative - During scoping and the alternatives development process, a number of individuals and cooperating agencies requested that the BLM and Forest Service consider an alternative that would increase the amount of livestock grazing in GRSG habitat. This recommendation was based on empirical evidence that shows there could be a correlation between declines in GRSG and declines in the amount of livestock grazing on public lands.

Comment: Elko County agrees with this proposal. The County would recommend that the BLM /USFS re-evaluate the alternative for inclusion into the FEIS /LUPA. The County resolutely disagrees with the reasons used to discount the action for lack of sound science. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

**Comment Number: NVCASG-14-0083-6**  
**Comment Excerpt Text:**  
Elko County would ask for a review by the Committee on Environmental Quality to identify and quantify the BLM / USFS actions to disregard local and state data. Again Elko County maintains that planning areas must be locatable specific areas of habitat and populations and not based on large regions with varying GRSG habitat.

**Comment Number: NVCASG-14-0091-23**  
**Comment Excerpt Text:**  
Include under Management Common to All Alternatives valid existing rights, including but not limited to, grazing preference, water rights, rights of way (including RS 2477 and RS 2339). The management schemes of the EIS under any or all alternatives cannot impair these rights.

**Comment Number: NVCASG-14-0095-1**  
**Comment Excerpt Text:**  
LUPA/DEIS fails to clearly state that the goal of your plan is to have more sage grouse in the future. Your plan must state how many sage grouse are present and include statistically sound monitoring to determine how many more sage grouse are present at a future date. In accordance with NEPA, if your
plan and your management activities fail to result in an increased number of sage grouse it is a bad plan that must be discarded and replaced with a plan that works.

Comment Number: NVCASG-14-0103-2
Comment Excerpt Text:
Essentially, the disturbance cap proposed in several of the DEIS alternatives is an unworkable concept as it has the potential to result in denial of existing valid mineral rights. Additionally, disturbance caps may be consumed due to non-anthropogenic disturbances such as wildfire. The BLM cannot legally preclude the exercise of valid existing rights, but this is exactly what would result if a disturbance cap is implemented.

Comment Number: NVCASG-14-0118-2
Comment Excerpt Text:
The Preferred Alternative needs to have an emphasis on site-specific objectives. The "cookie cutter" approach in Table 2.6 is unacceptable. It will only lead to further habitat degradation in areas that do not fit the mold, decrease in livestock grazing due to unattainable objectives, and impacts to the local economy.

Comment Number: NVCASG-14-0120-12
Comment Excerpt Text:
BLM's Alternative B sets an arbitrary 3% disturbance cap without any scientific, practical, or legal basis because it fails to account for local habitat conditions, the location of minerals, and valid existing rights. A 3% cap is inconsistent with BLM's multiple use mandate and imposes unnecessary restrictions on non-discretionary BLM actions. Moreover, BLM never explains how the 3% cap will be assessed. To the extent BLM relies on PPMPA, this proposal suffers from the same flaws discussed above regarding inappropriate use of the NDOw analytical mapping tool.

Comment Number: NVCASG-14-0132-35
Comment Excerpt Text:
Adequate regulatory mechanisms currently exist relative to the Greater Sage-grouse. Specifically, 43 CFR 4180 applies requirements relative to livestock grazing, and other similar regulatory mechanisms exists relative to other resources and resource uses. Further, all of the subject Land Use Plans contain provisions for TES species.

Comment Number: NVCASG-14-0144-1
Comment Excerpt Text:
The Chapter 4 and cumulative analysis does not reach any conclusions about the significant of impacts. The terms adverse impact or significant impact are not used in Chapter 4 or 5 with the exception of 3 occasions. The analysis does not meet the requirements of 40 CRF 1502.16 and provides no basis for the proper comparison of alternatives.

Comment Number: NVCASG-14-0144-12
Comment Excerpt Text:
BLM needs to summarize in this EIS the impacts found in individual LUPs. The impact analysis as presented in Ch 4 does not meet the standards for 40 CFR 1502.14.

Comment Number: NVCASG-14-0144-3
Comment Excerpt Text:
The only thoughtful, properly developed, and implementable alternative is the State of Nevada's.

Comment Number: NVCASG-14-0151-6
Comment Excerpt Text:
The County was engaged in development of the Ely RMP, which is much more recent and proactive than many of the RMPs throughout the planning area. Because of this, the County does not believe that adoption of the "no action" alternative would result in an increased threat to Sage-grouse within the Ely BLM District.

Comment Number: NVCASG-14-0151-8
Comment Excerpt Text:
The County requests that the BLM adopt the State of Nevada-proposed Alternative as its 'preferred alternative' in its Final document.
Comment Number: NVCASG-14-0169-12
Comment Excerpt Text:
The Purpose and Need Statement does not disclose that one of the main purposes of the DEIS is to respond to Instruction Memorandum (IM) 2012-044 (which expired prior to issuance of the DEIS) to analyze the impacts associated with implementing the conservation measures in the NT) Report.

Comment Number: NVCASG-14-0169-13
Comment Excerpt Text:
BLM offices should ensure that implementation of any of the measures is consistent with applicable statute and regulation. Where inconsistencies arise, BLM offices should consider the conservation measure(s) to the fullest extent consistent with such statute and regulation.

IM 2012-044. Although the DEIS complies with the IM directive to include at least one alternative based on the conservation measures in the NTT Report, the DEIS fails to respond to the second directive as stated in the second paragraph above: "BLM offices should ensure that implementation of any of the measures is consistent with applicable statute and regulation." The "NTT -Only" Alternative contains many land use restrictions and prohibitions inconsistent with the multiple use mandates in FLPMA and NFMA and rights under the General Mining Law.

Comment Number: NVCASG-14-0169-29
Comment Excerpt Text:
Under Alternative A, the No-Action Alternative, the DEIS fails to recognize and analyze the State of Nevada’s efforts that will continue regardless of what alternative is selected. The Governor's Executive Order 2012-09 created the Greater Sage-Grouse Advisory Committee, which drafted Nevada's Strategic Plan for Conservation of Greater Sage-Grouse, and the Legislature's enacted Assembly Bill 461, which created the Sagebrush Ecosystem Program and the Sagebrush Ecosystem Council. Nevada law now requires the Nevada Division of State Lands (Division) to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems on public and private (with the private landowners' consent).

Comment Number: NVCASG-14-0169-30
Comment Excerpt Text:
Table 2.4, p.2-55, Alternative B. This anthropogenic disturbance cap is flawed on numerous grounds. First, a 3% disturbance cap lacks a solid scientific basis. Not only does the science not support this 3% disturbance cap, a blanket condition such as this ignores important distinctions such as habitat quality or disturbance type and/or timing that likely play a much greater role in GRSG success.

In addition, the 3% cap promoted in Alternative B is inconsistent with BLM’s multiple use mandate as described in more detail above. The DEIS evidences this contradiction when it provides that in areas where the 3% cap is met, no new activity will be allowed until sufficient GRSG habitat has been restored to maintain this arbitrary 3% threshold. Having a rigid disturbance cap that fails to account for habitat conditions and existing valid rights is arbitrary, unnecessarily harsh, and beyond BLM authority.

Comment Number: NVCASG-14-0169-31
Comment Excerpt Text:
...nowhere in the DEIS does BLM explain exactly how the 3% cap will be assessed based on the actual PPMA delineations. Moreover, the maps included in the DEIS are on such a broad scale that it is impossible to tell how a blanket prohibition of disturbance will be applied and how certain PPMA’s will be disproportionately impacted. Additionally, and underscoring the lack of information included in the DEIS, is BLM’s failure to quantify current conditions and existing disturbance thresholds in the PPMA’s. The reader cannot determine, based on the DEIS and its illustrative maps, whether certain PPMA’s have already met their 3% cap, thus immediately limiting further activity in those areas. This is a critical piece of missing information, depriving industry, the public and the decision maker from understanding the impacts of these alternatives.
Comment Number: NVCASG-14-0169-4
Comment Excerpt Text:
"the information provided to us by BLM did not specify what requirements, direction, measures or guidance has been included in the newly revised RMPs to address threats to sage-grouse and sagebrush habitat. Therefore, we cannot assess their value or rely on them as regulatory mechanisms for the conservation of sagegrouse." 75 Fed. Reg. at 13976. Further, "[a]lthough [Resource Management Plans], [Allotment Management Plans], and the permit renewal process provide an adequate regulatory framework, whether or not these regulatory mechanisms are being implemented in a manner that conserves sage-grouse is unclear." Id. at 13977. Accordingly, instead of simply supplementing the requested information, 15 BLM chose to respond with a wholesale reordering of Federal land priorities across 40 million acres of the Western United States.

Comment Number: NVCASG-14-0188-20
Comment Excerpt Text:
Page 207, Alternative F Action F-LG 24

If this action element is selected, the cost of this extensive monitoring should be the burden of the land management agency, not the project proponent. Monitoring that determines achievement of the vegetation treatment should be the responsibility of the proponent, but monitoring to develop a data base for sage-grouse is beyond the responsibility of the proponent.

Comment Number: NVCASG-14-0188-23
Comment Excerpt Text:
Table 2.4 - Goal-O-SSS-AM 1

Please provide quantitative definitions for "large scale disturbance" and "adjoining PGMA". It is impossible to accurately analyze impacts and provide useful comments when a potentially significant measure such as this goes undefined.

Comment Number: NVCASG-14-0195-7
Comment Excerpt Text:
The preferred alternative does not allow for adaptive management. Found in the USFWS' Greater Sage Grouse Conservation Objectives: Final Report, also referred to as the COT Report, under Appendix B: Policy for the Evaluation of Conservation Efforts when Making Listing Decisions adaptive management is defined as a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. An adaptive, case-by-case approach will ensure that efforts and resources expended in the name of greater sage-grouse conservation are well spent. Ecosystems vary; site potential, plant communities, soil types, environmental influences, precipitation patterns and plant production and vigor are highly variable and cannot be appropriately managed by single-source standards and guidelines. As continually suggested by the USFWS, the regulations should allow flexibility to land users. As requested in Scoping Comments sent March 2012, the draft EIS should include demonstrated evidence of adaptive management principles to be used when managing greater sage-grouse habitat. On-going monitoring and adaptive management procedures need to be clearly defined to insure that actions are measured against objectives and modified or completely changed within an identified range of opportunities for public involvement. As the DEIS is currently written, adaptive management principles are not included or clearly defined to achieve objectives. The Association requests, once again, BLM include adaptive management principles and analyze management the impact of adaptive management to the habitat of greater sagegrouse. Listed below are peer-reviewed studies for BLM to consider.

- As demonstrated in Freese, E. et. al. (2013), managing livestock grazing to reduce the number and size of wildfire events on private lands compared to the public lands surrounding them. The results of this study exhibited that only 14% of the public lands remained undisturbed while 89% of the private land grazed with the intent of reducing fire frequency and size remained undisturbed. This further indicates that those policies that restrict flexibility of how public
lands could be grazed may be contributing to loss or impact of many acres of sage grouse habitat.

- Burkhardt et al. examined the effects of grazing on vegetative production and density and concludes that allowing plants to set seed at least every second year through managing spring grazing is of great benefit. The results of this study, concludes that the variable on spring grazing is that use in early spring has significantly less effect on total plant production over the year than does later spring use. The implications for sage grouse suggests that designing systems to insure at least one pasture in a given nesting use area during spring use periods should provide opportunities for successful nesting considering birds show fidelity to nesting in a given area but not specifically to an individual nest location.

- Cagney, et al. is a detailed report identifying points of consideration, driving forces, effects and implications of grazing management and system design and is an excellent guide to the development of a grazing management plan that fully considers the needs of sage grouse as well as the economic viability of the livestock operation. Following these procedures, results in developing measurable and attainable goals based on sound objectives in tune with the site potential of the area being grazed.

- A definitive paper by Crawford: summarized the knowledge of Sage Grouse related issues and their multiple complexities. The study stresses the positive or negative effects of grazing depending on how it is managed and applied. Within the appendixes, other studies summarized indicate the benefits of utilizing grazing to alter vegetative communities, reduce invasives, alter fire frequency, and many other potential effects. These factors can be affected by applied grazing and the multitude of grazing management systems.

- The study completed by Davies and Bates. 2010 analyzed variability in 106 Wyoming Big Sagebrush and Mountain Big Sagebrush sites (approximately 50150 split) and documented the significant production and site potential differences and variability between the two different sub-species of sagebrush. As found within the study, because of these differences, management actions need to be designed to the site conditions that exist at a particular location and set of ecological conditions and factors. This study strongly supports the need for having a very broad array of management and restoration options to be able to apply what is needed for each particular set of circumstances.

**Comment Number: NVCASG-14-0196-4**

**Comment Excerpt Text:**
The "No Action" Alternative is not adequately analyzed. The two-paragraph description neglects to recognize some of the regulatory tools that the BLM already has at its disposal, such as Manual 6840, and also neglects to include many of the significant actions that are being implemented by both the BLM and the State of Nevada. The Governor sponsored and signed Assembly Bill 461 (2013) that established the Sagebrush Ecosystem Program, the Sagebrush Ecosystem Council, requires the Division of State Lands to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems on public lands and on the lands of consenting private landowners (Nevada Revised Statute 321.594). NRS also requires the establishment of a mitigation credit system, prioritization and implementation of projects for sagebrush ecosystem improvement, and creation of the Account to Restore the Sagebrush Ecosystem that must be used to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems in the State of Nevada. These actions are significant conservation mechanisms that will exist with or without BLM action, and should be analyzed accordingly.
Comment Number: NVCASG-14-0199-29
Comment Excerpt Text:
The DEIS provides an inadequate description and analysis of Alternative A, the No-Action Alternative. The two-paragraph description of the No-Action Alternative fails to include a thorough discussion of the significant and substantial measures that have been and are being implemented by BLM, USFS, and the State of Nevada to conserve the sage-grouse and its habitat. DEIS, Ch. 2 at 12. Likewise, the treatment of the No-Action Alternative in Table 2.4 is incomplete and misleading.

Comment Number: NVCASG-14-0199-31
Comment Excerpt Text:
Second, it is unclear how the 3% cap would be applied. Some of the references to the cap in the Draft LUPA/EIS seem to indicate that the disturbance would be quantified on the basis of individual PPMAs. DEIS, Ch. 2 at 221 (referring to a 3% cap "for that area"). However, the identification of PPMAs in Figure 2-2 is not at a sufficient scale to determine where one PPMA begins and another ends. How these areas would be delineated could have significant impacts on whether and how a proposed action may be implemented. The imposition of a disturbance cap on PPMAs that vary in size also would have the potential for inequitable results (e.g., a small disturbance in a small PPMA could exceed the cap, but a large disturbance in a large PPMA might not). Other references to the disturbance cap are based on the section in which the proposed action is located. DEIS, Ch. 2 at 246. It is not clear why the section boundaries are relevant for some management actions but not others. Finally, some of the references simply refer to "3% for that area" without indicating how "that area" is defined. DEIS, Ch. 2 at 248. This lack of clarity and potential for inequity justify the rejection of a disturbance cap.

Comment Number: NVCASG-14-0199-32
Comment Excerpt Text:
Third, a 3% disturbance cap is inconsistent with FLPMA's and NFMA's multiple-use mandates.

Comment Number: NVCASG-14-0200-3
Comment Excerpt Text:
the No Action Alternative (Alternative A) does not present a complete discussion of the regulatory tools BLM already has, including Manual 6840, to protect GSG habitat. Even though BLM has not yet amended the Resource Management Plans ("RMPs") that comprise the No Action Alternative to include Manual 6840, the conservation measures outlined in the Manual are nonetheless binding upon BLM and should be considered in the context of the No Action Alternative.

Comment Number: NVCASG-14-0201-15
Comment Excerpt Text:
The list of bullets in this section is similar to the theme of the Greater Sage-Grouse Conservation Objectives Final Report (the "COT Report") 3 - "protect", "limitations", "restrictions", and "avoidance and exclusion areas;" these terms imply emphasis of one resource at the expense of others, not the multiple-use concept that is espoused in the Draft LUPA/DEIS document. There is no mention of an ecological approach to resolving the issues, just restrictions on what can be done on public lands. "Best Science" should be more than a list of what cannot be done on public lands.

Comment Number: NVCASG-14-0201-2
Comment Excerpt Text:
NOGA commented that public land management to date has been primarily one of multiple-use; however the emphasis on the conservation measures of National Technical Team (NTT) report is single-species management. Three of the alternatives in the Draft LUPA/DEIS are based entirely or in part on the NTT report.

Comment Number: NVCASG-14-0201-31
Comment Excerpt Text:
Inadequacy of the Analysis. Chapter I of the Draft LUPA/DEIS identifies issues eliminated from detailed
analysis because they are beyond the scope of the LUPAs and therefore, not addressed in the LUPAs. We feel strongly that some of the issues eliminated from analysis were essential to understanding the benefits and impacts of the action items presented in the various alternatives. Many of the conservation measures proposed in the alternatives are intended to reduce sage-grouse mortality (e.g., perch deterrents on power poles and flight diverters on fences); however, the number of birds killed as a result of BLM’s and Forest Service’s current management is not mentioned anywhere in the document. The public cannot adequately assess whether the cost associated with retrofitting power lines and fences, or burying power lines will significantly increase sage-grouse populations. Furthermore, if reductions in mortality are the intent of some of these conservation measures, we cannot assess how important mortality from collisions with fences and power lines, or from increased predation due to predator nesting or perching on power lines unless the Draft LUPA/DEIS provides estimates of the number of sagegrouse lost to predation and hunting each year. If hunting removes 8 percent of the sage-grouse population and predation removes 50 percent of the annual sage-grouse production, but collisions with fences only results in mortality of 1 percent of the population, it would seem the focus should be on predators and hunting, not retrofitting fences and power lines. But the analysis in the Draft LUPA/DEIS does not address hunting or predation, because the agencies do not have programs that have jurisdiction over hunting or predators. While that may be sufficient reason for the Draft LUPA/DEIS not to have conservation measures related to hunting and predators, it is not sufficient reason for not including an analysis of sage-grouse mortality factors, which includes hunting and predation.

Comment Number: NVCASG-14-0205-10
Comment Excerpt Text: Comments Applicable to Alternative A

Under Alternative A, the No-Action Alternative, the EIS fails to recognize and analyze the State of Nevada’s efforts that will continue regardless of what alternative is selected. The Governor’s Executive Order 2012-09 created the Greater Sage-Grouse Advisory Committee, which drafted Nevada’s Strategic Plan for Conservation of Greater Sage-Grouse, and the Legislature enacted Assembly Bill 461, which created the Sagebrush Ecosystem Program and the Sagebrush Ecosystem Council. Nevada law now requires the Nevada Division of State Lands (Division) to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems on public and private (with the private landowners’ consent). NRS 321.594.

First, the Division must oversee a mitigation program that awards credits to people for taking measures to protect, enhance, or restore sagebrush ecosystems. NRS 321.594(2) (a). The Division must also identify and prioritize projects to improve sagebrush ecosystems, coordinate with federal agencies, and suggest measures to avoid, minimize, and mitigate impacts. NRS 321.594(2) (b), (d). Further, the Nevada legislature created the Sagebrush Ecosystem Council in 2013, which must consider the best available science and formulate and carry out strategies and programs for the conservation of GRSG. NRS 232.162.

Additionally, the Nevada Legislature created the Account to Restore the Sagebrush Ecosystem, which must be used to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems in the State of Nevada. NRS 232.161. Lastly, the Nevada Department of Wildlife (NDOW) has conducted numerous GRSG conservation projects to restore, enhance, protect, and research GRSG habitat in Nevada. The EIS review of the No-Action Alternative fails to recognize and analyze the steps taken by the State of Nevada to conserve and enhance GRSG habitat to protect GRSG.

Comment Number: NVCASG-14-0205-11
Comment Excerpt Text: Alternative B provides a 3% disturbance cap in PPMAs limiting anthropogenic disturbances to less than 3% of the total GRSG habitat regardless of land
ownership. This 3% cap on disturbance accounts for both existing and any new disturbances in a PPMA.

The EIS defines a disturbance to include, but not be limited to, paved highways, graded gravel roads, transmission lines, substations, wind turbines, oil and gas wells, geothermal wells, and associated facilities, pipelines, landfills, homes and mines. See e.g., Table 2.4, p.2-55, Alternative B. This anthropogenic disturbance cap is flawed on numerous grounds. First, a 3% disturbance cap lacks a solid scientific basis. Not only does the science not support this 3% disturbance cap, a blanket condition such as this ignores important distinctions such as habitat quality or disturbance type and/or timing that likely play a much greater role in GRSG success.

In addition, the 3% cap promoted in Alternative B is inconsistent with BLM’s multiple use mandate as described in more detail above. The EIS evidences this contradiction when it provides that in areas where the 3% cap is met, no new activity will be allowed until sufficient GRSG habitat has been restored to maintain this arbitrary 3% threshold. Having a rigid disturbance cap that fails to account for habitat conditions and existing valid rights is arbitrary, unnecessarily harsh, and beyond BLM authority.

Third, nowhere in the EIS does BLM explain exactly how the 3% cap will be assessed based on the actual PPMA delineations. Moreover, the maps included in the EIS are on such a broad scale that it is impossible to tell how a blanket prohibition of disturbance will be applied and how certain PPMAs will be disproportionately impacted. Additionally, and underscoring the lack of information included in the EIS, is BLM’s failure to quantify current conditions and existing disturbance thresholds in the PPMAs. The reader cannot determine, based on the EIS and its illustrative maps, whether certain PPMAs have already met their 3% cap, thus immediately limiting further activity in those areas. This is a critical piece of missing information, depriving industry, the public and the decision maker from understanding the impacts of these alternatives.

Finally, the arbitrary 3% cap is a blanket, one-size-fits-all approach that is not tailored to address many of the major threats identified in the EIS which, in part, include wildfire, loss of native habitat to invasive species, and habitat fragmentation.

Comment Number: NVCASG-14-0205-2
Comment Excerpt Text: Under Section 202(c)(9) of FLPMA, 43 U.S.C. § 1712(a) and (c)(9), BLM’s LUPs "shall be consistent with State and local plans to the maximum extent consistent with Federal law and the purposes of this Act," and BLM must "assure that consideration is given to those State, local, and tribal plans that are germane in the development of land use plans for public lands," and "assist in resolving, to the extent possible, consistency of federal actions with local land use plans"). See also Yount v. Salazar, 2013 WL 93372, 13 (D. Ariz. 2013) (not reported) (stating "[b]oth FLPMA and NEPA require meaningful participation of and consultation with local governments, and, to the extent possible, consistency of federal actions with local land use plans").

In the context of the EIS and LUPs for Greater sage-grouse, Nye County believes that this consistency mandate requires BLM to adopt either Alternative A or the Nevada State Plan as the Preferred Alternative, unless it can make a clear finding that Alternative A or the State Plan would be inconsistent with federal law.

Comment Number: NVCASG-14-0205-3
Comment Excerpt Text: What the Service actually found was that "the information provided to us by BLM did not specify what requirements, direction, measures or guidance has been included in the newly revised RMPs to address threats to sage-grouse and sagebrush habitat. Therefore, we cannot assess their value or rely on them as regulatory mechanisms for the conservation of sage-grouse." 75 Fed. Reg. at 13976. Further, "Although [Resource Management Plans], [Allotment Management Plans], and the permit renewal process provide an adequate regulatory framework, whether
or not these regulatory mechanisms are being implemented in a manner that conserves sage-grouse is unclear.” Id. at 13977. Accordingly, instead of simply supplementing the requested information, BLM chose to respond with a wholesale reordering of Federal land priorities across over 40 million acres of the Western United States.

**Comment Number: NVCASG-14-0205-5**

**Comment Excerpt Text:**

*Manual 6840*

The No Action Alternative must discuss, in detail, BLM Manual 6840 and its specific and effective policies that protect both listed and candidate species consistent with the Secretary’s authority under the ESA and balance competing resource values as required by FLPMA.

The purpose of Manual 6840 is to establish policy for the management of species listed or proposed for listing under the ESA and for "sensitive species" on BLM lands. It contains guidance on how to designate and ensure for the conservation of "sensitive species" (i.e. "special status species" like sage-grouse). One of the objectives in Manual 6840 is to "initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA" (Manual 6840 at .02). In order to meet this objective the Manual seeks to ensure:

> [W]hen the BLM engages in the planning process, land use plans and subsequent implementation-level plans identify appropriate outcomes, strategies, restoration opportunities, use restrictions, and management actions necessary to conserve and/or recover listed species, as well as provisions for the conservation of Bureau sensitive species. In particular, such plans should address any approved recovery plans and conservation agreements.

*Manual 6840 at .04D5 (emphasis added)*

Section 1(3) of Manual 6840 pertaining to the administration of listed species authorizes BLM State Directors to exclude core habitat areas with resource conflicts from being designated as critical habitat: Where the State Director determines that adequate conservation measures are in place, and that the benefits, including economic benefits, of excluding BLM lands from critical habitat designation exceed the benefits of inclusion of BLM lands, the State Director shall request exclusion of BLM lands from the critical habitat designation pursuant to Section 4(b ) (2) and/or Section 3(5)A of the ESA.

For proposals across multiple States, the Director will coordinate with the States and submit such information. (BLM Manual 6840, Section 1(3»). If BLM does not believe the conservation measures prescribed in Manual 6840 are sufficient, then it must explain and quantify those deficiencies. Otherwise, the public cannot gauge and understand the need (if any) for land use management changes in BLM’s Preferred Alternative.

The No Action Alternative fails to properly analyze the existing conservation measures or authorities the BLM is already using to conserve the GRSG and its habitat. BLM must not ignore Manual 6840.

Section 302(b) of FLPMA requires the Secretary of the Interior, in managing the public lands, to "take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b) [hereinafter the "Unnecessary or Undue Degradation" Standard]. For hard rock mining, this requirement is implemented through BLM’s Surface Management Regulations, 43 C.F.R. Subpart 3809, which provide BLM with sufficient authority to consider and require mitigation for potential impacts to GSG habitat.

These legal tools, in addition to the pre-existing conservation commitments that BLM has undertaken prior to now, remain wholly ignored in the No Action Alternative. The lack of consideration of these existing conservation measures results in an inaccurate baseline account of the affected environment. This error is a fundamental flaw in the EIS and invalidates BLM’s entire analysis, given the No Action Alternative is supposed to set the floor and
serve as a benchmark against which the management alternatives may be measured.

Comment Number: NVCASG-14-0219-1
Comment Excerpt Text:
Neither of the Draft LUPA EISs analyzes whether the greater sage-grouse meets the ESA definitions for listing as endangered or threatened. Thus, both fail to meet the overriding purpose for the EISs. To evaluate whether the greater sage-grouse presently meets the criteria to be listed as endangered or threatened under the ESA, one must answer two questions:

1] How many greater sage-grouse are needed to safeguard the species against extinction; and,

2] Do current greater sage-grouse population numbers and trends put the greater sage-grouse at risk for imminent extinction or for eventual extinction in the foreseeable future?

The U.S. Fish and Wildlife Service (FWS) provided the information required to answer these questions in its 2010 FWS Findings. The FWS Findings identified greater sage-grouse populations below 50 breeding adults "as being at short-term risk of extinction" and identified populations below 500 breeding adults "as being at long-term risk for extinction." See FWS Findings6, page 13959.

Comment Number: NVCASG-14-0219-2
Comment Excerpt Text:
Inexplicably, when responding to scoping comments the Draft LUPA EISs claim that analysis of greater sage-grouse population levels is beyond the scope of the project, stating that comments "questioned population levels and the need to incorporate rangewide conservation measures" and concluding that such concerns "relate to decisions under the purview of the USFWS and are not (will not be) addressed" by the Draft LUPA EISs. See ID Draft LUPA/EIS2, page 1-33 and NV Draft LUPA/EIS1, page 1-18. Thus, the Draft LUPA EISs irrationally conclude that the overriding purpose and need identified for the project is itself beyond the scope of the project. As a result of this irrational decision, the Draft LUPA EISs devote little or no effort to disclose, discuss, or analyze greater sage-grouse population levels, viability, or persistence.

Comment Number: NVCASG-14-0219-3
Comment Excerpt Text:
Neither of the Draft LUPA EISs analyzes whether the greater sage-grouse meets the ESA definitions for listing as endangered or threatened. Thus, both fail to meet the overriding purpose for the EISs. To evaluate whether the greater sage-grouse presently meets the criteria to be listed as endangered or threatened under the ESA, one must answer two questions:

1] How many greater sage-grouse are needed to safeguard the species against extinction; and,

2] Do current greater sage-grouse population numbers and trends put the greater sage-grouse at risk for imminent extinction or for eventual extinction in the foreseeable future?

The U.S. Fish and Wildlife Service (FWS) provided the information required to answer these questions in its 2010 FWS Findings. The FWS Findings identified greater sage-grouse populations below 50 breeding adults "as being at short-term risk of extinction" and identified populations below 500 breeding adults "as being at long-term risk for extinction." See FWS Findings6, page 13959.

Comment Number: NVCASG-14-0219-4
Comment Excerpt Text:
Inexplicably, when responding to scoping comments the Draft LUPA EISs claim that analysis of greater sage-grouse population levels is beyond the scope of the project, stating that comments "questioned population levels and the need to incorporate rangewide conservation measures" and concluding that such concerns "relate to decisions under the purview of the USFWS and are not (will not be) addressed" by the Draft LUPA EISs. See ID Draft LUPA/EIS2, page 1-33 and NV Draft LUPA/EIS1, page 1-18. Thus, the Draft LUPA EISs irrationally conclude that the overriding purpose and need identified for the project is itself beyond the scope of the project. As a result of this irrational decision, the Draft LUPA EISs devote little or no effort to disclose, discuss, or analyze greater sage-grouse population levels, viability, or persistence.

Comment Number: NVCASG-14-0219-5
Comment Excerpt Text:
Given that the overriding purpose and need identified by the NOI and Draft LUPA EISs specifically ties to the desire to avoid listing the greater sage-grouse under the ESA, the Draft LUPA EISs have a fundamental obligation to address the extent to which the greater sage-grouse populations meet the criteria of the ESA as an endangered species or as a threatened species under current land use plan management direction before proposing action alternatives to change such management direction. Both Draft LUPA EISs completely fail to meet this fundamental obligation. The Draft LUPA EISs contain virtually no information, discussion, or analysis regarding existing greater sage-grouse population levels anywhere within their range, so are unable to evaluate the extent to which the species meets the qualifications for listing under the ESA.

Comment Number: NVCASG-14-0224-9
Comment Excerpt Text:
1.4.3. Ecor egional Context and Landscape Planning Approach - The BLM's landscape approach includes Rapid Ecoregional Assessments (REAs), which provide a framework for integrating science and management.
COMMENT: We are concerned this approach may be wholly inadequate for use in the planning process because, rather than utilizing site-specific data; it relies upon probability models to determine potential impacts. Many of the modeling techniques used in evaluating the GRSG have been proven inaccurate when compared to site-specific studies referenced throughout these comments.

**Comment Number: NVCASG-14-0238-3**
**Comment Excerpt Text:**
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.

**Comment Number: NVCASG-14-0243-1**
**Comment Excerpt Text:**
The draft LUPAIDEIS, section ES.3 Purpose and Need completely omits a major threat to the GESG habitat, and that is disease. According to the U of Montana study "West Nile Virus: Ecology and Impacts on Greater Sage Grouse Populations" West Nile Virus (WNV)" outbreaks more common during drought".

**Comment Number: NVCASG-14-0278-1**
**Comment Excerpt Text:**
EIS Section: 1.5.4, Chapter & Page: 1-18

Comment: "Predator control is allowed on ELM-administered lands and is regulated by NDOW and CDFW These comments, therefore, relate to state-regulated actions and are outside the scope of the plan amendment."

The BLM Handbook H1790-1 (NEPA Handbook) indicates this issue readily falls "within scope" based upon two bullets on page 41. These are:

1) 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).

2) 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).

**Comment Number: NVCASG-14-0278-4**
**Comment Excerpt Text:**
EIS Section: Table 2-4, Chapter & Page: p 55

Comment: The 3% limit of total discrete anthropogenic disturbance in PPMA's regardless of ownership is not realistic and ignores spatial distribution and property rights. All existing disturbance may be in one block in one corner of a PPMA and the addition of x acres adjacent to that affected area may have no impact on GRSG. There are many potential scenarios in which additional disturbance may have no additional impact, while relocation of an activity to a PPMA with less than 3% disturbance could have large impacts to GRSG. One size, fits all rules will never result in successful long-term management of a dynamic biological system.

**Comment Number: NVCASG-14-0278-5**
**Comment Excerpt Text:**
EIS Section: Table 2-4, Chapter & Page: p 55

Comment: The EIS states: "In PPMA where the 3% disturbance threshold is already exceeded from any source, no further anthropogenic disturbances will be permitted by ELM or Forest Service until enough habitat has been restored to maintain the area under this threshold (subject to valid existing rights)." The language "from any source" causes great concern because it means that if a lightning caused fire burns more than 3% of the PPMA, there can be no further human disturbance allowed. Even more problematic is that the potential timeframe for which additional human disturbance cannot occur is likely to be decades and perhaps much longer, given the sagebrush cover requirements in Table 2-6. Sagebrush does not reach the stated objectives for very long periods. This ignores the reality that either people move to resources or they move resources to
their location. Also, as written this prevents the construction of fuel breaks to control fire because they are anthropogenic, yet are intended to reduce the highest risk to sage-grouse: wildfire.

**Comment Number: NVCASG-14-0285-49**

*Comment Excerpt Text:*

Alternative D fails to adopt or even adapt the National Technical Team recommendations to guide sage grouse management measures. State and local agencies, as well as industrial interest groups, have thus far had their interests exert an undue level of influence over the Alternative D, to the detriment of sage grouse conservation which is the Purpose and Need for this planning process. BLM should instead apply at minimum the measures recommended by the BLM's National Technical Team, and more preferably the Sage Grouse Recovery Alternative attached to these comments. See Attachment 11. Alternative D also fails to meet the Purpose and Need for this EIS.

**Comment Number: NVCASG-14-0285-50**

*Comment Excerpt Text:*

Land surface disturbance in sage grouse habitat is widely known to affect the species. Disturbance thresholds are commonly applied in areas of energy development, even though there has been little science to date establishing the disturbance threshold by percentage of land area at which significant impacts to sage grouse begin to occur. Under Alternative D, there is no limit on the amount of cumulative disturbance allowed in sage grouse core habitat. Importantly, infrastructure (including roads, pipelines, and powerlines) also have been identified as a principal threat in Nevada and Northeastern California, and they also contribute to habitat loss, fragmentation, and sage grouse displacement. This protective measure needs to be applied to existing fluid mineral leases as a Condition of Approval, and to all other forms of human disturbance as well.

**Comment Number: NVCASG-14-0285-60**

*Comment Excerpt Text:*

The federal agencies should under no circumstances incentivize the creation or facilitation of a biofuels industry as recommended under Alternative D; biofuels is an environmentally unsustainable industry, and the creation of such an industry would wreak devastation on piñon-juniper woodlands far beyond those encroaching on sage grouse habitats, with major impacts on obligate songbirds (including BLM Sensitive Species) and other wildlife. The agencies have failed to analyze the direct and cumulative impact of creating such an industry, which in any case is beyond the scope and Purpose and Need of this EIS, and therefore do not have the ‘hard look’ analysis at impacts to support such a provision in the RMP amendment under NEPA.

**Comment Number: NVCASG-14-0285-77**

*Comment Excerpt Text:*

Alternative E allows 5% surface disturbance in each 640-acre section in sage grouse habitats each year. DEIS at 636. The best available science (Knick et al. 2013) identifies 3% as the disturbance threshold that should not be exceeded, based on 99% of active sage grouse leks in the study area (including all of Nevada and northeastern California) being sited in habitat surrounded by lands with less than 3% surface disturbance. Therefore, even if the disturbance cap were set cumulatively at 5% (existing disturbance plus all disturbance approved in all future years) this provision would not meet USFWS effectiveness criteria based on the best available science. By allowing a maximum of 5% surface disturbance each year, the cumulative surface disturbance could rapidly exceed 5% overall, and would in fact be unlimited in how high it could go.

Under Alternative E, SGMAs apply only to Nevada. DEIS at 636. BLM lands in California would be managed as under Alternative A (existing management; DEIS at 637), which is known to be deficient and is leading toward listing. This is an unacceptable outcome, and does not meet the EIS Purpose and Need. In addition, only 91% of sage grouse in the state of Nevada would be included in SGMAs (DEIS at 636); this implies that 9% would be completely unprotected under the plan amendment if this alternative were to be adopted, meaning a 9% population decline is reasonably foreseeable over the long term regardless of the effectiveness (or lack
thereof) of measures applied in SGMAs. Given that the sage grouse was ruled warranted for listing by USFWS in 2010, there need to be more, not fewer, sage grouse in the planning area to make showing that listing will not be warranted in 2015.

Alternative E relies on compensatory mitigation to achieve a “no net loss” in occupied, suitable, or potential habitats DEIS at 636. In practice, this standard is impossible to implement, because it is not possible to create new habitat, and compensatory mitigation efforts to date have not demonstrated an ability to increase grouse populations to compensate for population declines caused in impacted areas.

Alternative E also relies on a mitigation program based on in-lieu fees in exchange for allowing projects that degrade sage grouse habitats. DEIS at 47. It is important to note that in the Pinedale Anticline and Jonah Fields of Wyoming, the settings in which in-lieu fees for sage grouse habitat destruction have been most thoroughly tested, more than $40 million and $20 million, respectively, have been raised and expended on a variety of compensatory mitigation projects. Of all of these projects, not a single project has ever resulted in a documented increase of sage grouse populations in the habitats targeted for mitigation funding. Not one. As a result, thousands of acres of prime sage grouse habitat have been destroyed on one hand, and on the other hand millions have been spent too little apparent effect, with a net result of a major sage grouse population loss. This futile model must not be imported into the Nevada – Northeastern California sage grouse plan amendment.

According to BLM, “Alternative E does not provide fixed exclusion or avoidance areas, leaving all management subject to an avoid, minimize, mitigate approach, which provides a lower level of certainty than alternatives that have fixed exclusion and avoidance land allocations based on PPMAs and PGMAs designations.” DEIS at 637. We agree with this statement, with a twist: “Certainty” is not a relative term – one is either certain or one is not. There are no levels of certainty. Because of the approach described above, Alternative E provides uncertainty regarding land allocation outcomes, and therefore there is no certainty that the threats identified by USFWS will be circumvented by this alternative. In the absence of certainty, this alternative 62 cannot satisfy the Purpose and Need for the EIS, which is to satisfy listing criteria and create adequate regulatory mechanisms. The failure to exclude harmful activities including oil and gas development, mining, renewable energy production, powerlines, and road construction have the potential to have major negative impacts on sage grouse and will likely extirpate active breeding populations.

Comment Number: NVCASG-14-0285-81
Comment Excerpt Text:
The BLM has also not considered protections for sage grouse for lands outside Priority Habitats, and has not fully considered NTT or Sage-grouse Recovery Alternative measures proposed for sage grouse general habitats. What will be the impact of permitted activities on grouse populations that fall outside the Priority Habitats/ACEC boundaries under this plan? The DEIS is silent on this matter.

Comment Number: NVCASG-14-0285-85
Comment Excerpt Text:
We support the 3% disturbance cap for disturbance (applied under Alternatives B, C, and F, DEIS at 246), but it is unclear than any alternative fully implements this disturbance cap (e.g., in the context of mineral leasing or mining). However, human-caused disturbance impacts sage grouse and their habitats regardless of whether it occurs in the context of vegetation treatments and roads or mineral leasing and development, so this disturbance cap needs to be applied more broadly. In addition, all other permitted forms of surface disturbance also contribute to degradation of sage grouse habitats; it only makes sense to include (and limit) all forms of surface disturbance using the 3% cap. This approach would be consistent with the published science (Knick et al. 2013) and the opinions of the agency’s own experts in the NTT Report.
There is no scientifically acceptable basis for approving exceptions to this disturbance cap. And in the absence of hard evidence that compensatory mitigation actually increases sage grouse populations to compensate for habitat and population losses elsewhere, there is no scientific basis for approving exceptions when they are paired with compensatory mitigation, either.

**Comment Number: NVCASG-14-0290-6**
*Comment Excerpt Text:*
Alternative E mentions a "Conservation Credit System" which is vague and needs to be identified and explained better. Industry understands that the government is considering a 2:1 mitigation ratio at $500 per acre disturbed for PGH or 3:1 mitigation ratio at $750 per acre disturbed for PPH. These mitigation ratio fees should not be so restrictive or excessive that it ultimately prohibits the mining company from economically mining an area. Mitigation fees should only be imposed when site-specific field studies identify a project site as Sage-Grouse habitat. If the land is identified as PGH/PPH (or PPMA/PGMA); however, site-specific surveys identify the land as non-habitat, site specific surveys should take precedent and no mitigation fee should be imposed.

**Comment Number: NVCASG-14-0290-8**
*Comment Excerpt Text:*
The No-Action Alternative fails to recognize and analyze the recent steps taken by the State of Nevada to conserve and enhance Sage-Grouse habitat to protect Sage-Grouse.

**Comment Number: NVCASG-14-0291-6**
*Comment Excerpt Text:*
The rigid disturbance cap is arbitrary, and fails to account for habitat conditions and existing valid rights. To fully assess potential impacts, the EIS needs to explain exactly how the 3% cap will be assessed based on the actual PPMA delineations.

**Comment Number: NVCASG-14-0291-7**
*Comment Excerpt Text:*
Considering WLC holds valid mining claims and considering the 1874 Mining Law; the Nevada Sagebrush Ecosystem Technical Team should not have the authority to deny a project that exceeds 5 percent disturbance per 640 acres. The 5% per year requirement per 640 acres is arbitrary and is not based on science. Additional information needs to be presented in the EIS to scientifically justify the 5% per year, per 640 acre disturbance threshold.

**Comment Number: NVCASG-14-0291-8**
*Comment Excerpt Text:*
The EIS should identify and make a comparison between implementation of the ESA and implementation of the preferred alternative. Such comparison should include an economic analysis to both industry and government; identify timeframes necessary to complete both the ESA and the selected EIS Alternative, and the associated environmental impacts of both.

**Comment Number: NVCASG-14-0306-1**
*Comment Excerpt Text:*
The Purpose and Need Statement is inconsistent with the planning criteria that BLM and USFS established for the GSG NEPA documents.

**Comment Number: NVCASG-14-0306-2**
*Comment Excerpt Text:*
The Purpose and Need Statement does not disclose that one of the main purposes of the DEIS which is to respond to Instruction Memorandum 2012-044 (which expired prior to issuance of the DEIS) to analyze the impacts associated with implementing the conservation measures in the December 2011 National Technical Team (NTT) Report. The DEIS fulfills this requirement with Alternative B, the NTT Report Alternative.

**Comment Number: NVCASG-14-0306-3**
*Comment Excerpt Text:*
However, the DEIS fails to respond to the second directive in the IM which states: “BLM offices should ensure that implementation of any of the measures is
consistent with applicable statute and regulation.” Alternative B contains many land use restrictions and prohibitions inconsistent with the multiple use mandates in FLPMA and NFMA and rights under the General Mining Law. Alternative D, the Agency Preferred Alternative, includes many of the land use restrictions that are in Alternative B. These aspects of Alternative D are also inconsistent with the above-noted laws.

**Comment Number: NVCASG-14-0306-4**

**Comment Excerpt Text:**

Additionally, the DEIS does not disclose that Alternatives B, C, D, and F include measures that are inconsistent with FLPMA, NFMA, and the General Mining Law. Thus, the DEIS fails to respond to the directive in IM 2012 – 044 that directs BLM to restrict the analysis to conservation measures that are consistent with the public land laws and policies: “Where inconsistencies arise, BLM offices should consider the conservation measure(s) to the fullest extent consistent with such statute and regulation.”

**Comment Number: NVCASG-14-0306-5**

**Comment Excerpt Text:**

The Purpose and Need Statement doesn’t match the alternatives discussed in the document because it lacks the disclosure that the agencies could not implement Alternatives B, C, D, or F, without Congressional action to amend the multiple use mandates in FLPMA and NFMA and to substantially reduce rights under the General Mining law.

**Comment Number: NVCASG-14-0306-6**

**Comment Excerpt Text:**

The second serious NEPA compliance shortcoming of the DEIS is its failure for multiple reasons to examine a reasonable range of alternatives. First, as described below, BLM must revise the DEIS to include an alternative that amends the Resource Management Plans by incorporating the conservation measures required in the December 2008 Manual 6840, Special Status Species Management. This manual is directly applicable to GSG habitat management because the GSG is a BLM special-status species.

**Comment Number: NVCASG-14-0306-8**

**Comment Excerpt Text:**

Fourth, the DEIS needs to consider in detail alternatives that examine the baseline conditions and impacts associated with hunting, predation, and disease (e.g., West Nile Virus) on GSG populations. The DEIS mainly evaluates threats to GSG habitat (i.e., the land), which is an incomplete analysis because it does not consider GSG populations (i.e., the bird). The DEIS must be revised to include a complete discussion of hunting, predation, and disease in the Affected Environment and Environmental Consequences chapters. The analysis in the DEIS must not be restricted to a discussion of GSG habitat; it must also evaluate GSG populations.

**Comment Number: NVCASG-14-0311-20**

**Comment Excerpt Text:**

B. Unreasonable range of alternatives

The alternatives presented in the FEIS must be both technically and economically feasible for grazing. See BLM National Environmental Policy Act Handbook H-1790-1 at Section 6.6.1. The requirement for technically and economically feasible alternatives is not included in the preliminary planning criteria for the land use plan amendments other than by casual reference to the BLM NEPA Handbook. This requirement is particularly relevant to Alternative C, the cumulative effect of which would be to compromise the economic viability of ranching across BLM lands in Nevada. See Section 5.8.3. For this reason alone, Alternative C must be dismissed from further analysis.

**Comment Number: NVCASG-14-0311-30**

**Comment Excerpt Text:**

The Purpose and Need Statement as set forth in Section 5.3.1.1.3 identifies grazing of domestic and wild animals as a major threat but does not differentiate between the two. Subsequent passages seem to refer to the threat of grazing as involving domestic livestock only. See, e.g., Table 2.1. The fact that wild horses’ and burros’ utilization of forage is the subject of great debate and concern is most recently attested to by the litigation filed by the

Comment Number: NVCASG-14-0311-7
Comment Excerpt Text:
Y-3 II is concerned that some of the action alternatives and management actions within those alternatives are actually more restrictive than would be found on BLM lands should Sagegrouse be listed as threatened or endangered. Under the ESA, private parties may apply for an incidental take permit and, pending satisfaction of permit criteria, receive immunity for the take of wildlife associated with the permitted activity. 16 U.S.C. § 1539. The ESA also contemplates the submission of a habitat conservation plan that would allow an activity applicant to demonstrate mitigation measures and other means of minimizing wildlife impacts. Id. at 2 Y-3 II also notes that this bifurcation of planning and management processes, while at least addressed by the Nevada DEIS, is not addressed in the Idaho DEIS as it should be. § 1539(a) (2) (A). Conversely, Alternative C, which will be analyzed in further detail below, completely precludes livestock grazing with no opportunity for incidental take permits, habitat conservation plans, or other mitigation opportunities and thus, in this respect, is more restrictive than the ESA. For this and other reasons, outlined below, adoption of Alternative C or portions of other alternatives that would be more restrictive than the ESA is completely illogical and inappropriate in responding to the Service's request for additional regulatory mechanisms to avoid a listing under the ESA.

Comment Number: NVCASG-14-0330-1
Comment Excerpt Text:
The Alternatives described in the Draft LUPA/EIS are extremely difficult to interpret, principally because it is unclear whether the general management objectives under Alternative A (No Action) are being met. This information is needed to evaluate other alternatives proposed within the context of existing management. Alternative A, "No Action" Alternative, should be discussed in greater detail and clarified. This alternative describes the current policy on the management of various land uses by the BLM/USFS; however, it does not reveal whether it is effectively implemented or assess its effects on habitats important to GRSG.

Comment Number: NVCASG-14-0330-2
Comment Excerpt Text:
Table 2.8, page 358, Alternative A (No Action) describes the current management policies for GRSG habitat. It states: "Continued implementation of BLM vegetation and soil management policies and standards in sagebrush habitat would decrease Invasive species, help re-establish native plants, reduce the risk of wildfire, and reduce juniper and pinyon pine, conifers, and annual grasses, leading to a long-term improvement in value and quantity of GRSG habitat." However, documentation was lacking within the Draft LUPA/EIS to support the conclusion that these policies will lead to long-term improvement of GRSG habitat. This information is needed to evaluate the Alternatives proposed.

Comment Number: NVCASG-14-0342-14
Comment Excerpt Text:
The Purpose and Need Statement does not disclose that one of the main purposes of the DEIS is to respond to Instruction Memorandum (IM) 2012-044 (which expired prior to issuance of the DEIS) to analyze the impacts associated with implementing the conservation measures in the NTT Report. Specifically, IM 2012-044 states:

Policy/Action: The BLM must consider all applicable conservation measures when revising or amending its RMPs in Greater Sage Grouse habitat. The conservation measures developed by the NTT and contained in Attachment 1 must be considered and analyzed, as appropriate, through the land use planning process by all BLM State and Field Offices that contain occupied Greater Sage-Grouse habitat. While these conservation measures are range-wide in scale, it is expected that at the regional and sub-regional planning scales there may be some adjustments of these conservation measures in order
to address local ecological site variability. Regardless, these conservation measures must be subjected to a hard look analysis as part of the planning and NEPA processes. This means that a reasonable range of conservation measures must be considered in the land use planning alternatives. As appropriate, the conservation measures must be considered and incorporated into at least one alternative in the land use planning process.

**Comment Number: NVCASG-14-0342-15**

**Comment Excerpt Text:**

IM 2012-044. Although the DEIS complies with the IM directive to include at least one alternative based on the conservation measures in the NTT Report, the DEIS fails to respond to the second directive as stated in the second paragraph above: "BLM offices should ensure that implementation of any of the measures is consistent with applicable statute and regulation." The "NTT-Only" Alternative contains many land use restrictions and prohibitions inconsistent with the multiple use mandates in FLPMA and NFMA and rights under the General Mining Law.

**Comment Number: NVCASG-14-0342-16**

**Comment Excerpt Text:**

the DEIS does not disclose the Alternatives that include measures that are do not comply with FLPMA, NFMA or the General Mining Law. Thus, the DEIS fails to respond to the third directive in IM 2012 — 044: "Where inconsistencies arise, BLM offices should consider the conservation measure(s) to the fullest extent consistent with such statute and regulation."

**Comment Number: NVCASG-14-0342-20**

**Comment Excerpt Text:**

The Agencies have artificially deflated Alternative A, the "No Action" Alternative because it fails to quantify the impacts associated with ongoing implementation of the many existing local, state and Federal conservation measures and the existing BLM policies designed to protect the GRSG and its habitat. The No Action Alternative must review the existing regulatory framework, including Federal, state, local and private efforts, including voluntary conservation measures, to determine what positive effects those measures will produce.

**Comment Number: NVCASG-14-0342-22**

**Comment Excerpt Text:**

The DEIS fails to fully account for Federal regulatory mechanisms that are currently in place and are not only adequate to address the threats to the species, but are extremely robust. An example of the type of stipulations on mining operations that presently protect non-listed species and their habitat (in this case Wyoming), every Federal coal lessee is required to sign a stipulation from the BLM which says that:

"Special Stipulation 2. Threatened and Endangered Species (Wyoming BLM)

"The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened or endangered under the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq., or that have other special status. The Authorized Officer may recommend modifications to exploration and development proposals to further conservation and management objectives or to avoid activity that will contribute to a need to list such species or their habitat or to comply with any biological opinion issued by the Fish and Wildlife Service for the proposed action. The Authorized Officer will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act. The Authorized Officer may require modifications to, or disapprove a proposed activity that is likely to result in jeopardy to the continuous existence of a proposed or listed threatened or endangered species, or result in the destruction or adverse modification of designated or proposed critical habitat.

The lessee shall comply with instructions from the Authorized Officer of the surface managing agency (BLM, if the surface is private) for ground disturbing activities associated with coal exploration on federal
coal leases prior to approval of a mining and reclamation permit or outside an approved mining and reclamation permit area. The lessee shall comply with instructions from the Authorized Officer of the Office of Surface Mining Reclamation and Enforcement, or his designated representative, for all ground-disturbing activities taking place within an approved mining and reclamation permit area or associated with such a permit."

Since the GRSG is presently a special status species, this stipulation authorizes BLM to modify the lease to avoid activity that will harm the GRSG, and prohibits the agency from approving any activity that would adversely affect such species if it would violate the ESA. It even authorizes BLM to modify the lease after mining has begun if necessary. These are very powerful protections, and they refute the suggestion that there are inadequate regulatory mechanisms to protect the GRSG and its habitat. There are similar protections required for other industries as well, such as oil and gas leasing on BLM land.

Comment Number: NVCAG-14-0342-23
Comment Excerpt Text:
The No Action Alternative must discuss, in detail, BLM Manual 6840 and its detailed and effective policies that protect both listed and candidate species consistent with the Secretary’s authority under the ESA and balance competing resource values as required by FLPMA.

Comment Number: NVCAG-14-0342-24
Comment Excerpt Text:
The No Action Alternative fails to properly analyze the existing conservation measures and authorities the BLM is already using to conserve the GRSG and its habitat. The No-Action Alternative proffered by the Agencies must acknowledge Manual 6840 as the status quo, baseline policy governing present GRSG conservation. If BLM believes that such existing regulatory mechanisms are inadequate, then the burden is on the agency to explain how and why this is so.

Comment Number: NVCAG-14-0342-25
Comment Excerpt Text:
As an example of the possibility of no meaningful public participation in this process, the Commenters note that the BLM public meeting in Reno, Nevada, on December 5, 2013 was merely an "open house" format attended by representatives of the Commenters. There was no formal presentation provided to the public, although representatives of BLM were available for questions. The graphic information provided by BLM at that meeting did not include any comparative discussion whatsoever of Alternative A, the No Action alternative, which calls into question whether the agency is seriously considering it as an alternative.

Comment Number: NVCAG-14-0342-27
Comment Excerpt Text:
Section 302(b) of FLPMA requires the Secretary of the Interior, in managing the public lands, to "take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b) [hereinafter the "Unnecessary or Undue Degradation" Standard]. For hard rock mining, this requirement is implemented through BLM’s Surface Management Regulations, 43 C.F.R. Subpart 3809, which provide BLM with sufficient authority to consider and require mitigation for potential impacts to GRSG habitat.

These legal tools, in addition to the pre-existing conservation commitments that BLM has undertaken prior to now, remain wholly ignored in the No Action Alternative. The lack of consideration of these existing conservation measures, results in an inaccurate baseline account of the affected environment. This error is a fundamental flaw in the DEIS and invalidates BLM’s entire analysis, given the No Action Alternative is supposed to set the floor and serve as a benchmark against which the management alternatives may be measured.

Comment Number: NVCAG-14-0342-30
Comment Excerpt Text:
the DEIS and LUPA should recognize that the NEPA analysis of the LUPA alternatives is not adequate to
review any proposed or future public land withdrawals. Accordingly, the LUPA should recognize that any proposed or future public land withdrawals are subject to additional analysis under NEPA.

Comment Number: NVCASG-14-0342-35
Comment Excerpt Text:
Under Alternative A, the No-Action Alternative, the DEIS fails to recognize and analyze the State of Nevada’s efforts that will continue regardless of what alternative is selected.

Comment Number: NVCASG-14-0342-36
Comment Excerpt Text:
a 3% disturbance cap lacks a solid scientific basis. Not only does the science not support this 3% disturbance cap, a blanket condition such as this ignores important distinctions such as habitat quality or disturbance type and/or timing that likely play a much greater role in GRSG success.

Comment Number: NVCASG-14-0342-37
Comment Excerpt Text:
nowhere in the DEIS does BLM explain exactly how the 3% cap will be assessed based on the actual PPMA delineations. Moreover, the maps included in the DEIS are on such a broad scale that it is impossible to tell how a blanket prohibition of disturbance will be applied and how certain PPMA will be disproportionately impacted. Additionally, and underscoring the lack of information included in the DEIS, is BLM’s failure to quantify current conditions and existing disturbance thresholds in the PPMA. The reader cannot determine, based on the DEIS and its illustrative maps, whether certain PPMA have already met their 3% cap, thus immediately limiting further activity in those areas. This is a critical piece of missing information, depriving industry, the public and the decision maker from understanding the impacts of these alternatives.

Comment Number: NVCASG-14-0342-38
Comment Excerpt Text:
the arbitrary 3% cap is a blanket, one-size-fits-all approach that is not tailored to address many of the major threats identified in the DEIS which, in part, include wildfire, loss of native habitat to invasive species, and habitat fragmentation.

Comment Number: NVCASG-14-0342-9
Comment Excerpt Text:
the Purpose and Need Statement does not disclose that one of the main purposes of the DEIS to respond to Instruction Memorandum 2012-044, see discussion below.

Comment Number: NVCASG-14-0344-10
Comment Excerpt Text:
The proposed inclusion of disturbances on private lands in a cap calculation further endangers future projects by a multitude of stakeholders on public lands, as projects undertaken on private lands are not subject to the same planning and permitting processes and could quickly and capriciously deplete available cap space.

Comment Number: NVCASG-14-0344-29
Comment Excerpt Text:
The PPMA include areas that are not sage-grouse habitat, and there seems to be no valid reason for why these restrictions would apply for disturbance of non-habitat during these seasons.

Comment Number: NVCASG-14-0344-46
Comment Excerpt Text:
2.7. Appendix E

Item I.C. Habitat (Disturbance Monitoring):

The 18 threats identified by the USFWS were combined into three categories: sagebrush, non-habitat (human footprint), and energy and mining. Non-habitat only includes human impacts, but within the Planning Area and the areas designated as PPMA, PPGAs, PPH, and PGH there are multiple ecological sites that would be considered as non-habitat (e.g., an ecological site that supports a salt desert shrub community with no sagebrush). These areas need to be included in the initial baseline or monitoring of acreages to ensure that disturbance in these areas is accounted for and not counted as habitat disturbance. It is a fact that non-habitat cannot be categorized as...
only where there is human footprint; this is not scientifically defensible on any level.

Comment Number: NVCASG-14-0344-47
Comment Excerpt Text:
Item I.E. Effectiveness Monitoring:

There does not appear to be any effectiveness monitoring for mitigation implementation. There is no credit in the Draft LUPA/DEIS for habitat enhancement or mitigation. These measures would add to the amount of seasonal habitats. How will enhancements and mitigation successes be considered in relation to disturbance caps like 3 percent? Noble has a significant concern that a disturbance cap will only be tracked for impacts to habitat but not have any tracking system to put habitat back into the cap for mitigation and enhancements which is normally how caps work for other wildlife species. Noble also has considerable concern regarding what methods and protocols BLM will use to track habitat data that will go into enforcing a disturbance cap. If a disturbance cap is utilized, then the FEIS must have a transparent and defensible methodology.

Comment Number: NVCASG-14-0344-5
Comment Excerpt Text:
The general approach of the Draft LUPA/DEIS is based on how threats to sage-grouse as identified by the USFWS and the COT report could be addressed using BLM or Forest Service land management programs. The NIT report followed a similar process, a program by program analysis of how each BLM or Forest Service program may result in impacts to sage-grouse or sage-grouse habitat. However, in each of these approaches there is no perspective on the relative importance of a land management program-specific impact. Consequently, the alternative development approaches (at least Alternatives B, D, and F) appear to focus only on program level actions.

Comment Number: NVCASG-14-0344-7
Comment Excerpt Text:
It is Noble’s understanding that the Final EIS preferred alternative will be include a combination of each individual alternative, based on the results of the DEIS public comments. The analysis of the individual action elements in each alternative are not adequately carried through the document to allow for this "buffet-style" of action elements for the selected alternative. The action elements were only analyzed in the context of each alternative in their entirety. As such, the public has not had an opportunity to review or comment on a selected alternative that is made up of parts of the six alternatives in the Draft LUPA/DEIS.

Comment Number: NVCASG-14-0344-8
Comment Excerpt Text:
The agencies have not provided sufficient scientific data to support the disturbance cap concept or its effectiveness, and the calculation methodology is fraught with challenges that will prevent consistent and clear implementation. Further, the agencies have not adequately explained several crucial details about the application of the concept.

Comment Number: NVCASG-14-0344-9
Comment Excerpt Text:
Non-anthropogenic disturbances, such as wildfire, have the potential to consume all the available cap space under any disturbance cap proposal, and would do so in an unpredictable manner. In addition, BLM cannot legally preclude the execution of valid existing rights, including those for current oil and gas leases, approved rights-of-way, and approved construction projects. The policy is especially problematic in areas where a high percentage of federal acreage has already been leased for oil and natural gas development and there is limited or unavailable space under a disturbance cap. Caps could place development on public land at risk of arbitrary preclusion.

Comment Number: NVCASG-14-0351-2
Comment Excerpt Text:
The Draft EIS fails to fully study, analyze, develop, and describe primary alternatives based upon sound scientific research and historical data. In failing to consider the explosion of GRSG habitat and population following the introduction of mining and
ranching to Nevada and specifically to Pershing County, the Draft EIS failed to arrive at an appropriate management decision.

**Comment Number: NVCASG-14-0367-10**

**Comment Excerpt Text:**

The purpose and need statement in the DEIS states: “The major threats identified within BLM-and the following (the major threats were identified by the BLM interdisciplinary team in coordination with the USFWS): . . . Infrastructure–fragmentation of GRSG habitat due to human development activities such as right-of-way and renewable energy development.”

This statement fails to properly specify the underlying purpose and need to which the proposal is responding as required by NEPA regulations. See 40 CFR 1502.13 (requiring a statement that “shall briefly specify the underlying purpose and need to which the agency is responding and the need to which the agency is responding in proposing the alternatives including the proposed action”). The narrowly stated purpose in the DEIS fails to meet the requirements of section 1502.13 as it narrowly dictates the range of alternatives and an agency cannot define its objectives in unreasonably narrow terms.

**Comment Number: NVCASG-14-0367-11**

**Comment Excerpt Text:**

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

**Comment Number: NVCASG-14-0393-3**

**Comment Excerpt Text:**

Given the potential for more precipitation in the future to fall in the way of rain, particularly in the fall and spring seasons, and less in the form of snow and the related impacts that this may cause in regard to fall and spring flooding and related erosion as well as impacts to summer stream flows, the FEIS should include the option of implementation of cloud seeding along various Humboldt River Basin mountain ranges as a means to increase snow pack. In addition, the Action Alternatives should include other methods to control rapid spring runoff or fall flooding and enhance infiltration of surface runoff during these events.

### 1.5 Best Available Info Baseline Data

**Comment Number: NVCASG-14-0109-11**

**Comment Excerpt Text:**

32, B, Action LG-5, 229

ESDs should be the rule for assessing habitat conditions and determining whether there is potential for habitat improvement. In addition, this technical information is developed in NE California and Nevada which better reflects local conditions as opposed to the range-wide habitat variables recommended by Doherty et al. 2011, and Connelly & Hagen et al. 2007. Dr. Peter Coates with the USGS has been developing localized habitat criteria for plant communities in this study area.

**Comment Number: NVCASG-14-0109-21**

**Comment Excerpt Text:**

All, Appendix O, O-2

Use of the out-of-the-box IMPAN model for estimating impacts from sage-grouse management alternatives have been shown to be inaccurate (RCI 2012). However for this DEIS analysis the regional IMPLAN models were adjusted by using Cooperative Extension budgets. The study researchers should be recognized for their efforts to improve the regional database and adjusting the IMPLAN models to more accurately estimate these economic linkages. Also these procedures should have been included in the DEIS with references to Cooperative Extension budgets used to update and modify IMPLAN input-output vectors.
Comment Number: NVCASG-14-0109-6  
Comment Excerpt Text:  
8, All, ES.7, xix  
There is nothing in the planning criteria that lends credence to or calls for inputs from local sources, including ranchers with decades or generations of experience and knowledge with respect to sage-grouse and their local habitat, locations of leks, observations of predation, climatic events (i.e. wildfires), and the impacts, including vegetation changes. This leaves a huge gap in the search for sound, credible information that can assist in effective planning as the process advances.

Comment Number: NVCASG-14-0125-3  
Comment Excerpt Text:  
the science and methodology relied upon by the agencies in completing its DEIS is flawed and incomplete. The discussion of alternatives, proposed actions, and impacts rely heavily on Ecological Site Descriptions (“ESD”) to both establish and monitor vegetation objectives. See e.g., DEIS Table 2.5

Comment Number: NVCASG-14-0125-5  
Comment Excerpt Text:  
The agencies' heavy reliance on the incomplete ESDs and the inadequate disclosure that the relevant variables were incomplete falls well short of NEPA’s requirements.

Comment Number: NVCASG-14-0144-11  
Comment Excerpt Text:  
Section 2.8.1. Page 24-The no action alternative is not the baseline for comparison. The current conditions establish the baseline. The impact analysis is the measurement of changes each alternative has on the baseline. The no action alternative is just one of several possible approaches to sage grouse conservation. BLM and the Forest Service do have tools available to address sage grouse under the no-action.

Comment Number: NVCASG-14-0169-16  
Comment Excerpt Text:  
The Agencies have artificially deflated Alternative A, the "No Action" Alternative because it fails to quantify the impacts associated with ongoing implementation of the many existing local, state and Federal conservation measures and the existing BLM policies designed to protect the GSG and its habitat. The No Action Alternative must review the existing regulatory framework, including Federal, state, local and private efforts, including voluntary conservation measures, to determine what positive effects those measures will produce.

Comment Number: NVCASG-14-0180-4  
Comment Excerpt Text:  
In regards to unregulated grazing by wild horses and wildlife: The document should disclose which Herd Management Areas (HMAs), Herd Areas (HAs), and Wild Horse and Burro Territories (WHBTs) within sage-grouse habitat are actually within Appropriate Management Levels (AML). Along the same lines, the document should disclose which Wildlife Management Areas are within elk population objectives. This disclosure is critical as it will show that these management areas within the N-4 Grazing Board's area of interest are over allocated. This over allocation has resulted in subsequent overgrazing, by wild horses and elk, particularly in key sage-grouse habitats such as riparian areas. It is essential that this problem is acknowledged, as too often regulated livestock grazing is blamed resulting in unjustified cuts in AUMs.

Comment Number: NVCASG-14-0180-5  
Comment Excerpt Text:  
current AML for HMAs, HAs, and WHBTs located in sage-grouse habitat should be reviewed and adjusted in order to meet desired conditions based on ecological site potential, current site condition and state and transition models and in consideration of horses and elk being present year-round with passive management. All of these provisions are consistent with the Wild Horse and Burro Act or existing policies / agreements with NDOW (for elk), and reference to such should be documented. In addition, the BLM should encourage the Nevada Department of Wildlife (NDOW) to implement actions to achieve herd management objectives for elk populations immediately.
Comment Number: NVCASG-14-0195-13
Comment Excerpt Text:
Alternative Number: All, Section: ES 7, Bullet 18, Page Number: xix

Comment: Vegetation management objectives do not need to be developed by BLM and USFS. A Memorandum of Understanding was entered into by BLM, USFS and NRCS in 2010 to develop a standardized method of defining, delineating and describing rangeland ecological sites. In accordance with this MOU, the Rangeland Interagency Ecological Site Manual was developed and signed into policy in 2013. This manual has defined ecological site descriptions and classifies landscapes site potential to meet management objectives.

Comment Number: NVCASG-14-0195-3
Comment Excerpt Text:
BLM has stated the agency will recognize valid and existing rights however, the DEIS does not explain what constitutes valid existing rights and how these rights are related to new land management actions within the DEIS. The Association requests BLM further clarify how valid and existing rights will be recognized under each of the management actions.

Comment Number: NVCASG-14-0195-7
Comment Excerpt Text:
The preferred alternative does not allow for adaptive management. Found in the USFWS' Greater Sage Grouse Conservation Objectives: Final Report, also referred to as the COT Report, under Appendix B: Policy for the Evaluation of Conservation Efforts when Making Listing Decisions adaptive management is defined as a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. An adaptive, case-by-case approach will ensure that efforts and resources expended in the name of greater sage-grouse conservation are well spent. Ecosystems vary; site potential, plant communities, soil types, environmental influences, precipitation patterns and plant production and vigor are highly variable and cannot be appropriately managed by single-source standards and guidelines. As continually suggested by the USFWS, the regulations should allow flexibility to land users. As requested in Scoping Comments sent March 2012, the draft EIS should include demonstrated evidence of adaptive management principles to be used when managing greater sage-grouse habitat. On-going monitoring and adaptive management procedures need to be clearly defined to insure that actions are measured against objectives and modified or completely changed within an identified range of opportunities for public involvement. As the DEIS is currently written, adaptive management principles are not included or clearly defined to achieve objectives. The Association requests, once again, BLM include adaptive management principles and analyze management the impact of adaptive management to the habitat of greater sage-grouse. Listed below are peer-reviewed studies for BLM to consider.

- As demonstrated in Freese, E. et. al. (2013), managing livestock grazing to reduce the number and size of wildfire events on private lands compared to the public lands surrounding them. The results of this study exhibited that only 14% of the public lands remained undisturbed while 89% of the private land grazed with the intent of reducing fire frequency and size remained undisturbed. This further indicates that those policies that restrict flexibility of how public lands could be grazed may be contributing to loss or impact of many acres of sage grouse habitat.

- Burkhardt et. al examined the effects of grazing on vegetative production and density and concludes that allowing plants to set seed at least every second year through managing spring grazing is of great benefit. The results of this study, concludes that the variable on spring grazing is that use in early spring has significantly less effect on total plant production over the year than does later spring use. The implications for sage grouse suggests that designing systems to insure at least one pasture in a given nesting use area
during spring use periods should provide opportunities for successful nesting considering birds show fidelity to nesting in a given area but not specifically to an individual nest location.

- Cagney, et al. is a detailed report identifying points of consideration, driving forces, effects and implications of grazing management and system design and is an excellent guide to the development of a grazing management plan that fully considers the needs of sage grouse as well as the economic viability of the livestock operation. Following these procedures, results in developing measurable and attainable goals based on sound objectives in tune with the site potential of the area being grazed.

- A definitive paper by Crawford: summarized the knowledge of Sage Grouse related issues and their multiple complexities. The study stresses the positive or negative effects of grazing depending on how it is managed and applied. Within the appendixes, other studies summarized indicate the benefits of utilizing grazing to alter vegetative communities, reduce invasives, alter fire frequency, and many other potential effects. These factors can be affected by applied grazing and the multitude of grazing management systems.

- The study completed by Davies and Bates. 2010 analyzed variability in 106 Wyoming Big Sagebrush and Mountain Big Sagebrush sites (approximately 50150 split) and documented the significant production and site potential differences and variability between the two different sub-species of sagebrush. As found within the study, because of these differences, management actions need to be designed to the site conditions that exist at a particular location and set of ecological conditions and factors. This study strongly supports the need for having a very broad array of management and restoration options to be able to apply what is needed for each particular set of circumstances.

**Comment Number: NVCASG-14-0199-2**  
**Comment Excerpt Text:**  
While the PGH/PPH maps are intended to be used at the programmatic scale, BLM appears to be applying them at the project scale. This occurs even when properly conducted habitat determinations are available. There must be an agreed-to methodology for revision of habitat designation using site-specific scientific data and information. The DEIS needs to address this.

**Comment Number: NVCASG-14-0199-38**  
**Comment Excerpt Text:**  
Areas of non-habitat (e.g., pinyon-juniper encroachment and salt desert scrub) have been mapped as PPH and PGH and these areas provide no habitat value for sage-grouse, yet proposed disturbance in these areas must currently be mitigated at the ratio of 3 acres of mitigation for every 1 acre of disturbance in PPH habitat, regardless of whether or not the acreage is actually sage-grouse habitat. A streamlined and objective process needs to be developed for addressing these errors in the mapping, or the existing process of conducting a baseline inventory of resources (i.e., actual habitat) needs to be recognized and used by the agencies during the National Environmental Policy Act analysis of the individual projects.

**Comment Number: NVCASG-14-0199-43**  
**Comment Excerpt Text:**  
Table 2.4, Page 61 - Goal D-SSS-AM 1:  
Instead of stating additional PPMA/PGMA be identified, this goal should focus on refining PPMA/PGMA delineations (to include additions, subtractions, or MA class changes), based upon new science, non-anthropogenic impacts such as fire, restoration potential for severely impacted habitats, and monitoring of PPMA, PGMA, and non-classified habitats. Just as currently unclassified habitat may need to be classified as PPMA/PGMA in the future, it is likely that many areas currently designated as PPMA/PGMA should be removed and classified as nonhabitat.
Comment Number: NVCASG-14-0199-8
Comment Excerpt Text:
Throughout the document, the use of appropriate citations is very limited. The DEIS proposes goals, objectives and actions designed to benefit GRSG, but the document, in many areas, does not ensure accuracy or credibility of these statements and assumptions by providing citations. The minimal use of peer-reviewed literature suggests many of the proposed actions and expected results from those actions, are speculative in nature. Many statements are based on presumed cause-and-effect (condition X will result from action Y). If such cause-and-effect statements are used, scientific literature should accompany the statement and provide supporting evidence that can be reviewed by the reader. In addition, some citations appear to be misused, misplaced, or open to interpretation.

Comment Number: NVCASG-14-0201-1
Comment Excerpt Text:
NOGA submitted comments during the Public Scoping period that ended on March 23, 2012. Many of these comments were not addressed in the Draft LUPA/DEIS. We feel that the BLM and Forest Service did not follow their procedural requirements to address public comments. Specifically, NOGA commented on the maps that were used for Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH) and that these maps were not accurate, that the maps should have been identified as draft, and there should have been a process for local input to correct the obvious errors. These issues were not addressed in the Draft LUPA/DEIS.

Comment Number: NVCASG-14-0224-7
Comment Excerpt Text:
the maps used in the LUPA/DEIS to identify PPH and PGH have been drawn so broadly that many areas that do not meet the criteria for these habitat classifications are included in these classifications. We point out that the maps were initially accompanied by a disclaimer that they were not appropriate for use at the project level. The 1-Km resolution datasets and 1:2,000,000 scale maps typically used in the BLM planning process may be viable tools for multi-state or sub-continental planning efforts, but they become totally meaningless at field office or even county level. With respect to the GRSG, datasets and mapping at these scales grossly mischaracterize historic and potential habitat by including non-habitat as well as overlooking microhabitat characteristics, especially in diverse and fragmented landscapes. Likewise, threats to GRSG are also entirely overestimated when using sub-continental scale mapping, such as that used by this planning effort, in particular for the GRSG.

Most of the conventional literature regarding GRSG starts with the assertion that ~60% of historic range has been lost. This is based on work done by Schroeder et al in 2004, and has become the cornerstone of mainstream GRSG research. It too is at a 1:2,000,000 scale and provides the basis for much of the USFWS and BLM policy regarding GRSG. Of great concern, however, is the fact that this scale provides wholly unsuitable data when conducting any analysis or planning at FO level.

Given the fact that the Preferred Alternative would require a mitigation ratio for lands within PPH, the inadequacy of the current maps is alarming, particularly due to the prospect of mitigation being required in an area that does not actually contain GRSG habitat simply because it was included within the boundaries of PPH. The agencies need to significantly refine the maps being used for designating PPH and PGH to improve their accuracy to ensure that restrictions and limitation are utilized ONLY for those areas that meet the habitat criteria.
Comment Number: NVCASG-14-0226-4  
Comment Excerpt Text:  
scientific research and documentation used within the DEIS is limited in scope to repetitive authors and does not adequately use literature by rangeland scientists and other professionals. This will limit the availability of management options and does not properly address the benefits of livestock grazing in relation to greater sage-grouse habitat conservation.

Comment Number: NVCASG-14-0238-23  
Comment Excerpt Text:  
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.

Comment Number: NVCASG-14-0251-4  
Comment Excerpt Text:  
Our review of the DEIS shows that much data is old and much information is not available. Impacts analysis should state the levels of reliability of the data or ranges of possible effects.

Comment Number: NVCASG-14-0253-4  
Comment Excerpt Text:  
The DEIS must address a large array of management options to properly analyze impacts and implement management actions that may be used. However, scientific research and documentation used within the DEIS is limited in scope to repetitive authors and does not adequately use literature by rangeland scientists and other professionals. This will limit the availability of management options and does not properly address the benefits of livestock grazing in relation to greater sage-grouse habitat conservation. Pertinent research is needed to address the functionality of the sagebrush ecosystem in regards to livestock grazing use and greater sage grouse habitat conservation.

Comment Number: NVCASG-14-0265-2  
Comment Excerpt Text:  
Elko County maintains that the GRSG DEIS / LUPA has not identified and conceded the reality that changes in range management over the past seventy five (75) years or more have led to the current status of lost sage steppe habitat because of wildland fires that have destroyed and devastated all wildlife and wildlife habitat. The federal government is now expecting local, state and regional economies to concede these losses and concede our constituent’s civil rights to utilize public resources and access to federally managed lands. Elko County insists that these mandates as proposed are not in compliance or accordance with the multiple use mandates of the Federal Land Policy and Management Act (FLMPA) of 1976 and NEPA.

Elko County has established and quantified within the “Elko County Greater Sage-Grouse Management and Conservation Strategy Plan” that peak Sage-Grouse populations coincide with much greater numbers of agricultural developments post European settlement supplying water and habitat including livestock cattle and sheep, grazing within Sage-Grouse habitats. Elko County believes and has provided information in “Elko County Greater Sage-Grouse Management and Conservation Strategy Plan” that identifies inaccuracies leading to changes in federally managed public land use policies over the past 75 years by the federal land management agencies. Federal land use policies that have created and enhanced the habitat plight and predicament that the western states are now enduring. The changes that reduced livestock grazing and other multiple uses on federally managed public lands that have led to habitat decadence and overgrowth ultimately leading to catastrophic wildland fires that have destroyed millions of acres of wildlife and wildlife habitat including the Greater Sage-Grouse and its habitat.

Comment Number: NVCASG-14-0270-6  
Comment Excerpt Text:  
The following references should be considered in the EIS.


Comment Number: NVCASG-14-0278-28
Comment Excerpt Text:
EIS Section: Ch 3, Chapter & Page: 39

Comment: "Disturbance means a significant, and relatively sudden, modification of the resource (i.e., an alteration of the plant community away from a stable state, accompanied by changes in species composition, growth patterns, and reproduction)."

If the above statement is true then this EIS needs to remove all language that livestock grazing is a stress because it does not result in a sudden modification of the resource, alteration of the plant community away from a stable state, or any of the above. This statement also contradicts the statement by Knick (2011) that grazing is a press disturbance (see comment 36). The inconsistency strongly suggests a lack of understanding about the disturbance concept, which may be acute (sudden) or chronic (slow), and the disturbance may be the complete removal of a disturbance mechanism from a system, or increasing the frequency, intensity or duration of the specific mechanism. We strongly suggest the authors review Pickett and White (1985).

Comment Number: NVCASG-14-0285-76
Comment Excerpt Text:
Knick et al. (2013) found that 99% of active leks in the planning area were surrounded by less than 3% surface disturbance. Manier et al. (2013) reviewed a variety studies, and found that risk of brood loss increased significantly when a threshold of 4% surface disturbance was surpassed (p. 59), and also noted additional disturbance thresholds. In the ecoregion as a whole, all development types take up 7% of the land area (DEIS at 422), but these impacts are concentrated along certain corridors (DEIS at 423) and therefore this figure likely does not reflect percentages in sage grouse Priority and General Habitats. The Nevada – Northeastern California DEIS does not disclose the current thresholds of surface disturbance by population area as baseline information, nor does it estimate the projected disturbance percentage by area for each alternative. This information is critical to determine how the alternatives compare in terms of resulting in significant impacts to sage grouse based on exceedances of varying disturbance thresholds under each alternative. This key analysis is missing from the DEIS.

Comment Number: NVCASG-14-0285-88
Comment Excerpt Text:


Substantive Comments on the Nevada and Northeastern California Greater Sage-Grouse Draft LUPA/EIS


Comment Number: NVCASG-14-0292-2

Comment Excerpt Text:
In fact, all seven of the Management Zones exceed a population of 500 breeding adults, and five of the Zones greatly exceed the minimum effective population of 5,000 individual birds below which greater sage-grouse are considered to be at risk for long-term extinction. Additionally, estimates for the rate of decline in greater sage-grouse populations from 1985 through 2007 have averaged about 1.4% per year. See FWS Findings6, page 13922. Assuming that current management practices endure and this rate of decline continues indefinitely, it would take more than 330 years for the existing greater sage-grouse population to dwindle below the minimum effective population. Speculating what might occur over three centuries from now reaches well beyond the foreseeable future. Thus, there are now numerous areas that will support populations that exceed the minimum effective population of 5,000 birds into the foreseeable future to preclude listing the greater sage-grouse as threatened under the ESA.

Comment Number: NVCASG-14-0292-4

Comment Excerpt Text:
Instead, the Draft LUPA EISs apparently accept the erroneous FWS Findings that the greater sage-grouse is warranted for listing under the ESA without undertaking any critical examination of such findings, and then choose to ignore analysis of population levels and trends in favor of a focus on habitat conditions and trends without any consideration for how such habitat factors ultimately affect the grouse populations. Such approach fails to conform to the overriding purpose and need identified for the Draft LUPA EISs which is specifically tied to the desire to avoid listing the greater sage-grouse under the ESA. Because the evidence shows that the greater sage-grouse does not qualify for listing under the ESA, as discussed herein, there is no need for further action.

In order to fulfill the overriding purpose and need, the Final LUPA EISs must evaluate whether the greater sage-grouse meets the criteria of the ESA as an endangered species or as a threatened species under current land use plan management direction.

Comment Number: NVCASG-14-0292-5

Comment Excerpt Text:
The FWS Findings estimated that the recent rangewide greater sage-grouse population totals over 535,000 birds, which is 107 times larger than the minimum effective population of 5,000 birds. See FWS Findings6, Table 4, page 13921. Given the estimated number of males by Management Zone reported in Table 6 of the FWS Findings (see FWS Findings6, page 13923) and the female skewed sex ratio for greater sage-grouse (reported to average about two females to one male, FWS Findings6, pages 13916 and 13992), it is evident that all seven Management Zones exceed a population of 500 breeding adults, and five of the Zones greatly exceed the minimum effective population of 5,000 individual birds which precludes a population from the long-
term risk of extinction. Thus, five Management Zones exceed the population size below which greater sage-grouse are considered to be at risk for long-term extinction, so there are at least five areas that support sufficient populations to preclude the greater sage-grouse from being listed as threatened under the ESA according to data reported within the FWS Findings.

When discussing two stronghold habitat areas, the FWS Findings implicitly concede that the greater sage-grouse does not qualify to be listed as threatened under the ESA. The FWS Findings state “the ability of these strongholds to maintain high densities to date in the presence of several threats indicates that there are sufficient habitats currently to support the greater sage-grouse in these areas” (see FWS Findings6, page 13962) and admits that the FWS expects that these “two strongholds of contiguous habitat will still remain in fifty years even though the threats discussed above will continue there” (see FWS Findings6, page 14009). The FWS expectation that these two stronghold areas will maintain high densities (large populations) in fifty years, even in the face of existing threats, demonstrates that the species does not face extinction in the foreseeable future, so the greater sage-grouse is not threatened as defined under the ESA.

Given the proportional distribution of breeding males within the ten population areas identified for the Nevada sub-region (see NV Draft LUPA/EIS, pages 3~26 – 3~32) and the total estimated greater sage-grouse population of 88,000 birds in California/Nevada (see FWS Findings6, table 4, page 13921), it is estimated that at least four populations in this sub-region greatly exceed the minimum effective population of 5,000 individual birds which precludes a population from the long-term risk of extinction. Thus, four Nevada populations likely support sufficient numbers to preclude the greater sage-grouse from being listed as threatened under the ESA.

Comment Number: NVCASG-14-0306-7
Comment Excerpt Text:
Second, the No Action Alternative (Alternative A) does not present a complete discussion of the regulatory tools BLM already has, including Manual 6840, to protect GSG habitat. Even though BLM has not yet amended the Resource Management Plans (“RMPs”) that comprise the No Action Alternative to include Manual 6840, the conservation measures outlined in the Manual are nonetheless binding upon BLM and should be considered in the context of the No Action Alternative. The DEIS completely ignores Manual 6840 as if it does not exist. Manual 6840 is not even listed in the Chapter 7, References. The complete absence of any discussion of Manual 6840 anywhere in the DEIS, whether in the context of the No Action Alternative or as an action alternative to amend the RMPs to incorporate Manual 6840, is a fatal flaw that should require BLM to prepare a revised DEIS. BLM’s current course of action that ignores and jettisons the existing policies in Manual 6840 without justification is arbitrary and capricious.

Comment Number: NVCASG-14-0308-6
Comment Excerpt Text:
Without information on existing grazing in the planning area, it is more difficult to tell whether the preferred alternative substantially changes management to benefit sage-grouse. Nowhere does the LUPA/DEIS provide a thorough disclosure of existing grazing management, as required by NEPA. Specifically, failing to indicate actual recent livestock use on the cattle allotments makes the preferred alternative unclear. The LUPA/DEIS should have included actual use for each allotment in the chart that lists authorized AUMs in Appendix K. Because the LUPA/DEIS lacks sufficient and accurate baseline information, it lacks a barometer with which to measure the proposed actions.

Nor does the LUPA/DEIS disclose the seasonality of grazing on allotments within the planning area, which prevents the reader from understanding how spring or spring-fall grazing regimes could affect sage-grouse in the planning area. It also does not provide trailing routes, pasture rotation plans, etc. This is all
information that the BLM possesses and that could easily be provided online.

**Comment Number: NVCASG-14-0309-14**

*Comment Excerpt Text:* The DEIS does not rigorously explore competing points of view. Instead, like the old MFPs, it largely lays out what the agency wants to do, and justifies it, without a hard look taken at opposing science and environmental risk. The Literature section is devoid of a broad body of current scientific information on livestock grazing, historical information on invasive species, native vegetation communities, microbiotic crusts, passive restoration, population viability, etc. Yet it includes all the old school maximally disturbing treatment literatures. It ignores the current review articles on the ineffectiveness or failures of treatments under many circumstances. This means BLM drew up its alternatives and chose its preferred alternative partially in the dark. BLM has ignored a large body of scientific literature that WWP and others provided on cd during Scoping Comments. It does not even include the 2006 Braun Blueprint, and other key papers on sage-grouse conservation. A SEIS must be prepared to correct BLM’s closed scientific mindset.

**Comment Number: NVCASG-14-0309-26**

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

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

**Comment Number: NVCASG-14-0309-8**

*Comment Excerpt Text:* This EIS does not conduct a science-based “hard look” NEPA analysis. The Nevada DEIS analysis of environmental information is minimal. In some ways, it resembles the MFP process, where BLM prepared long lists and tables of land acreages or other attributes, attached sheets of various rangeland summaries supporting high levels of continued commodity use, and called it good. Analysis was simply saying that the agency’s Preferred action would accomplish great things. No in depth hard look was taken, including at balancing uses. In the NV and ID DEIS’s BLM Is left with a greatly imbalanced and competing uses, as the BLM fails to alter livestock grazing disturbance allocations at all (acres open and numbers), imposes more development disturbance plus massive treatment disturbance.

**Comment Number: NVCASG-14-0311-2**

*Comment Excerpt Text:* The NIT Report was followed very shortly by BLM’s Instruction Memorandum 2012-044 providing BLM’s strategy for revision of the Nevada and other land use management plans. IM 2012-044 never went through the Administrative Procedure Act rulemaking process nor was it subjected to analysis under the National Environmental Policy Act. Therefore, it does not enjoy a presumption of validity. The same is true regarding the NIT Report. These concerns will be set forth below in the portion of these comments dedicated to a discussion of Alternative B that is based upon the NIT Report. Suffice it to say at this juncture that the concerns regarding the NIT Report both as to APA and NEPA compliance and other concerns infect not only Alternative B but the other alternatives that are based in whole or in part upon
the NTT Report including Alternative C, Alternative D, and Alternative F.

**Comment Number: NVCASG-14-0346-3**  
**Comment Excerpt Text:**  
Chapter: 2, Section: 2.5.2, Page Number: 51

Comment: Reference to Habitat Assessment Framework in first paragraph requires a citation (Stiver et al. 2010).

**Comment Number: NVCASG-14-0367-15**  
**Comment Excerpt Text:**  
However, this DEIS relies on outdated data or methodologies and does not sufficiently quantify or detail information to support scientific and other impact analysis conclusions and discussions in the DEIS.

In particular, the DEIS relies on incomplete information to make conclusions. For instance, section 4.43.2 states the effect of wind energy on sage-grouse is a subject of “much speculation,” “conjecture,” and “unknown.” Agencies must make clear if they lack complete information for the EIS. See 40 CFR 1502.22. Where information is needed, agencies must obtain the information unless the means to obtain it are unknown or is prohibitively expensive to obtain. Id. at 1502.22(b). The final EIS should make this ambiguity clear in light of the duty to adequately disclose or describe the limitations, assumptions, and applicability of modeling or methodologies used in the EIS.

**Comment Number: NVCASG-14-0367-16**  
**Comment Excerpt Text:**  
The concept of delineating PPH and PGH for sage-grouse is generally sound, inasmuch as the sage-grouse is a landscape species and thus roams over a very large area to meet its seasonal needs for survival. However, the current application of that concept by BLM is inconsistent and unjustifiably broad.

BLM does not provide a quantitative definition of PPH. Due to the lack of appropriate funding, most sage-grouse populations have generally not been well studied, and to the extent sage-grouse populations have been studied, the quality of data varies for each population. Each state BLM office has therefore individually established its own PPH maps, using varying degrees of available population data. In states that have not completed their delineations of PPH, BLM relied on the analysis by Doherty et al. to map PPH.

**Comment Number: NVCASG-14-0367-17**  
**Comment Excerpt Text:**  
Furthermore, most PPH maps appear to be developed without regard to actual habitat on the ground, resulting in the incorporation of non-habitat within the PPH areas. Given that there are many such areas within the PPH that do not provide habitat for sage-grouse, BLM’s current definition of PPH is not only vague and inconsistent but also overly broad. Such a broad delineation of PPH will unnecessarily limit productive legitimate economic uses of these federal public lands.

**Comment Number: NVCASG-14-0367-18**  
**Comment Excerpt Text:**  
Both PPH and PGH maps should be amended in the RMPs based on site-specific data. Such amendments have already been made in Wyoming and Oregon in response to public outcry regarding the original PPH and PGH designations in those states. Until this is corrected, PPH and PGH delineation should be subject to site-specific field evaluation as to their importance to local sage-grouse instead of simply prohibiting development. This would allow for this process to avoid blanket prohibition of wind development in large areas without appropriate site-specific evaluations first.

### 1.6 GIS DATA AND ANALYSIS

**Comment Number: NVCASG-14-0103-3**  
**Comment Excerpt Text:**  
there has been notable inability by the BLM to accurately and consistently define habitat, especially at the project level because the BLM uses PGH/PPH maps that were developed on a regional scale. Therefore, using these regional scale maps on a
project scale is inaccurate and problematic. Specifically, areas may be included that are clearly not suitable habitat.

Comment Number: NVCASG-14-0120-1
Comment Excerpt Text:
The NDOW Mapping Tool specifically recommends that the NDOW habitat designations not be used for project-level analyses: This tool provides resource managers with information to guide conservation and land-use planning efforts in the context of sage-grouse management at the landscape-scale (1:100,000). This product is not intended to be used to delineate priority sage-grouse habitat at a project-level scale. To apply these results to specific locations it is recommended that a field investigation be conducted by a qualified biologist for the purpose of impact assessment.

Comment Number: NVCASG-14-0120-2
Comment Excerpt Text:
The use of landscape-level maps is particularly troubling to the extent it is used to determine required mitigation levels. Mitigation requirements must be determined using ground-level and project specific information to determine actual impacts to high-value habitat.

Comment Number: NVCASG-14-0132-38
Comment Excerpt Text:
Maps/habitats need to be updated to 2014, or whenever a LUPA is finalized, whichever is later. This includes actual ground-truthing, which apparently has not occurred, and this also has ramifications for "triggers" relative to changes in “baseline” conditions have been conducted and have findings in conflict with the maps

Comment Number: NVCASG-14-0188-22
Comment Excerpt Text:
Table 2.4 Action D-SSS 2

There needs to be an agreed to and transparent mechanism to modify the delineation of PPMA and PGMA based on site-specific project data.

Comment Number: NVCASG-14-0198-5
Comment Excerpt Text:
The NMEC is very concerned about the accuracy of the maps contained in the draft EIS purporting to describe various priority and general sage-grouse habitat. The State of Nevada has currently funded a USGS effort to develop well-founded sage-grouse habitat maps for use in their Sage-Grouse Conservation Plan. These USGS maps should be adopted by and used by all agencies. Furthermore, all users of public lands must be allowed to prepare detailed site-specific sage-grouse inventories and maps when planning to work on these lands and to potentially adjust the previously mapped boundaries based on data. Nothing is static, especially as related to the habitat of a species on the move. The language in the EIS should provide a process to incorporate the use of the best available maps and continual refinement of the maps into the selected Alternative.

Comment Number: NVCASG-14-0201-19
Comment Excerpt Text:
Page 21, 1.6. Development of Planning Criteria, second to last bullet item in this section:

Discussion of the PPH and PGH designation maps in the same paragraph that states the "Data will be consistent with the principles of the Information Quality Act of 2000 (public Law [PL] 106-554, Section 515)" is not consistent. These maps have been used without credible groundtruthing and where baseline studies have been conducted with findings in conflict with the maps, the BLM has routinely used the mapped designations in spite of having data to the contrary.
Comment Number: NVCASG-14-0202-14  
Comment Excerpt Text:  
Required Design Features identified in Appendix A for Alternatives C, D, and F (page A-11) under the Wildlife/Greater Sage Grouse heading stipulate adherence to seasonal avoidance buffers, including avoidance of winter range from November 1 through March 31, avoidance of brood rearing habitat from May 15 through August 15, and a four-mile avoidance buffer around active leks from March 1 through June 15. It is understood that active greater Sage Grouse leks are not identified in the LUPA/DEIS because that information is sensitive and the document is readily available to the public. However, winter range and brood-rearing habitat also apply seasonal avoidance measures and such habitats are not identified in the LUPA/DEIS. NREA utility members recommend including mapping of greater Sage Grouse winter range and brood-rearing habitat in the LUPA/DEIS so all impacts to operations, maintenance, and new construction of their infrastructure would be clear.

Comment Number: NVCASG-14-0213-1  
Comment Excerpt Text:  
Page xii, 3rd paragraph, “There are approximately 77,800 acres of public lands in Elko County, Nevada…”

The Owyhee CD strongly disagrees with this claim. As noted by the Elko County Assessor’s office, there is approximately 8 million acres of public land in Elko County.

Comment Number: NVCASG-14-0252-1  
Comment Excerpt Text:  
No explanation is given for the delineation of the planning area boundary. The fluctuation between using state lines in some areas, Rocky Mountain/Great Basin Region lines in others and WAFWA Zone lines in yet others will ultimately result in ineptitude and confusion when implementing management decisions. Imagine for example, a proposal located on both sides of a state line. As is currently being planned, the proposal will be under management direction from two RMPs that may or may not be compatible. Specifically, it is only logical that the BLM lands referred to as the Nevada Strip be managed under direction of RMPs applicable to Idaho.

Comment Number: NVCASG-14-0290-3  
Comment Excerpt Text:  
Concerns about the accuracy of all maps used to identify and designate Sage-Grouse habitat, PPH, PGH, Preliminary Priority Management Areas (PPMA), and Preliminary General Management Areas (PGMA). It is WLC's understanding that Sage-Grouse Habitat maps are not intended to be used at the "individual project planning level". However, it has been our recent experience that maps identifying PPH and PGH are being used for site-specific project planning purposes. Because existing Sage-Grouse Habitat Categorization maps were developed from a Geographic Information System mapping exercise and not based on recent (e.g. last 2 years) site specific surveys, it should be recognized that they may have inaccuracies and they may designate some lands as Sage-Grouse habitat that are clearly not Sage-Grouse habitat. Once an area is delineated as a certain habitat it appears to be difficult if not impossible for an agency representative to modify it. Methods need to be in place so that proponents can see where their project site falls on agency Sage-Grouse habitat categorization maps, a decision can be made if a site-specific field survey is warranted, and a protocol for agencies is identified to accept site specific field surveys in lieu of pre-determined agency Sage-Grouse habitat categorization maps.

Comment Number: NVCASG-14-0308-11  
Comment Excerpt Text:  
The Preferred Alternative D not only fails to close any of the PPH, PGH, or linkage-habitat to livestock use but apparently increases the amount of occupied sage-grouse habitat available to livestock grazing from 12,572,300 acres to 12,838,200 acres. DEIS Chapter 2 at 34. The DEIS fails to disclose the specifics of this increase or analyze the impacts of this grazing increase. In fact, we were unable to determine in which state this additional quarter million acres is located.
Comment Number: NVCASG-14-0308-4
Comment Excerpt Text:
None of the maps show the Devil’s Garden/Clear Lake sage-grouse habitat which includes significant occupied habitat on Modoc National Forest and Clear Lake National Wildlife Refuge west of the BLM’s Alturas Resource Area.

Comment Number: NVCASG-14-0309-18
Comment Excerpt Text:
NV State “Suitable” Habitat Segregation Scheme
Alt E Map Occupied and Suitable Habitat (DEIS Figure 2-5) shows large areas carved out of the Occupied Habitat and relegated to a Suitable category. This includes very significant areas of low to mid elevation that have seedings or other past agency treatments, and areas of fire rehab including lands where recovery for sage-grouse was part of agency post-fire actions and commitments to the public. These at times differ from BLM mapping of PPH and PGH. Compare Alt D Map Figure 2-4 to Alt E Map Figure 2-5.

Comment Number: NVCASG-14-0311-24
Comment Excerpt Text:
BLM’s duty to ensure the scientific integrity of the FEIS is found at 40 C.F.R. § 1502.24. The information presented in the DEIS and FEIS must be sufficiently quantified and detailed to support the scientific and other impact analysis conclusions and discussions in the FEIS. Of particular concern is whether the maps purporting to present PPMAs and PGMAs are sufficiently accurate and "ground-truthed." The maps presented in the DEIS are of such broad scale that it is difficult to determine whether they are accurate. They certainly are inaccurate to the extent that they cover lands known to be inhabitable to Sage-grouse including anthropogenic disturbances and physical barriers such as cliffs and water. The FEIS should provide that additional ground-truthing will take place prior to any site-specific implementation of projects and decisions and that amendments to land use plans may be undertaken without further NEPA analysis to avoid unnecessary delays in project approval.

Comment Number: NVCASG-14-0328-3
Comment Excerpt Text:
The "no net unmitigated loss" policy of the Draft LUPA/EIS must include a final definition of the spatial scale (i.e., geographic or mapping unit) that will be used for assessment of whether net losses of habitat are occurring. Is it to be applied to individual populations'? To PPMA and/or PGMA? To W AFW A Management Zones? To State of Nevada SGMA’s?

Comment Number: NVCASG-14-0333-3
Comment Excerpt Text:
Having attend various public meetings in Nevada, It Is clear that the mapping that is being used for the DLUPA/DEIS is questionable at best. It appears that various maps have been accepted and incorporated in this process from multiple sources and in multiple formats. They tend to be overly broad in nature and it is my understanding that virtually none of the work has actually been ground-truthed. How can anyone truly determine the effect any of the proposed alternatives might have on them without proper maps to refer to?

Comment Number: NVCASG-14-0375-4
Comment Excerpt Text:
The maps included in "Chapter 3" show overlapping areas occupied by various uses. Map fig. 3.9 does not clearly discern the different locations of Herd Management Areas (HMA) and Herd Areas (HA). This inhibits inclusion of repatriating HA’s as a possible alternative and gives a false impression of more area inhabited by wild horses than actually exists. Please include a map that clearly delineates between HMA and HA land. In addition, data such as the number of horses estimated within each area and AUM use for wild horses and burros in contrast to AUM’s for livestock should be included in a document that includes limiting AUMs as a proposed strategy. To not include such information is irresponsible for creating a comprehensive, equitable management plan for sage grouse.
Comment Number: NVCASG-14-0393-4  
Comment Excerpt Text:  
Section 4.16.2 Nature and Type of Effects — This section states "There are approximately 517.2 miles of 303(d) listed streams and 90 acres of 303(d) listed water bodies located within PPMAs and PGMAs in the planning area." This statement does not clarify whether said listed water bodies are or are not listed because they are not supporting the Propagation of Wildlife beneficial use described in Nevada’s water quality standards. In fact, very few miles of 303(d) listed water bodies are not fully supporting the propagation of wildlife. As shown in Table 8 of the Draft Nevada 2012 Integrated Report’, only 136.2 out of 6,305.5 miles of rivers and streams (or just over 2 percent) in Nevada assessed by the Nevada Division of Environmental Protection do not meet the water quality standard for propagation of wildlife. Simply because a water body is listed as 303(d) impaired does not mean that it is unfit for consumption by GRSG. The FEIS must clarify how many, if any, miles of 303(d) listed streams and acres of water bodies located within PPMAs and PGMAs are not supporting the Propagation of Wildlife beneficial use water quality standard found in Nevada Administrative Code.

1.7 INDIRECT IMPACTS

Comment Number: NVCASG-14-0086-9  
Comment Excerpt Text:  
However, the EIS (i.e., Action-D-VEG-26, Action-D-LG-14 and -19) propose extensive water developments on public lands. Once again, the EIS fails to consider how these developments would be paid for and does not address the planning burden associated with each new proposed water development.

Comment Number: NVCASG-14-0171-1  
Comment Excerpt Text:  
The current workload for rangeland related activities cannot be met and these budgets are undergoing additional reductions. The BLM and the FS will be unable to meet the increased requirements for monitoring, habitat suitability determination and the increased permit administration described in Alternative D. The Service, which is undergoing similar budget constrictions, will be unable to accomplish the consultation necessary to determine that the promises made in the DEIS are carried out.

Comment Number: NVCASG-14-0193-1  
Comment Excerpt Text:  
Funding

The goal of improving habitat must be accompanied by a plan and source for funding to do so. We question the current capacity of the federal agencies and existence of future funding to implement the Proposed Action. In order to address this issue, we ask that the BLM and USFS outline a funding strategy for implementation of actions, including monitoring across the 17,732,900 acres of PPMA/PGMA dispersed across the entire planning area. Without such a plan, we fear that the Proposed Action is unworkable, and urge the BLM to look towards the suggestions of the State of Nevada, as well as to direct what funds are available to workable plans that are implemented in partnership with local entities and stakeholders (one example of this is funding for actions in Chapter 2.8.2, p.237). Most of the actions in the Proposed Action (Alternative D) do not provide either timelines or funding for achieving or implementing proposed Action Items (Chapter 2, Table 2.5, p 141); this is in contrast to the State of Nevada Plan which includes efforts to provide an objective that clearly addresses the need to allocate financial resources to address proposed actions within a defined time frame.

Comment Number: NVCASG-14-0198-1  
Comment Excerpt Text:  
the DEIS’s description of Alternative A fails to acknowledge the many activities, programs and regulations which are already in place in Nevada and the ability to improve or revise those on a site-specific or area-specific basis. What we need is an Alternative A- PLUS with money and staffing sufficient to implement the existing laws and programs so that they actually work to protect not only sage-grouse and its habitat but other sensitive species as well.
Comment Number: NVCASG-14-0198-6
Comment Excerpt Text:
The proposed Land Use Amendments fail to include and establish a path to fund significant programs to address these key issues. Instead, the document focuses on small changes to programs which are unlikely, even cumulatively, to address the real problems.

Comment Number: NVCASG-14-0199-15
Comment Excerpt Text:
One of the overarching assumptions of the entire impact analysis is that "[s]ufficient funding, enforcement, and personnel would be available for implementing the final decision." DEIS, Ch. 4 at 9 (601). This assumption may be unrealistic, depending on, among other things, the details of the final decision and agency funding appropriations by Congress. More troubling, the assumption is belied by other statements in the DEIS.

For instance, in its discussion of the affected environment for wildland fire and fire management, the DEIS discloses the fact that funding for the hazardous fuels reduction program continues to fall, with an anticipated 47 to 56 percent reduction in Nevada for fiscal year 2014, and that, as a result, projects to enhance sage-grouse habitat will be significantly reduced. DEIS, Ch. 3 at 74 (464).

Comment Number: NVCASG-14-0199-16
Comment Excerpt Text:
Because the Agencies’ assumption that adequate funding and staffing would be available to implement the management actions in the final decision is questionable, the Final LUPA/EIS should acknowledge that the selected alternative may be only partially implemented and should analyze the impacts of such partial implementation. The 2011 Council on Environmental Quality (CEQ) guidance on mitigation directs agencies to disclose when funding shortfalls may impact the implementation of mitigation measures:

"CEQ views funding for implementation of mitigation commitments as critical to ensuring informed decision making. For mitigation commitments that agencies will implement directly, CEQ recognizes that it may not be possible to identify funds from future budgets; however, a commitment to seek funding is considered essential and if it is reasonably foreseeable that funding for implementation of mitigation may be unavailable at any time during the life of the project, the agency should disclose in the EA or EIS the possible lack of funding and assess the resultant environmental effects." (7)

(7) CEQ, Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact at 9 (Jan. 14, 2011)

Comment Number: NVCASG-14-0199-58
Comment Excerpt Text:
[Ch 4. General] 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.

Comment Number: NVCASG-14-0201-13
Comment Excerpt Text:
3.10. Enforcement Issues:

The entire focus of the Draft LUPA/DEIS is more regulatory mechanisms; indeed, this was the purpose of amending the land use plans. While NOGA does not agree that more regulatory mechanisms are necessary, NOGA does recognize that more regulations will create a new demand for enforcement. This is not addressed in the Draft LUPA/DEIS. Just how do the BLM and Forest Service plan to ensure that all these new regulations are enforced? And at what cost to the tax payers?

Comment Number: NVCASG-14-0205-4
Comment Excerpt Text:
The BLM and Forest Service have artificially deflated Alternative A, the "No Action" Alternative because it fails to quantify the impacts associated with ongoing implementation of the many existing local, state and
Federal conservation measures and the existing BLM policies designed to protect the GRSG and its habitat. The No Action Alternative must review the existing regulatory framework, including Federal, state, local and private efforts, including voluntary conservation measures, to determine what positive effects those measures will produce.

The EIS fails to fully account for Federal regulatory mechanisms that are currently in place and are not only adequate to address the threats to the species, but are extremely robust.

Since the sage grouse is presently a special status species, this stipulation authorizes BLM to modify the lease to avoid activity that will harm the sage grouse, and prohibits the agency from approving any activity that would adversely affect such species if it would violate the ESA. It even authorizes BLM to modify the lease after mining has begun, if necessary. These are very powerful protections, and they refute the suggestion that there are inadequate regulatory mechanisms to protect the sage grouse and its habitat. There are similar protections required for other industries as well, such as oil and gas leasing on BLM administered land.

**Comment Number: NVCASG-14-0205-7**  
**Comment Excerpt Text:**  
The BLM and the USFS may extend federal land management policies to private lands if there is a connected action. Impacts to resources on private lands are routinely included in NEPA analyses and mitigation for impacts on private lands is required. The EIS should recognize that the decisions in the LUPA apply to public lands unless there is a connected action that occurs on both public and private lands or the LUPA must exempt private lands from the connected action policy.

**Comment Number: NVCASG-14-0230-3**  
**Comment Excerpt Text:**  
The primary underlying assumption in analyses of the alternatives and actions assumes that, Sufficient funding, enforcement, and personnel would be available for implementing the final decision. This assumption cannot be validated and, in fact, is one of the reasons the USFWS used to justify their proposed threatened species status for the Bi-State Distinct Population Segment of greater sage-grouse in western Nevada and eastern California (FR 78(208):64358-64384).

**Comment Number: NVCASG-14-0263-1**  
**Comment Excerpt Text:**  
Since fire suppression is a budgetary matter, how can BLM adequately address this issue? There is much discussion about fire suppression, fuels management, cheatgrass control, and post-fire rehabilitation in Chapter 5, but there is no assurance that these considerations will actually be funded.

**Comment Number: NVCASG-14-0267-1**  
**Comment Excerpt Text:**  
A discussion identifying how obtaining sufficient funding is a key issue of vital importance in restoring important sage-grouse habitat by seeding as stated in above Item 1 [Sage-Grouse Habitat Restoration]. This discussion should include specific sources and amount of funding to be obtained to reach the desired goals and objectives. Currently the funding for this extremely important purpose is woefully inadequate.

A discussion detailing the woefully deficient funding currently available for sage-grouse habitat restoration being lost by yearly wildfires is presented in an article the SRM published in Rangelands Volume 35, Number 3, June 2013 authored by Tim Murphy, David E. Naugle, Randal Eardley, Jeremy D. Maestas, Tim Griffiths, Mike Pellant and Stan J. Stiver.

**Comment Number: NVCASG-14-0344-19**  
**Comment Excerpt Text:**  
"Lands addressed in the LUPAs will be BLM- and Forest Service-administered land in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs will apply only to BLM- and Forest Service-administered lands."
This is not accurate. BLM and Forest Service routinely extend federal land management policies to private lands through the connected action concept. This should be clearly stated in this section of the document. Impacts to resources on private lands are routinely included in NEPA analyses and mitigation for impacts on private lands is required. To imply that private lands are exempt from the provisions of the selected alternative is incorrect.

**Comment Number: NVCASG-14-0379-3**

**Comment Excerpt Text:**
the EIS (i.e., Action-D-VEG-26, Action-D-LG-14 and -19) propose extensive water developments on public lands. Once again, the EIS fails to consider how these developments would be paid for and does not address the planning burden associated with each new proposed water development. It is well known that fencing a riparian zone (whether lotic or lentic) and providing off-site water will result in an improvement in riparian condition.

**Comment Number: NVCASG-14-0385-5**

**Comment Excerpt Text:**
The alternatives described in the LUPA/DEIS call for various minimization and mitigation measures to be applied to existing transmission and distribution power lines. These minimization and mitigation measures potentially include the removal, burial, or modification of power lines within specified management areas, the application of perch discouragers on NREA utility members’ infrastructure, and unspecified requirements at ROW renewal. However, at no point does the LUPA/DEIS identify the entity required to fund such minimization and mitigation measures. Transmission and distribution power lines across Sage Grouse habitat in Nevada, California, Oregon and Idaho are typically owned and operated by rural utility districts, which supply electricity to customers throughout their service territories.

**Comment Number: NVCASG-14-0385-9**

**Comment Excerpt Text:**
Required Design Features identified in Appendix A for Alternative B (page A-3) states "bury distribution power lines." This statement is repeated multiple times throughout the Alternative B Required Design Features. Similar to the text from Chapter 2 (see comment 7); the entity required to fund the burial of the distribution power lines is not identified. Additional detail is needed regarding this statement in Appendix A.

**Comment Number: NVCASG-14-0393-1**

**Comment Excerpt Text:**
The DEIS does not adequately disclose the full scope and magnitude of impacts, particularly with regard to ground and surface water quality and quantity; indirect impacts to functional viability and value of private property upon which commensurability has been established for authorized livestock grazing on federally-administered land; and upon economic and fiscal impacts to private property owners and local governments within the Humboldt River Basin of implementation of the Nevada-Northeastern California Greater Sage-grouse (GRSG) draft land use plan amendments. Full disclosure of the aforementioned impacts must be addressed with the Final Nevada-Northeastern California Greater Sage-grouse Land Use Plan Amendments and Environmental Impact Statement.

1.8 **Cumulative Impacts**

**Comment Number: NVCASG-14-0040-5**

**Comment Excerpt Text:**
In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA concept found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada, it is reasonable to conclude that it represents a growing agency trend at least in Nevada.
This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1. This lack of disclosure in this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative effect analyses.

Comment Number: NVCASG-14-0144-24
Comment Excerpt Text:
There is no significance attached to cumulative impacts and the analysis. The reader is unsure whether an impact is potential significant, adverse, significantly adverse, or beneficial. There is limited data presented to substantiate those judgments or conclusions.

Comment Number: NVCASG-14-0144-25
Comment Excerpt Text:
Section 5.1 Table 5.1 Page 12 - The DEIS does not include the actions undertaken for sage grouse conservation in Lander County. For example more than 12,000 acres of pj treatment has occurred with significant and positive impacts to sage grouse. At much as 1,500 acres of pj treatment will occur each year for at least 5-10 years. Further efforts are planned along with improvements to springs and riparian areas, predator control, and noxious weed control. Why are these efforts not included in Table 5.1.

Comment Number: NVCASG-14-0169-14
Comment Excerpt Text:
The DEIS documents are part of several related NEPA documents, including the DEISs for Oregon, Idaho and southwestern Montana, Nevada and northeastern California, and Utah. The total potential acreage withdrawn and the contribution in this DEIS to a broader total number of acres proposed to be withdrawn from future public use is not discussed. This is a fatal NEPA analytical gap.

Comment Number: NVCASG-14-0188-10
Comment Excerpt Text:
"Lands addressed in the LUPAs will be BLM- and Forest Service-administered land in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs will apply only to BLM- and Forest Service-administered lands." This is not accurate. BLM and Forest Service routinely extend federal land management policies to private lands through the connected action concept. This should be clearly stated in this section of the document.

Comment Number: NVCASG-14-0199-40
Comment Excerpt Text:
Page 19, 1.6. Development of Planning Criteria:
The document states "Lands addressed in the LUPAs will be BLM- and Forest Service administered land in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUP As will apply only to BLM- and Forest Service-administered lands." This is not accurate. BLM and Forest Service routinely extend federal land management policies to private lands through the connected action concept. This should be clearly stated in this section of the document. Impacts to resources on private lands are routinely included in NEPA analyses and mitigation for impacts on private lands is required. To imply that private lands are exempt from the provisions of the selected alternative is incorrect.

Comment Number: NVCASG-14-0201-16
Comment Excerpt Text:
If the analysis of hunting has been eliminated from the Draft LUPA/DEIS because it is an issue over which BLM and Forest Service do not have jurisdiction, why does the Draft LUPA/DEIS include Climate Change and Socioeconomics? The same can be stated in regards to the NTT and COT reports due to the lack of impact analysis from hunting and predators in those documents.

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 issues are not necessarily irrelevant to the Draft LUPA/DEIS analyses. 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 are the significant factors contributing to the decline of sage-grouse populations.

**Comment Number: NVCASG-14-0262-5**

**Comment Excerpt Text:**

In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands as uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1. This lack of disclosure in 6... this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative effect analyses.

**Comment Number: NVCASG-14-0263-3**

**Comment Excerpt Text:**

Chapter 5: The counties that contain the bulk of GSG habitat are significantly dependent upon utilization of natural resources for their economic well-being. These uses include mining, energy production, recreation, and livestock grazing. Several times in Chapter 5 it is stated that there are potential negative impacts to these uses, including rendering some operations unviable. How can these potential adverse economic impacts be quantified? How can the potential adverse impacts to local communities be accurately quantified? Failure to include these quantified impacts is a deficiency in this DEIS.

**Comment Number: NVCASG-14-0285-2**

**Comment Excerpt Text:**

We are concerned that the Winnemucca RMP may not be included among the RMPs to which this plan amendment applies. DEIS at 3. However, the Winnemucca area is included in the plan amendment planning area elsewhere. See DEIS at 35 and Figure 1-2. The conservation measures published for sage grouse in the Winnemucca RMP FEIS are inadequate to protect the grouse and avert Endangered Species Act listing, and therefore need to be amended further to provide adequate sage grouse protections. Please clarify that this plan amendment will apply to the Winnemucca RMP. We are pleased to see that this plan amendment will amend the Humboldt and Toiyabe Forest Plans (DEIS at 13, 35), because the proposed Bi-State plan amendments that are separately being circulated for these plans are wholly inadequate to address sage grouse conservation needs.

**Comment Number: NVCASG-14-0285-36**

**Comment Excerpt Text:**

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

**Comment Number: NVCASG-14-0285-72**

**Comment Excerpt Text:**

We are also concerned that the direct and cumulative impact analyses in the Draft EIS offer only a laundry list of conservation measures, without evaluating their efficacy and overall impact on sage grouse populations under each alternative. Are sage grouse populations expected to increase or decrease under each alternative in 10 years, 50 years, and 100 years? What would be the magnitude of population changes for each alternative? Even current population trends by PMU are missing from the EIS. See DEIS at
400, 410. Copeland et al. (2013) evaluated just this question for Wyoming, a similar land area, using a modeling approach, and we call upon the federal agencies to adopt such a modeling approach to come up with projections for sage grouse population trends under each alternative. In order to avoid an ESA listing, the BLM will need to show an improvement in sage grouse habitat condition and population trend, because current populations are at levels at which USFWS found the bird to be “warranted” for protection in 2010. Please provide the requested estimated habitat and population trend versus current baseline conditions for each subpopulation under each alternative, so it can be determined to what extent each alternative does or does not fulfill the Purpose and Need for the EIS.

Comment Number: NVCASG-14-0285-73
Comment Excerpt Text:
We are concerned that the BLM and Forest Service have not fully considered the cumulative impact of exurban development on adjoining private lands, which might combine with impacts of permitted activities on federal lands to extirpate sage grouse breeding populations. Aldridge et al. (2008) found that the single greatest factor predicting sage grouse extirpation was human population density in 1950, and that counties with population densities greater than 4 people per square kilometer had increased likelihood of extirpation, with no difference in extirpation rates at higher population densities, presumably because the habitat had become unsuitable for sage grouse persistence at 4 people per km2. According to Aldridge et al. (2008), sage grouse were extirpated from virtually all counties where population density reached 25 people per km2. According to Aldridge et al. (2008), sage grouse were extirpated from virtually all counties where population density reached 25 people per km2. Please provide analysis of private lands that meet or exceed the 4 person per km2 and 25 persons per km2 countywide thresholds that are inside Priority or General Habitats and in proximity to federal lands, and analyze the cumulative impacts that exurban development may have under each alternative when combined with reasonably foreseeable consumptive uses on nearby federal lands.

Comment Number: NVCASG-14-0311-22
Comment Excerpt Text:
Table 5.8 fails to adequately identify reasonably foreseeable future actions. For example, hunting and predator control are determined to be outside the scope of the DEIS. See Section ES.6 and 1.5.4. Given that both hunting and predator control are known, identified and foreseeable future actions, they must be analyzed as part of the cumulative impacts analysis even though they are considered to be outside of the scope of the action alternatives themselves. As BLM properly notes, the cumulative impacts analysis takes into account all reasonably foreseeable actions regardless of land ownership and jurisdiction.

Comment Number: NVCASG-14-0342-17
Comment Excerpt Text:
The DEIS documents are part of several related NEPA documents, including the DEISs for Oregon, Idaho and southwestern Montana, Nevada and northeastern California, and Utah. The total potential acreage withdrawn and the contribution in this DEIS to a broader total number of acres proposed to be withdrawn from future public use is not discussed. This is a fatal NEPA analytical gap.

Comment Number: NVCASG-14-0342-18
Comment Excerpt Text:
A discussion of the range-wide withdrawal for the GRSG is important, as the purpose and need of each DEIS is aimed at shoring up a perceived inadequacy under the ESA and focused on avoiding a range-wide listing for the GRSG. Accordingly, it is important to gain a better understanding of the total number of acres proposed for withdrawal by the Agencies in order to determine whether there is a possibility of avoiding the listing — an essential element of the Purpose and Need of this LUPA process - because the boundaries for purposes of the ESA are not confined by state borders.

Comment Number: NVCASG-14-0342-19
Comment Excerpt Text:
Agencies are considering major withdrawals in the States of Idaho, Nevada, and Utah in separate DEIS documents. However, there is no review or analysis
of the cumulative withdrawals throughout these three states. In fact, not only has BLM failed to consider the total withdrawals in all three plans, but has likewise failed to consider the cumulative effects of these withdrawals in all 11 Western states in sage grouse habitat. Accordingly, until BLM does so, it is in clear violation of NEPA and its implementing regulations that require the agency evaluate cumulative impacts.

**Comment Number: NVCASG-14-0344-13**

Comment Excerpt Text:
Noble concludes that the Cumulative Effects analysis in the Draft LUPA/DEIS is inadequate and not in compliance with 40 CFR 1508.7. Two major impacts to sage-grouse were eliminated from detailed analysis because the BLM and Forest Service do not have jurisdiction over hunting and predation. However, 40 CFR 1508.7 is clear that the federal agencies do not have to be "undertaking such other actions" to have them included in the cumulative effects analysis.

**Comment Number: NVCASG-14-0344-4**

Comment Excerpt Text:
Noble finds it very hard to comprehend why predation and hunting of sage grouse are not analyzed as a component of a cumulative effects analysis so that the relative impacts for each alternative can be put in context. It is not required for BLM and Forest Service to have a program for hunting or predation to include these population suppressing factors in the analyses. Rather these populations must be included to understand how effectively the alternatives address the conservation of sage-grouse. Cumulative impacts result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal or person undertaking such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place of a period of time [40 CFR 1508.7].

**Comment Number: NVCASG-14-0358-8**

Comment Excerpt Text:
Since the KMA concept is included in both of the two RMPs under development in Nevada it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1. This lack of disclosure in this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative effect analyses.

**Comment Number: NVCASG-14-0367-14**

Comment Excerpt Text:
The DEIS fails to identify reasonably foreseeable future actions. For example, the fact that there are 12 wind testing applications does not equate to reasonably foreseeable utility scale wind energy projects. We also question why hunting and predator control is determined to be outside the scope of the DEIS. The DEIS also fails to meaningfully identify the spatial scope of cumulative impact area for renewable energy. For example, Table 5.5's acreage calculation doesn't correspond with any acreage in the description of the alternatives. How was the acreage determined in Table 5.5?

### I.9 Mitigation Measures

**Comment Number: NVCASG-14-0015-7**

Comment Excerpt Text:
The Draft LUPA/EIS refers to “prescribed mitigation ratios,” (Ch. 2, at 14 (46)), but does not indicate what those ratios will be, how they will be determined, whether they will vary by project, and whether they will vary by mitigation type.

**Comment Number: NVCASG-14-0051-8**

Comment Excerpt Text:
For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed, as it appears it will be full force and effect. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come
up with a 10-year plan that makes progress toward utilization objectives.

**Comment Number: NVCASG-14-0065-3**
**Comment Excerpt Text:**
For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come up with a 10 year plan that makes progress toward utilization objectives.

**Comment Number: NVCASG-14-0087-2**
**Comment Excerpt Text:**
The EPA requests that the BLM and USFS provide additional information describing the resources that will be committed for implementing and enforcing the conservation measures, assessing information necessary to evaluate the effectiveness of land use planning decisions, and implementing the adaptive management plan.

**Comment Number: NVCASG-14-0091-19**
**Comment Excerpt Text:**
The document states “Lands addressed in the LUPAs will be BLM- and Forest Service-administered land in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs will apply only to BLM- and Forest Service-administered lands.” This is not accurate. BLM and Forest Service routinely extend federal land management policies to private lands through the connected action concept. This should be clearly stated in this section of the document. Impacts to resources on private lands are routinely included in NEPA analyses and mitigation for impacts on private lands is required. To imply that private lands are exempt from the provisions of the selected alternative is incorrect. The clarification is needed that the decisions in the DEIS apply to public lands unless there is a connected action that occurs on both public and private lands, or, the DEIS must have language that specifically exempts private lands from the connected action policy.

**Comment Number: NVCASG-14-0091-39**
**Comment Excerpt Text:**
Action B-FM 1
This action precludes the entry into PPMAs for fluid mineral leasing, and as indicated above, there are areas of non-habitat and a variety of seasonal habitats within PPMAs. To exclude fluid mineral exploration and/or development of these non-habitat areas or within seasonal habitats during the season of non-use allows for single use only.

For the exception listed in the Action, mitigation prior to issuing the lease is required, with demonstrated long-term population increases. This amounts to mitigating prior to impacts, and perhaps prior to the determination of impacts. Such a pre-disturbance stipulation requires that the proponent initiate mitigation well in advance of any project related disturbance and prior to issuing the lease. The lease must be issued before any funds or effort can be expended on mitigation. Mitigation requirements prior to disturbance are not within BLM’s jurisdiction since BLM cannot require mitigation as terms of a lease or permit without consent of the proponent. This concept can result in making oil and gas leasing and exploration uneconomic prior to validating if the fluid resource can be extracted in economic quantities.

**Comment Number: NVCASG-14-0103-1**
**Comment Excerpt Text:**
Mitigation measures considered for adoption in the DEIS are not supported by data to verify their effectiveness, and are thus subjective. Several of the alternatives considered in the DEIS include subjective language when discussing whether mitigation measures would be required. Similarly, there is no standard for successful habitat improvement that could be required as offsite mitigation.
Comment Number: NVCASG-14-0120-6
Comment Excerpt Text:
The Draft EIS fails to include any specific details on mitigation ratios that could be required for offsite mitigation of project impacts in GRSG habitat, despite the fact that mitigation is a common element for all alternatives.

Comment Number: NVCASG-14-0120-7
Comment Excerpt Text:
BLM states in its analysis of Mineral Materials under preferred Alternative D, without explanation or justification, that "[l]oss of habitat through disturbance at current sites would be offset through offsite mitigation." (emphasis added). BLM lacks the authority to impose conservation measures that would provide the same or greater restrictions on activities as would be applied under the Endangered Species Act at the expense of valid existing rights. Thus, to the extent BLM is suggesting that existing disturbance would require mitigation, particularly if disturbance activities were conducted pursuant to pre-existing claims or leases, BLM should clarify offsite mitigation requirements. BLM surely cannot mean that existing disturbance would be required to obtain mitigation retroactively.

Comment Number: NVCASG-14-0120-8
Comment Excerpt Text:
BLM also fails to explain what "offsite mitigation" means, what it would include, or how it would work or be paid for.

Comment Number: NVCASG-14-0132-13
Comment Excerpt Text:
Section 2.4.4. Alternative D. The DEIS discusses "prescribed mitigation ratios", but this is not further explained, defined, or quantified.

Comment Number: NVCASG-14-0132-14
Comment Excerpt Text:
Section 2.5.3. Adaptive Management. This section of the DEIS reports that the agencies "will develop" "hard and soft triggers". However, this fails to inform the public of what is intended. If for no other reason than this, the agencies should withdraw the DEIS/LUPA until such "triggers" are identified and elucidated for proper review by the public. It is not proper for the agencies to not identify such "triggers" in this DEIS, but then to create them later under the premise that such triggers were vetted by this NEPA document. Such "triggers" need to be made known to the public "now", not simply invented and imposed "later".

Comment Number: NVCASG-14-0132-23
Comment Excerpt Text:
Section 2.5.3. Adaptive Management. As to the "adaptive management working group", such group should not be restricted to Federal, State, and Local governments and fish and game agencies; it should also include representatives from the livestock industry and academia. Academia may provide insights into the science of cause-and-effect, and a Livestock Industry representative may provide insights into livestock husbandry, how livestock move on the landscape etc.

Comment Number: NVCASG-14-0132-34
Comment Excerpt Text:
The DEIS RDF states that "An Environmental Assessment is required for applications for monitoring sites in known Sage Grouse Population Management Units." However, the DEIS is entirely unclear as to what monitoring sites are being referred to, and could be construed that BLM and FS are required to file an EA every time they want to establish a rangeland monitoring site on the federal lands.

Comment Number: NVCASG-14-0182-1
Comment Excerpt Text:
We note the critical absence of clear and measurable landscape-scale objectives and metrics, which are necessary for evaluating future progress toward the goals, for honing strategies, and for informing adaptive management. Without such an objective, it is not possible to demonstrate that the proposed conservation actions in the Draft LUP will be sufficient, specific, or certain enough to satisfy the ESA.
Comment Number: NVCASG-14-0188-12
Comment Excerpt Text:
Page 19, 2.5.3. Adaptive Management

The adaptive management section is unclear as to how new field data will be utilized and how often it will be needed to be updated.

Comment Number: NVCASG-14-0195-7
Comment Excerpt Text:
The preferred alternative does not allow for adaptive management. Found in the USFWS' Greater Sage Grouse Conservation Objectives: Final Report, also referred to as the COT Report, under Appendix B: Policy for the Evaluation of Conservation Efforts when Making Listing Decisions adaptive management is defined as a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. An adaptive, case-by-case approach will ensure that efforts and resources expended in the name of greater sage-grouse conservation are well spent. Ecosystems vary; site potential, plant communities, soil types, environmental influences, precipitation patterns and plant production and vigor are highly variable and cannot be appropriately managed by single-source standards and guidelines. As continually suggested by the USFWS, the regulations should allow flexibility to land users. As requested in Scoping Comments sent March 2012, the draft EIS should include demonstrated evidence of adaptive management principles to be used when managing greater sage-grouse habitat. On-going monitoring and adaptive management procedures need to be clearly defined to insure that actions are measured against objectives and modified or completely changed within an identified range of opportunities for public involvement. As the DEIS is currently written, adaptive management principles are not included or clearly defined to achieve objectives. The Association requests, once again, BLM include adaptive management principles and analyze management the impact of adaptive management to the habitat of greater sagegrouse. Listed below are peer-reviewed studies for BLM to consider.

• As demonstrated in Freese, E. et. al (2013), managing livestock grazing to reduce the number and size of wildfire events on private lands compared to the public lands surrounding them. The results of this study exhibited that only 14% of the public lands remained undisturbed while 89% of the private land grazed with the intent of reducing fire frequency and size remained undisturbed. This further indicates that those policies that restrict flexibility of how public lands could be grazed may be contributing to loss or impact of many acres of sage grouse habitat.

• Burkhardt et. al examined the effects of grazing on vegetative production and density and concludes that allowing plants to set seed at least every second year through managing spring grazing is of great benefit. The results of this study, concludes that the variable on spring grazing is that use in early spring has significantly less effect on total plant production over the year than does later spring use. The implications for sage grouse suggests that designing systems to insure at least one pasture in a given nesting use area during spring use periods should provide opportunities for successful nesting considering birds show fidelity to nesting in a given area but not specifically to an individual nest location.

• Cagney, et al. is a detailed report identifying points of consideration, driving forces, effects and implications of grazing management and system design and is an excellent guide to the development of a grazing management plan that fully considers the needs of sage grouse as well as the economic viability of the livestock operation. Following these procedures, results in developing measurable and attainable goals based on sound objectives in tune with the site potential of the area being grazed.

• A definitive paper by Crawford: summarized the knowledge of Sage Grouse related issues
and their multiple complexities. The study stresses the positive or negative effects of grazing depending on how it is managed and applied. Within the appendixes, other studies summarized indicate the benefits of utilizing grazing to alter vegetative communities, reduce invasives, alter fire frequency, and many other potential effects. These factors can be affected by applied grazing and the multitude of grazing management systems.

• The study completed by Davies and Bates. 2010 analyzed variability in 106 Wyoming Big Sagebrush and Mountain Big Sagebrush sites (approximately 50150 split) and documented the significant production and site potential differences and variability between the two different sub-species of sagebrush. As found within the study, because of these differences, management actions need to be designed to the site conditions that exist at a particular location and set of ecological conditions and factors. This study strongly supports the need for having a very broad array of management and restoration options to be able to apply what is needed for each particular set of circumstances.

Comment Number: NVCASG-14-0199-33
Comment Excerpt Text:
The DEIS refers to "prescribed mitigation ratios," (Ch. 2, at 14), it but does not indicate what those ratios will be, how they will be determined, whether they will vary by project, and whether they will vary by mitigation type.

Comment Number: NVCASG-14-0202-16
Comment Excerpt Text:
Alternative D, the agency preferred alternative, states that development projects within PPMA and PGMA must result in "no unmitigated loss" of greater Sage Grouse habitat. "No unmitigated loss" would be achieved through a regional mitigation strategy outlined in Appendix D. At this point, NREA utility members agree that there is not enough detail in how the regional mitigation strategy would be operated to support or oppose its implementation, or even a sufficient definition of what constitutes "no unmitigated loss". For instance, Appendix D does not specify a structure for determining appropriate mitigation, including impact and benefit calculation methods, mitigation ratios, mitigation currency, location, and performance standards options. Such methods must be more fully developed and made available for review and comment.

Comment Number: NVCASG-14-0202-17
Comment Excerpt Text:
30. The Regional Mitigation Strategy outlined in Appendix D will be further developed and implemented by Western Association of Fish and Wildlife Agencies (WAFWA) Management Zone Implementation Teams composed of BLM, USFS, USFWS, and state fish and game agency personnel. This is very troubling to NREA utility members because no private development representatives will be involved in the Management Zone Implementation Team. The Management Zone Implementation Team as currently staffed could potentially propose such costly and restrictive mitigation to make development within PPMA and PGMA unfeasible. NREA utility members feel that potential developers and private interests should have a voice in the development and implementation of the Regional Mitigation Strategy to ensure that credits and debits imposed on development remains fair.

Comment Number: NVCASG-14-0224-15
Comment Excerpt Text:
2.5.2. Monitoring for the Greater Sage-Grouse Planning Strategy Appendix E

COMMENT: We recognize the need to monitor the implementation and effectiveness of the LUPA. However, the agencies have not provided adequate specificity regarding how this will be accomplished. The LUPA/DEIS merely describes the type of approach that will be taken to implement a monitoring framework. Without something closer to a final product, it is impossible to clearly understand and comment on such a policy. This raises real issues with NEPA compliance-particularly when results from
the monitoring framework will lead to management changes through adaptive management.

The final sentence of Appendix E states, “The BLM and USFS will consider public comments and collaborate with other agencies to finalize the Nevada and Northeastern California Greater Sage-Grouse LUPA/EIS Sage-grouse Monitoring Plan.” It is unclear how the commenting process will be handled.

Comment Number: NVCASG-14-0224-16
Comment Excerpt Text:
The adaptive management strategy described in the LUPA/DEIS would identify “science based” soft and hard adaptive management triggers; address how data from the Monitoring Framework will be used to gauge when triggers are met; and charter an adaptive management working group (“AMWG”) to assist with responding to soft triggers. When available, the agencies will consider population trend data from WAFWA and/or state wildlife agencies. More detail is needed to fully explain this proposed AM process and where it has been successfully implemented.

Similarly, it is vague when, how or whether new field data will be collected and tracked by the agencies. The trigger structure needs to be more fully explained in the context of when NSO, TL, CSU or other measures that may be imposed or relaxed based upon new findings.

Comment Number: NVCASG-14-0224-17
Comment Excerpt Text:
An AMWG will be comprised of BLM, FS, USFWS, local governments and applicable State Game and Fish agencies. We strongly recommend that industry also be represented on the AMWG, because industry has a vested interest in how AM is applied.

Comment Number: NVCASG-14-0226-3
Comment Excerpt Text:
An adaptive, case-by-case approach will ensure that efforts and resources expended in the name of greater sage-grouse conservation are well spent. Ecosystems vary; site potential, plant communities, soil types, environmental influences, precipitation patterns and plant production and vigor are highly variable and cannot be appropriately managed by single-source standards and guidelines.

Comment Number: NVCASG-14-0259-14
Comment Excerpt Text:
Page 102; Action E-SSS-MIT 1: PMA-3: "The Nevada Sagebrush Ecosystem Mitigation Bank Program, a centralized mechanism to coordinate mitigation and pre-impact mitigation across all jurisdictions and land ownerships, will be the system to validate the success of all conservation efforts of GRSG populations and the sagebrush ecosystem in Nevada. The Nevada Sagebrush Ecosystem Council, through the Nevada Sagebrush Ecosystem Technical Team, will develop a set of metrics and credits to ensure that appropriate mitigation measures are applied consistently and transparently. By establishing this central mitigation bank, the State of Nevada will have a robust system that provides for consistent evaluation, oversight, monitoring, reporting of progress, and adaptive management for long-term certainty." The Draft LUP/EIS needs to explain the relationship between the BLM, USFS, and the State of Nevada. It also needs to be clear that the mitigation bank system will not create time delays for project proponents. The BLM, USFS, and State of Nevada need to implement a coordinated system for mitigation banking that will not create time delays and cost increases for project proponents.

Comment Number: NVCASG-14-0265-5
Comment Excerpt Text:
Elko County insists that federal legislation must be prepared concerning changes to the Migratory Bird Treaty Act of 1918. An action to remove the Raven (Corvus corax), also known as the Northern Raven from protected status to permit local and state regulation concerning GRSG depredation without further federal intervention as per 50 CFR 21.43. The original 1918 statute implemented the 1916 Convention between the U.S. and Great Britain (for Canada) for the protection of migratory birds. Later amendments implemented treaties between the U.S. and Mexico, the U.S. and Japan, and the U.S. and the Soviet Union (now Russia).
Comment Number: NVCASG-14-0268-6
Comment Excerpt Text:
Mitigation, where required, should have to benefit sage grouse. In some locations in the
DEIS and in certain alternatives, the term "mitigation" is vague and not defined as benefitting sage grouse.

Comment Number: NVCASG-14-0287-1
Comment Excerpt Text:
Define the source of funds to meet costs associated with implementing any additional mitigation associated with BLM’s LUPA/DEIS alternatives.

Comment Number: NVCASG-14-0291-10
Comment Excerpt Text:
Mitigation fees need to be reasonable and affordable, and possibly a “mitigation fee cap or upper limit” can be imposed (e.g., a cost per acre up to 500 acres of disturbance, then a not to exceed value/total limit per project is imposed). The EIS needs to fully identify the conservation credit system, including associated fees and how the credit system would be implemented. Mitigation fees should only be imposed when site specific field studies identify a project site as Sage-Grouse habitat. If the land is identified as PGH/PPH (or PPMA/PGMA); however, site-specific surveys identify the land as non-habitat, site-specific surveys should take precedent and no mitigation fee should be imposed.

Comment Number: NVCASG-14-0328-1
Comment Excerpt Text:
The Draft LUPA/EIS lacks a mechanism to insure that final monitoring and mitigation implementation across the Plan Area will be applied consistently to facilitate adaptive management.

Comment Number: NVCASG-14-0344-28
Comment Excerpt Text:
Page 248, Alternative B, Action B-FFME 6:
This action should be written without the 3% disturbance cap and include the mitigation outline in the bullets as part of the action, not as "exceptions."

For the exception listed in the Action, mitigation prior to issuing the lease is required, with demonstrated long-term population increases. This amounts to mitigating prior to impacts, and perhaps prior to the determination of impacts. Such a pre-disturbance stipulation requires that the proponent initiate mitigation well in advance of any project related disturbance and prior to issuing the lease. The lease must be issued before any funds or effort can be expended on mitigation. Mitigation requirements prior to disturbance are not within BLM’s jurisdiction since BLM cannot require mitigation as terms of a lease or permit without consent of the proponent. This concept can result in making oil and gas leasing and exploration uneconomic prior to validating if the fluid resource can be extracted in economic quantities.

Comment Number: NVCASG-14-0346-5
Comment Excerpt Text:
Chapter: 2, Section: 2.5.3, Page Number: 52
Comment: Under Adaptive Management and Monitoring, the paragraph discusses the use of "hard and soft" triggers to guide adaptive management yet no real definition or structure is provided as to the difference between the two and what they actually mean.

Comment Number: NVCASG-14-0367-12
Comment Excerpt Text:
The final EIS should include more alternative design features and mitigation measures that:

1) recognize sage-grouse habitat quality and protection in proportion to potential sage-grouse conservation;

2) recognize the efforts of local, regional, statewide, and private conservation initiatives; and

3) provide for compensatory on-site and off-site mitigation (such as mitigation banks).

In our experience, onsite mitigation options are often limited because BLM appears to believe that sage-grouse will disappear from the project area of a wind
Farm. If the term mitigation is used in its classic sense, as defined by the FWS and Corps of Engineers, mitigation includes (in this order) avoidance, minimization, and compensation. Using this definition, avoidance of as much impact through project siting, design and/or operation should constitute an onsite mitigation action, as would minimizing other impacts through project design or operation.

Offsite mitigation options should include compensatory mitigation, in which sage-grouse habitat would be improved in some substantial way to provide a net benefit. Compensatory mitigation options include, but are not limited to, juniper removal, marking fences and transmission lines, decommissioning existing roads, replanting burned areas, controlling non-native species, managing livestock, restoring higher quality native vegetation, and limiting public access to important areas, including lekking, nesting, and winter ranges. Offsite mitigation can also most easily be accomplished on private lands through conservation banking or through Candidate Conservation Agreements with Assurances (CCAA) and on public lands (if feasible) through Candidate Conservation Agreements (CCAs).

We further noted that Appendix A, Required Design Features, proposes numerous features for fluid minerals but is unclear on whether they would apply to wind energy, which the DEIS likens to oil and gas field development. This should be clarified in the final DEIS.

Comment Number: NVCASG-14-0379-6
Comment Excerpt Text:
The EIS requires extensive, ongoing pre- and post-fire monitoring yet does not address the existing funding and staff restrictions

Comment Number: NVCASG-14-0396-4
Comment Excerpt Text:
For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come up with a 10 year plan that makes progress toward utilization objectives.

2. FLPMA

Comment Number: NVCASG-14-0003-1
Comment Excerpt Text:
Alternatives B, C, and F which do not recognize rights provided to individuals under the Mining Law of 1872 (General Mining Law, 30 U.S.C. 21a et seq), and are not consistent with provisions under the Federal Land Policy and Management Act of 1976 (FLPMA, 43 U.S.C 1701 et seq).

Comment Number: NVCASG-14-0003-26
Comment Excerpt Text:
FLPMA does not authorize the subordination of any of these uses in preference for a single land use such as sage-grouse habitat conservation. AEMA contends that applying an emphasis on one resource, sage-grouse, across an entire Planning Area is not consistent with FLPMA; BLM must also consider how the sage-grouse centric management contained in the NTT Report and the DLUPA/DEIS is appropriate in the context of other special status species.

Comment Number: NVCASG-14-0003-27
Comment Excerpt Text:
AEMA contends that the land use restrictions and prohibitions, especially the proposed withdrawals from mineral entry, and the enormous acreage proposed for ACEC designation in Alternative C and F(Ch. 2 at 40) are not consistent with FLPMA’s multiple use mandate or the specific directive pertaining to minerals in FLPMA § 102(a)(12)

Comment Number: NVCASG-14-0003-29
Comment Excerpt Text:
BLM is required to strike an appropriate balance between potentially competing interests and land management objectives. Moreover, this balance is to
be achieved in the LUPA process. Therefore, the DLUPA/DEIS' proposed land withdrawals, prohibitions, and restrictions are contrary to explicit statutory language in FLPMA and Section 22 of the General Mining Law (discussed below) and must be revised.

**Comment Number: NVCASG-14-0083-20**
**Comment Excerpt Text:**
In our opinion the BLM /USFS did not have the authority under NEPA to change Alternative C as written and should have dismissed the alternative as unacceptable due to non-compliance of NEPA requirements to meet the multiple use mandates of the FLPMA (43 CFR 1716), MUSYA and NFMA

**Comment Number: NVCASG-14-0120-13**
**Comment Excerpt Text:**
Section 5.13.2.4 states that, under the preferred alternative, "claimants and operators would be encouraged to consolidate exploration activities into plans of operations to reduce proliferation of discrete exploration notices under 43 CFR 3809.21(b)." BLM provides no legal or factual basis to require consolidation of these activities into plans of operations and this change is burdensome and unnecessary. Currently, exploration activities under five acres may be conducted without inclusion under plans of operations under a NEPA categorical exclusion. It is unclear if BLM would require full NEPA analyses even for de minimis exploration activities if exploration activities were required to be consolidated.

**Comment Number: NVCASG-14-0125-6**
**Comment Excerpt Text:**
The devastating changes in agency policy that are proposed in the Preferred Alternative are well beyond the scope of the agencies mandate to take protective measures.

**Comment Number: NVCASG-14-0144-9**
**Comment Excerpt Text:**
Section 2.3.1 Page 6 Please explain how Alternative C and F meet the multi-use mandates for FLPMA?

**Comment Number: NVCASG-14-0151-7**
**Comment Excerpt Text:**
Not only does the removal of livestock from priority habitats violate a multitude of federal laws, it is inconsistent with the BLM's multiple use mandate, would harm the culture and economy of rural communities, and would result in negative impacts to the grouse.

**Comment Number: NVCASG-14-0169-25**
**Comment Excerpt Text:**
Any withdrawals from mineral entry conflict with the General Mining Law of 1872 and is not consistent with FLPMA's multiple use mandate or the specific directive pertaining to minerals in FLPMA § 102(a) (12). This action would unreasonably restrict the use of public lands for exploration or mining operations and is contrary to FLPMA's requirement that BLM manage such lands in a way that recognizes the United States' need for domestic sources of minerals. 43 U.S.C. § 1701(a) (12)

**Comment Number: NVCASG-14-0169-33**
**Comment Excerpt Text:**
Alternative C proposes to designate 12,249,700 acres as areas of critical environmental concern (ACEs) for GRSG conservation, which would include (1) withdrawing land from mineral entry, (2) prohibiting oil, gas, and geothermal leasing, (3) prohibiting or severely restricting grazing, (4) prohibiting renewable energy projects, and (5) restricting ROWs. These management actions are contrary to the multiple use mandates under FLPMA and the NFMA. Further, certain ACECs may be subject to valid existing rights.
and therefore, may conflict with the General Mining Law of 1872.

Comment Number: NVCASG-14-0169-34
Comment Excerpt Text:
Alternative F also proposes to designate substantial acreage as ACEs for GRSG conservation. These designations are contrary to the multiple use mandates under FLPMA and the NFMA. Further, certain ACECs may be subject to valid existing rights, and therefore, may conflict with the General Mining Law of 1872.

Comment Number: NVCASG-14-0193-9
Comment Excerpt Text:
We are concerned about the proposal of a blanket policy to exclude utility-scale wind and solar energy facilities, salable mineral development, non-energy leading minerals, and no-surface occupancy restrictions for fluid minerals, in all sage-grouse habitat in Alternative D. 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 Policy and Management Act of 1976 respectively.

Comment Number: NVCASG-14-0196-2
Comment Excerpt Text:
Alternatives B, C, F and to some extent, Alternative D, as they are inconsistent with multiple-use mandates in the Federal Land Policy and Management Act of 1976 (FLPMA), the National Forest Management Act of 1976 (NFMA), the National Multiple Use and Sustained Yield Act of 1960 (MUSYA), and the General Mining Law. These land use restrictions are not legally, technically or economically practical or feasible and should not be considered as reasonable alternatives.

Comment Number: NVCASG-14-0200-1
Comment Excerpt Text:
The Purpose and Need section in this DEIS focuses solely on GSG habitat conservation and is silent on the need to balance GSG habitat conservation with other multiple uses of BLM- and USFS-administered lands as required by FLPMA, NFMA, and MUSYA, and to preserve rights under the Mining Law. This myopic focus is inconsistent with the planning criteria that BLM and USFS established for this NEPA analysis.

Comment Number: NVCASG-14-0238-2
Comment Excerpt Text:
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.

Comment Number: NVCASG-14-0251-3
Comment Excerpt Text:
While the Federal Land Planning and Management Act (FLPMA) clearly authorizes the BLM to designate Areas of Critical Environmental Concern (ACEC), BLM’s creation of Preliminary Priority and General Management Areas (PPMAs and PGMAs) (p. 39) in which management would be applied to areas of Preliminary Priority Habitat and to Preliminary General Habitat (Executive Summary, Sec. ES.8) seems to have no statutory basis under the FLPMA.

Comment Number: NVCASG-14-0265-1
Comment Excerpt Text:
In our experiences with the NEPA process as a cooperating agency we have many times provided specific pertinent scientific data and information concerning the respective NEPA project. In most all circumstances this information and data has been disregarded by the agency as rhetorical, non-scientific, unquantifiable or unsubstantiated by the agencies. Therefore, Elko County has developed acute reservations concerning the federal land management agencies and the NEPA process. We reason that the
process is entirely a matter of the agency personnel interpretation of information and data that best suits management policies set forth by the current administration and/or Special Interest Groups that have filed in federal courts. Elko County has incessantly entered into Memorandums of Understanding (MOU’s) with the federal agencies with no satisfaction or direct contribution into the various decisions of the respective EA, EIS or any other planning effort. However, Elko County offers the following summary comments concerning the Nevada and Northeastern California Greater Sage-Grouse Draft Land Use Plan Amendments and Environmental Impact Statement.

Comment Number: NVCASG-14-0288-5
Comment Excerpt Text:
The proposed alternatives within the LUP seek to limit, if not close, oil, natural gas, and mineral development. The cumulative impact of the closures and designation in the LUP may preclude energy development within the planning areas, undermining the land’s potential for oil, gas, and mineral potential. Under the Federal Land and Policy Management act, oil and natural gas development and mining are defined as a major use of public lands. Therefore, BLM is required to foster and develop energy and mineral development, rather than restrict and prohibit such development.

Comment Number: NVCASG-14-0306-21
Comment Excerpt Text:
These planning criteria appropriately acknowledge the need to comply with federal laws governing public land management that establish multiple use requirements. Section 1.3 only deals with GSG habitat conservation without regard to the agencies’ statutory obligations to balance GSG habitat conservation with other multiple uses of BLM- and USFS-administered lands as required by the Federal Land Policy and Management Act of 1976 “FLPMA” (43 U.S.C 1701 et seq) and the National Forest Management Act of 1976 “NMFA”, (16 U.S.C. 1600) and rights under the General Mining Law (30 U.S.C. § 21 et seq)

Comment Number: NVCASG-14-0306-3
Comment Excerpt Text:
However, the DEIS fails to respond to the second directive in the IM which states: “BLM offices should ensure that implementation of any of the measures is consistent with applicable statute and regulation.” Alternative B contains many land use restrictions and prohibitions inconsistent with the multiple use mandates in FLPMA and NFMA and rights under the General Mining Law. Alternative D, the Agency Preferred Alternative, includes many of the land use restrictions that are in Alternative B. These aspects of Alternative D are also inconsistent with the above-noted laws.

Comment Number: NVCASG-14-0306-4
Comment Excerpt Text:
Additionally, the DEIS does not disclose that Alternatives B, C, D, and F include measures that are inconsistent with FLPMA, NFMA, and the General Mining Law. Thus, the DEIS fails to respond to the directive in IM 2012 – 044 that directs BLM to restrict the analysis to conservation measures that are consistent with the public land laws and policies: “Where inconsistencies arise, BLM offices should consider the conservation measure(s) to the fullest extent consistent with such statute and regulation.”

Comment Number: NVCASG-14-0306-5
Comment Excerpt Text:
The Purpose and Need Statement doesn’t match the alternatives discussed in the document because it lacks the disclosure that the agencies could not implement Alternatives B, C, D, or F, without Congressional action to amend the multiple use mandates in FLPMA and NFMA and to substantially reduce rights under the General Mining law.

Comment Number: NVCASG-14-0311-19
Comment Excerpt Text:
C. Western Watersheds Project Alternative C.

This alternative is noted as an “individual or conservation group” alternative in previous pages of
the DEIS but is later stated to be the alterative written by Western Watersheds Project ("WWP"). This authorship allows the public to critically assess Alternative C in the context within which it was offered and intended. Consistent with WWP’s mission, it would close 39.7 million acres of habitat to grazing including a 3-year phase out of grazing in every Area of Critical Environmental Concern ("ACEC"). WWP’s mission is succinctly stated on its website: "The time has come to end public lands ranching.” See www.westernwatersheds.org/issues/public-lands-ranching. This alternative cannot be adopted by BLM because doing so would violate FLPMA, the Taylor Grazing Act, 43 U.S.C. 315a, et seq., the Public Rangelands Improvement Act, 43 U.S.C. 1901, et seq., and the Multiple Use Sustained Yield Act, 16 U.S.C. 528, et seq., all of which call for multiple use of federal lands including lands for livestock grazing.

Comment Number: NVCASG-14-0333-1
Comment Excerpt Text:
The management of the public lands for one species to the detriment of other multiple uses is inappropriate and untenable, given the legal mandates of the BLM and FS to do exactly the opposite.

Comment Number: NVCASG-14-0342-13
Comment Excerpt Text:
The Agencies have a legal obligation to comply with the General Mining Law, Mining and Minerals Policy Act, and FLPMA to recognize the Nation’s need for domestic sources of minerals and the right to explore. It is at best careless, and at worst remarkably disingenuous, to identify locatable minerals as a "principle use" and then fail to identify the applicable laws for managing them and then propose management actions that are contrary to the General Mining Law and outside BLM’s discretion as described above.

Comment Number: NVCASG-14-0342-2
Comment Excerpt Text:
For withdrawals of more than 5,000 acres, however, FLPMA requires the Secretary to submit the withdrawal to Congress, providing an opportunity for either house to veto the proposal. BLM’s proposals effectively would withdraw many times that number of acres without following the procedures required in FLPMA, which is contrary to law.

Comment Number: NVCASG-14-0342-29
Comment Excerpt Text:
Some of the LUPA alternatives propose withdrawing land from mineral entry. Any withdrawals from mineral entry conflict with the General Mining Law of 1872 and is not consistent with FLPMA’s multiple use mandate or the specific directive pertaining to minerals in FLPMA § 102(a) (12).

Comment Number: NVCASG-14-0342-3
Comment Excerpt Text:
Withdrawals of the magnitude proposed under Alternatives B, C, D, and F conflict with the FLPMA’s multiple use mandate, § 22 of the General Mining Law, the Mining and Minerals Policy Act, and cannot be implemented through the LUPA process.

Comment Number: NVCASG-14-0342-4
Comment Excerpt Text:
Moreover, the BLM’s NEPA review and LUPA amendments are not the appropriate mechanisms by which to make these sorts of land use withdrawals. BLM’s Surface Management Handbook explicitly provides that land use plans may not limit mining activity.

Comment Number: NVCASG-14-0344-2
Comment Excerpt Text:
Alternatives based on the NIT report do not comply with the multiple-use concept under FLPMA.

Comment Number: NVCASG-14-0366-1
Comment Excerpt Text:
FLPMA does not authorize the subordination of any multiple uses in preference for a single land use such as greater sage-grouse habitat conservation.

Comment Number: NVCASG-14-0367-13
Comment Excerpt Text:
The DEIS states that BLM and the FS recognize the importance of state and local plans, as well as plans developed by other federal agencies and tribal
governments, and will strive to be consistent with or complementary to the management actions in these plans whenever possible. However, it appears that the agencies did not consider how their following planning efforts conflict with: (1) the BLM Manual 6840 Special Status Species Management; and (2) Wind PEIS and BMP approach. See 40 CFR 1502.16(c) (requiring the consideration of “[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned”).

Comment Number: NVCASG-14-0367-7
Comment Excerpt Text:
This sage-grouse management policy described in the NTT Report, in conjunction with the NOI and the IMs, elevates sage-grouse management above other multiple uses on the federal public lands. This is the case even though BLM and the FS have established their multiple-use management mandate, which trumps single-species management, in the Federal Land Policy and Management Act of 1976, as amended, (FLPMA), the National Forest Management Act of 1976 (NFMA), and the Multiple-Use Sustained-Yield Act of 1960.

Comment Number: NVCASG-14-0367-9
Comment Excerpt Text:
The strict single-species management being pursued by BLM and the FS through the current sage-grouse policy is clearly a violation of the multiple-use policy that Congress has repeatedly declared in several federal statutes and the balancing of interests that those statutes require. In other words, to manage these public lands for the protection of a single species and categorically limit other interests on specified land is clearly inconsistent with the statutory intent of both FLPMA and NFMA. Consistent with these statutes, BLM and the FS should manage federal public lands pursuant to the multiple-use and sustainable-yield mandates and not rule out certain activities on those lands, such as excluding important uses, including renewable energy development, from certain areas.

2.1 Consistency with Other State, County, or Local Plans

Comment Number: NVCASG-14-0003-11
Comment Excerpt Text:
The alternatives analysis in the DLUPA/DEIS fails to recognize the Nation’s need for domestic sources of minerals, violates FLPMA, does not balance BLM’s goals and objectives across programs, and fails to incorporate appropriate management actions by opting for a one-size fits-all approach to conservation. Thus, the DLUPA/DEIS does not satisfy requirements under NEPA to analyze all reasonable and viable alternatives, BLM’s own requirements for analyzing alternatives as set forth in its NEPA Handbook,( H-1790-1), or the above-noted Purpose of the document. The BLM must prepare a revised DLUPA/DEIS that includes a revised and expanded alternatives analysis and provide the public an opportunity to comment on the revised document.

Comment Number: NVCASG-14-0003-5
Comment Excerpt Text:
AEMA contends that the surface use restrictions and land withdrawals proposed within sage-grouse habitat under Alternatives B, C and F, and to a lesser degree Alternative D conflict with the 11 RMPs goals and objectives for minerals, BLM’s own policy in Manual 6840, the General Mining Law, and its multiple use mandate under FLPMA (discussed in detail below), and represents a fatal flaw which renders the DLUPA/DEIS both inadequate and inconsistent with existing laws and policies.

Comment Number: NVCASG-14-0003-7
Comment Excerpt Text:
Comment Number: NVCASG-14-0015-1
Comment Excerpt Text:
BLM recently issued an interim policy for taking a regional approach to mitigating project impacts. BLM Instruction Memorandum 2013-142. In that interim policy, BLM recognized the benefits of regional mitigation planning, stating that “[m]itigation sites, projects, and measures should be focused where the impacts of the use authorization can be best mitigated and BLM can achieve the most benefit to its resource and value objectives, regardless of land ownership.” Draft MS-1794 – Regional Mitigation Manual Section at 1-6.

In recognition of this interim policy, the LUPA should allow conservation agreements between public-land users and BLM or USFS that incorporate this regional mitigation concept and provide a net benefit to the sage-grouse to govern actions contemplated by those agreements instead of the provisions of the LUPA, without the need for an additional plan amendment. Because these conservation agreements result in greater benefits to the species than the typical land-use-authorization process under the land use plan, it is appropriate for the LUPA to provide that the terms of those agreements can supersede the terms of the land use plan. At a minimum, the LUPA should grandfather in any existing conservation agreements that provide a net benefit to the sage-grouse, allowing the terms of those agreements to govern in lieu of the LUPA.

Comment Number: NVCASG-14-0015-10
Comment Excerpt Text:
Although more limited in size than the ACECs proposed in Alternative C, the ACECs proposed in Alternative F and the restrictions that would accompany those ACECs, Draft LUPA/EIS, Ch. 2 at 263-67 (295-99) (Action F-SD 1), are still inconsistent with FLPMA’s multiple-use mandate and would interfere with valid existing rights.

Comment Number: NVCASG-14-0015-11
Comment Excerpt Text:
Like Alternative B, Alternative F would propose lands within PPMAs to be withdrawn from mineral entry.

Comment Number: NVCASG-14-0015-6
Comment Excerpt Text:
Third, a 3 percent disturbance cap is inconsistent with FLPMA’s and NFMA’s multiple use mandates.

Comment Number: NVCASG-14-0083-8
Comment Excerpt Text:
Text Referencing: Introduction
Comment: Many methods of public lands management including FLPMA are discussed, however the Multiple Use Mandates were not specifically and fully explained in the Executive Summary. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0091-1
Comment Excerpt Text:
We find the DEIS alternatives B, C, D, and F overwhelmingly inconsistent with the Eureka County Master Plan and our other plans, policies, and controls. Our Master Plan, primarily the Natural Resources & State and Federal Land Use Element of the Plan, has management goals, objectives, polices, and mandates, that if implemented, will conserve GSG in Eureka County. This is in addition to our various policies. The DEIS fails to analyze our plan and policies and is therefore inconsistent with such. We call for BLM/USFS to complete the analyses necessary to implement our plan for conservation of GSG in Eureka County.

Comment Number: NVCASG-14-0091-7
Comment Excerpt Text:
Record of Decision Must Explain BLM’s Decision to Override Plans and Policies We request that after
BLM and USFS coordinate with Eureka County to reach consistency with our plans and policies that there is an inclusion of discussion of remaining conflicts and inconsistencies in the Record of Decision as required and outlined in CEQ FAQ 23c:

“In the Record of Decision, the decision maker must explain what the decision was, how it was made, and what mitigation measures are being imposed to lessen adverse environmental impacts of the proposal, among the other requirements of Section 1505.2. This provision would require the decision maker to explain any decision to override land use plans, policies or controls for the area” (emphasis added).

Comment Number: NVCASG-14-0105-2
Comment Excerpt Text:
The Elko County Commission passed a Resolution last week declaring the raven a Nuisance to the health, safety and welfare of the people, livestock, and wildlife of Elko County. (See Resolution in Footnote 1 below.) The Resolution cites to and is based on the best scientific studies and research available showing the danger that Ravens pose to Sage Grouse. Under NEPA, BLM is required to accept and implement this Resolution as a local directive as the most effective and least restrictive alternative for the benefit of Sage Grouse.

Comment Number: NVCASG-14-0109-9
Comment Excerpt Text:
This Alternative C action proposes to eliminate permitted livestock grazing in PPMAs for an estimated grazing reduction of about 1.3 million AUMs across the planning area. This proposal is absurd and unrealistic, as livestock grazing is a recognized use of public lands and vitally important to maintaining and improving sage-grouse habitat and reducing the threat of devastating wildfires. The economic activity associated with permitted grazing also represents important contributions to rural economies and communities. Further, this proposal is not consistent with the provisions and legal requirements in the Taylor Grazing Act, the Federal Land Management and Policy Act, the Forest Management Act. Based on these reasons, this alternative must be eliminated from further consideration in this EIS.

Comment Number: NVCASG-14-0144-7
Comment Excerpt Text:
ES.7 Page XVIII -BLM has made little or no effort to ensure conservation measures are consistent with local planning and policies. Lander County passed a sage grouse strategy that stresses habitat improvements such as riparian fencing, PJ removal, and noxious weed control.

Comment Number: NVCASG-14-0144-8
Comment Excerpt Text:
ES.7 page XIX -Lander County is not aware of any efforts to resolve inconsistencies of local plans and policies.

Comment Number: NVCASG-14-0151-21
Comment Excerpt Text:
Alternative: D, Section: D-LR-LT 1, Page Number: 263
Review Comment: The County does NOT support any action in regards to restricting land disposals that is not consistent with the Lincoln County Lands Acts or the Ely Resource Management Plan. It appears that the prohibition on disposals within PPMAs and PGMAs is in conflict with both linen.
drought policies should be referenced and provide the guidance if they exist.

**Comment Number: NVCASG-14-0172-3**  
**Comment Excerpt Text:**  
Our members participated in the development of the drought policy for the Alturas and Surprise Field Offices of the BLM. There should be nothing considered in this EIS that keeps these locally developed policies from continuing.

**Comment Number: NVCASG-14-0175-4**  
**Comment Excerpt Text:**  
The protection of the Greater Sage Grouse in Nevada can most adequately be managed by the Sagebrush Ecosystem Program, brought forth by Nevada Governor Brian Sandoval. This program is a multiagency and multi-disciplinary team that is best qualified to address the many issues pertaining to the Greater Sage Grouse in the State of Nevada.

**Comment Number: NVCASG-14-0192-1**  
**Comment Excerpt Text:**  
For any discussion of the co-location of utility corridors, please make the reader aware if highway easements are planned to be used for co-location that each project would be reviewed and require approval by the federal, state or local agency responsible for administering that highway ROW easement.

**Comment Number: NVCASG-14-0193-4**  
**Comment Excerpt Text:**  
Though the Executive Summary (Chapter 1, pp. 1-23) indicates that County Land Use Plans were considered, we request additional consideration of both the 2011 Nye County Comprehensive Master Plan and the Elko County Sage Grouse Plan.

**Comment Number: NVCASG-14-0193-8**  
**Comment Excerpt Text:**  
The Proposed Action (Alternative D) includes Action DREC-2, which states that, "no new recreation facilities would be constructed in PPMAs and PGMAs (e.g. Campgrounds, day-use areas, scenic pullouts, and trailheads)," (Chapter 2.8.2, p. 215). 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 this management action; otherwise we propose this be eliminated from consideration in the final plan, particularly since it conflicts with the BLM’s multiple-use mandate.

**Comment Number: NVCASG-14-0199-28**  
**Comment Excerpt Text:**  
BLM recently issued an interim policy for taking a regional approach to mitigating project impacts. BLM Instruction Memorandum 2013-142. In that interim policy, BLM recognized the benefits of regional mitigation planning, stating that "[m]itigation sites, projects, and measures should be focused where the impacts of the use authorization can be best mitigated and BLM can achieve the most benefit to its resource and value objectives, regardless of land ownership.  “Draft MS-1794 - Regional Mitigation Manual Section at 1-6.

In recognition of this interim policy, the LUP A should allow conservation agreements between public-land users and BLM or USFS that incorporate this regional mitigation concept and provide a net benefit to the sage-grouse to govern actions contemplated by those agreements instead of the provisions of the LUPA, without the need for an additional plan amendment. Because these conservation agreements result in greater benefits to the species than the typical land-use-authorization process under the land use plan, it is appropriate for the LUP A to provide that the terms of those agreements can supersede the terms of the land use plan. At a minimum, the LUP A should grandfather in any existing conservation agreements that provide a net benefit to the sage-grouse, allowing the terms of those agreements to govern in lieu of the LUPA.

**Comment Number: NVCASG-14-0199-34**  
**Comment Excerpt Text:**  
Although more limited in size than the ACECs proposed in Alternative C, the ACECs proposed in Alternative F and the restrictions that would accompany those ACECs, DEIS, Ch. 2 at 263-67
(Action F -SD 1), are still inconsistent with FLPMA's multiple-use mandate and would interfere with valid existing rights.

**Comment Number: NVCASG-14-0199-35**  
**Comment Excerpt Text:**  
Like Alternative B, Alternative F would propose lands within PPMAs to be withdrawn from mineral entry. DEIS, Ch. 2 at 232 (Action F-LR-W 1). Such withdrawal would be inconsistent with FLPMA’s multiple-use mandate, would undermine the goal of increasing incentives for conservation efforts by private parties, and should not be included in the Final LUPA.

**Comment Number: NVCASG-14-0200-7**  
**Comment Excerpt Text:**  
Alternative B, the NTT Report Alternative, contains many land use restrictions and prohibitions inconsistent with the multiple use mandates in FLPMA and NFMA and rights under the General Mining Law. Alternative D, the Agency Preferred Alternative, includes many of the land use restrictions that are in Alternative B. These aspects of Alternative D are also inconsistent with the above-noted laws.

**Comment Number: NVCASG-14-0205-2**  
**Comment Excerpt Text:**  
Under Section 202(c)(9) of FLPMA, 43 U.S.C. § 1712(a) and (c)(9), BLM’s LUPs "shall be consistent with State and local plans to the maximum extent ... consistent with Federal law and the purposes of this Act," and BLM must "assure that consideration is given to those State, local, and tribal plans that are germane in the development of land use plans for public lands," and "assist in resolving, to the extent practical, inconsistencies between Federal and non-Federal Government plans (emphasis added)." See also Yount v. Salazar, 2013 WL 93372, 13 (D. Ariz. 2013) (not reported) (stating "[b]oth FLPMA and NEPA require meaningful participation of and consultation with local governments, and, to the extent possible, consistency of federal actions with local land use plans").

In the context of the EIS and LUPs for Greater sage-grouse, Nye County believes that this consistency mandate requires BLM to adopt either Alternative A or the Nevada State Plan as the Preferred Alternative, unless it can make a clear finding that Alternative A or the State Plan would be inconsistent with federal law.

**Comment Number: NVCASG-14-0238-1**  
**Comment Excerpt Text:**  
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.

**Comment Number: NVCASG-14-0247-1**  
**Comment Excerpt Text:**  
The Draft EIS fails to recognize Pershing County’s Natural Resources Plan even though this plan has been on file with the Bureau of Land Management for nearly four years. The failure to coordinate management of public lands with Pershing County, and for that matter the other counties and the State of Nevada, is concerning.

**Comment Number: NVCASG-14-0268-5**  
**Comment Excerpt Text:**  
The Summit Lake Paiute Reservation is surrounded by sage grouse priority habitat. The Tribe is pursuing several initiatives to expand the Reservation boundaries including land acquisitions to protect sage grouse and the biodiversity of species endemic to the Summit Lake watershed and surrounding area. The management action should be revised to support the Tribe’s initiative to acquire public lands which promotes and complements conservation and recovery of sage grouse. Alternatively, an exception should be made to allow transfer of priority sage grouse habitat to Native American Tribes where the Tribe plans to steward said lands for the conservation of sage grouse.
Importantly, there will be a need for consistency between RMPs that share common ecosystems and sage grouse biology. Many of the scientifically demonstrated impacts of BLM-permitted activities to sage grouse, ranging from livestock grazing to impacts of tall structures or oil and gas development, would be expected to be similar across the range of the species. There is no reason to expect, for example, that the impact of transmission towers on sage grouse habitat use would be any different in Nevada than it is in Montana. Thus, in order to avoid the appearance of an arbitrary and capricious approach to sage grouse conservation between states or other jurisdictional boundaries that have no biological or ecological basis, BLM should have some common minimum requirements across RMPs that ensure that conservation measures that cannot be shown to support the maintenance and recovery of sage grouse populations do not crop up in regional or local RMPs due to the whims of local politics. Northern Nevada, for example, shares an ecoregion and sage grouse Management Zone with Oregon, Idaho, and parts of Utah. At a minimum, this plan should incorporate common minimum standards to protect sage grouse with plans in Utah, Oregon, and Idaho that also govern lands in shared ecoregions.

Consideration of federal, state, and local plans is required by 40 C.F.R. § 1502.16(c). While some statement is made to the effect that these plans are considered (Section ES.7 and 1.7), there is no discussion of how the proposed alternatives may conflict with BLM Manual 6840 Special Status Species Management. Nor, as noted above, is there any clear discussion of the conflict with most of the action alternatives and the Secretary’s designation of these BLM lands as chiefly valuable for grazing.

The Sagebrush Ecosystem Program was created as a multi-agency and multi-disciplinary program to more adequately address the resource and habitat concerns currently facing the greater sagegrouse and the potential listing of the species in the State of Nevada. This program was initiated by Governor Sandoval by an Executive Order in 2012 and was affirmed by the Nevada State Legislature in 2013 as Nevada State Statute. The Sagebrush Ecosystem Program provides goals, objectives and management actions to alleviate the primary threats to greater sage grouse in Nevada.

The protection of the greater sage grouse in Nevada is a state issue and should be addressed as such. As stated previously, the habitat requirements of greater sage grouse vary greatly.

Permittees ability to graze livestock on BLM and FS managed lands is critical to many of our western counties and rural economies. Thus, local and county governments should play an active role in land use planning. BLM has the obligation to consider provisions of pertinent plans, seek to resolve inconsistencies between state, local, and tribal plans, and provide ample opportunities for state, local, and tribal governments to comment on the development of amendments or revisions. Furthermore, the efforts of local governments and citizens working together to resolve local issues offers the best chance of success of conservation to the greater sage grouse and should be fully acknowledged by the BLM.

In drafting the Draft EIS regarding the GRSG regulations, the Draft EIS fails to take into consideration and is in conflict with pre-existing Pershing County, Nevada Land Use Planning, specifically the Pershing County Natural Resources Land Use Plan (County Plan) and the Pershing County Master Plan.

The Fifth Amendment to the United States Constitution provides that the government may not take away private property without just compensation; Pershing County’s Land Use Planning
contemplates protections to the individual rights of property holders within the County. Because there are a multitude of takings issues involved in the Draft EIS, the BLM and Forest Service must engaged in a takings assessment prior to taking any action, issuing any ruling, or making any decision that would constitute a taking of private property or a private property interest. See Executive Order 12630. Failure to conduct the assessment would conflict with the County's Land Use planning which protects the land interests of property owners.

Comment Number: NVCASG-14-0351-3
Comment Excerpt Text:
The Draft EIS fails to recognize that local governments that have plans are coordinating and cooperating agencies and have a right to be considered in any land use planning. 43 CFR 1610.3-1 requires that the Draft EIS take into consideration the local and state plans and conduct a consistency review. The local and state plans should be controlling if they are consistent with federal law. Accordingly, the Draft EIS fails to consider the land use plans of local governments in violation of federal law. There is no mention of the Pershing County Land Use Planning in the Draft EIS.

Comment Number: NVCASG-14-0383-1
Comment Excerpt Text:
Why have we abandon efforts such as the Conservation Strategy for Sage-Grouse (Centrocercus urophasianus) and Sagebrush Ecosystems within the Buffalo-Skedaddle Population Management Unit developed by the Northeast California Sage-Grouse Working Group, a multi-agency collaboration including by-in and input from private ranching and farming operations? Rather than having the BLM guess what the U.S. Fish and Wildlife Service (USFWS) would like to see in order to avoid listing the sage-grouse, which this EIS is essentially doing, Conservation Strategies allow for the USFWS to work with other agencies and private enterprise and are localized efforts that lead to real plausible projects and solutions.

3. OTHER LAWS

Comment Number: NVCASG-14-0003-24
Comment Excerpt Text:
The DLUPA/DEIS fails to meet the standards of “utility” and “objectivity” pursuant the DQA and subsequent guidance documents, described in detail below.

Comment Number: NVCASG-14-0003-28
Comment Excerpt Text:
BLM must demonstrate its compliance with the mandate under the Mining and Minerals Policy Act (30 U.S.C. §21(a)), and FLPMA (43 U.S.C. §1701(a) (12)) to recognize the Nation’s need for domestic minerals.

Comment Number: NVCASG-14-0003-29
Comment Excerpt Text:
BLM is required to strike an appropriate balance between potentially competing interests and land management objectives. Moreover, this balance is to be achieved in the LUPA process. Therefore, the DLUPA/DEIS' proposed land withdrawals, prohibitions, and restrictions are contrary to explicit statutory language in FLPMA and Section 22 of the General Mining Law (discussed below) and must be revised.

Comment Number: NVCASG-14-0003-31
Comment Excerpt Text:
AEMA contends recommendations contained in the DLUPA are not consistent with rights under the General Mining Law which allow citizens of the United States the opportunity to enter, use and occupy public lands open to location to explore for, discover, and develop certain valuable mineral deposits (30 U.S.C. §22).

Comment Number: NVCASG-14-0003-33
Comment Excerpt Text:
AEMA contends that BLM does not have the authority, outside of the regulations at 43 C.F.R §3809, to impose RDFs on operators exercising the rights under the General Mining Law. Therefore, BLM must remove or revise the above management
actions to be in compliance with the General Mining Law.

Comment Number: NVCASG-14-0003-34
Comment Excerpt Text:
BLM identifies locatable minerals as a principal industry or use in several of the counties in the Planning Area, especially in Eureka, Elko, Humboldt, Lander, and Pershing Counties (See Ch.3 at 173-181), yet BLM fails to identify compliance with the General Mining Law and the Mining and Minerals Policy Act as a way of addressing issues through policy or administrative action.

Comment Number: NVCASG-14-0003-36
Comment Excerpt Text:
Secondly, the restrictions on rights of way, roads, and other infrastructure may make economic development of some mineral deposits impossible. Maintaining lands available for mineral entry is a hallow gesture if the lands are inaccessible or surrounded by lands on which infrastructure cannot be located. These restrictions also are unlawful because they conflict with the rights granted by § 22 of the General Mining Law and 30 U.S.C. 612(b) (Surface Use Act), which guarantee the right to use and occupy federal lands open to mineral entry, with or without a mining claim, for prospecting, mining and processing and all uses reasonably incident thereto, including but not limited to ancillary use rights, and rights of and associated with ingress and egress.

Comment Number: NVCASG-14-0015-12
Comment Excerpt Text:
Alternative F includes the same action as Alternative B that would make applicable BMPs (Appendix E of the NTT) mandatory as COAs within PPMAs. Draft LUPA/EIS, Ch. 2 at 256 (288) (Action F-LOC 2). As noted above in the section on Alternative B, this action conflicts with other language in the Draft LUPA/EIS and the provisions of the General Mining Act of 1872 that prevents the Agencies from imposing use restrictions on mining claims. The Final LUPA should incorporate reasonable BMPs as guidance for locatable minerals, not as mandatory conditions of approval.

Comment Number: NVCASG-14-0015-3
Comment Excerpt Text:
Nevada law now requires the Nevada Division of State Lands to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems on public lands, as well as private lands with the private landowners’ consent. NRS 321.594. It also requires the establishment of a mitigation credit system, prioritization and implementation of projects for sagebrush ecosystem improvement, and creation of the Account to Restore the Sagebrush Ecosystem, which must be used to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems in the State of Nevada. See NRS 321.594(2); NRS 232.162; and NRS 232.161. The No-Action Alternative should acknowledge these existing state and federal conservation mechanisms.

Comment Number: NVCASG-14-0015-8
Comment Excerpt Text:
A few of Alternative E’s management actions need to recognize exceptions for the exercise of valid existing rights. In particular, Alternative E would require the siting of new linear features in existing corridors or, at a minimum, collocated with existing linear features in sage-grouse management areas. See, e.g., Draft LUPA/EIS, Ch. 2 at 220 (252) (Action E-LRLUA 1).

Comment Number: NVCASG-14-0051-1
Comment Excerpt Text:
Specific to stock water rights, Nevada Water Law is based on two principles: prior appropriation and beneficial use. Prior appropriation refers to “first in time, first in right.” To obtain a water permit in Nevada, a person must prove beneficial use such as stock watering, mining, irrigation, etc. The preferred alternatives (B) and (F) (see DEIS Action LG 15, pg.234) poses a threat to permittees existing water rights by threatening their ability to make beneficial use thereof. Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally managed lands, especially those related to livestock water rights and rights of way to access these water rights.
An example of how valid existing rights will be compromised in the preferred alternative (D) is explained below:

- Appendix A, “Required Design Features,” states that in priority habitat (PPMA), agency action would be to “remove livestock ponds built in perennial channels that are negatively impacting riparian habitat, either directly or indirectly, and do not permit new ones to be built in these areas.”
- Appendix A, “Required Design Features,” would also “remove or modify existing water developments that are having a net negative impact on GRSG habitats.

Comment Number: NVCASG-14-0064-1
Comment Excerpt Text:
There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated permanently (see DEIS Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. …Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbitt, 167 F.3d 1287, 1308 10th Cir. 1999).

Comment Number: NVCASG-14-0065-1
Comment Excerpt Text:
Appendix A, “Required Design Features,” states that in priority habitat (PPMA), agency action would be to “remove livestock ponds built in perennial channels that are negatively impacting riparian habitat, either directly or indirectly, and do not permit new ones to be built in these areas.” This wording directly infringes upon the authority of the Nevada State Engineer over water law and the existing water rights application, permitting, and adjudication which are under state authority, not Federal. The ponds, troughs, spring improvements, and other water developments having been properly permitted, have been put in a considerable expense to the ranch for the stated purpose, mostly stock water, and it would be considered a “Taking” if additional access and/or use limitations or exclusions were implemented; especially since the numbers of Sage Grouse in the areas suggested for its listing as endangered is greater than the threshold required for listing.

Comment Number: NVCASG-14-0065-2
Comment Excerpt Text:
Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. …Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbitt, 167 F.3d 1287, 1308 10th Cir. 1999). This “chiefly valuable for grazing” is a land classification under the TGA and can only be changed by congressional action, not administratively.

Comment Number: NVCASG-14-0066-1
Comment Excerpt Text:
Key Management Areas (KMAs). The C Punch Ranch has previously protested the approval of the BLM Winnemucca District Proposed RMP/FEIS. In part this
protest was based on the proposed use of key management areas (KMAs) in critical or preferred grazing sites to monitor and adjust permitted livestock grazing. For obvious reasons this approach is not consistent with the Nevada Rangeland Monitoring Handbook approved by the BLM Nevada State Office and most, if not all, agency handbooks developed to guide grazing management and rangeland monitoring at the allotment level.

**Comment Number: NVCASG-14-0066-4**
**Comment Excerpt Text:**
Water and Water Rights: Several of the alternatives that have been developed and analyzed by the BLM indicate a desire to remove, alter or relocate range improvements including watering facilities. The BLM MUST recognize that in the State of Nevada water rights are considered private property. The removal, alteration or relocation of watering facilities that associated water rights will likely result in a “taking”, as such the BLM Must work in collaboration with the livestock permittee and water right holder prior to any alterations to water facilities.

**Comment Number: NVCASG-14-0069-1**
**Comment Excerpt Text:**
The BLM should reconsider whether sage-grouse habitat is “chiefly valuable” for livestock grazing.

Most grazing on BLM lands occurs within grazing districts established by the Taylor Grazing Act of 1934 (43 U.S.C. § 315). The act required the Secretary of Interior to determine that lands within grazing districts were “chiefly valuable” for livestock grazing (43 U.S.C. § 315). However, the Secretary can also separately conclude that any lands within grazing districts are “more valuable or suitable for any other use than for [grazing]” (43 U.S.C. § 315f). To meet the purpose and need of the National Greater Sage-Grouse Planning Strategy (76 Fed. Reg. 77009) and the draft Nevada/NE California plan (vol I, xiii-xiv), the Secretary should, as part of the current planning process, reconsider whether sage-grouse habitat, or a subset of extant habitat (e.g., priority habitat), in grazing districts is still “chiefly valuable” for grazing as opposed to other priorities, such as sage-grouse conservation. The Secretary can adjust boundaries of grazing districts to exclude grazing where it may continue to harm the species.

**Comment Number: NVCASG-14-0071-3**
**Comment Excerpt Text:**
The draft EIS seems to virtually ignore the Mining Law of 1872. In addition to the proposed land withdrawals, many of the alternatives would reduce the ability of prospectors to access and develop valid mining claims, even in general sage-grouse habitats, by requiring roads and the utility lines needed to develop them to follow straight lines or pre-existing corridors. Since the whole point of exploring is to find new areas to mine, many of the alternatives would make it impossible to either develop existing claims or explore for new ones. The Draft EIS must disclose the impact that road and ROW restrictions would have on locatable minerals.

Even if lands were kept open and not withdrawn from exploration, it would mean nothing if development of the roads, pipelines, power lines and the like needed to support mineral operations are severely restricted or even prohibited.

**Comment Number: NVCASG-14-0071-6**
**Comment Excerpt Text:**
Importantly, the withdrawal of lands in Nevada is directly at odds with the Mining and Materials Policy Act of 1970 which encourages the federal government to foster the development of minerals on federal lands, among other policies.

**Comment Number: NVCASG-14-0083-48**
**Comment Excerpt Text:**
Ch: 4, Sec: 4.4.5, Pg. No.: 60

Text Referencing: Vegetation and Soils Alternative B - Impacts from Riparian Areas, Wetlands and Water Resources Management. Riparian and Water Resources management actions under Alternative B would allow new water developments only to occur if GRSG PPMAs would benefit.

Comment: Elko County disagrees with this proposed management action. Water resources in the State of
Nevada are regulated by private ownership water rights. The BLM / USFS do not have authority or jurisdiction of water development.

**Comment Number: NVCASG-14-0083-62**

**Comment Excerpt Text:**

Ch: 4, Sec: 4.9.7, Pg. No.: 146

Text Referencing: Livestock Grazing Alternative D - Impacts from Riparian Areas, Wetlands, and Water Resources Management. Effects on livestock grazing would be greater than under Alternative A. Alternative D would cause changes to current permitted use, based on specific actions taken to return riparian areas to PFC and improve plant community species richness.

Comment: Elko County maintains that water rights in the State of Nevada are regulated by the State Engineer. State Water Rights are the right of the owner to develop points of diversion and places of use to show beneficial use on private lands and on federally managed public lands.

**Comment Number: NVCASG-14-0086-1**

**Comment Excerpt Text:**

The combined impact of the restrictive Land Use Plan Amendment (LUPA) serves to shift the primary use of grazing district lands from livestock grazing to sage grouse conservation. This shift sits well outside the intent and purpose of the Taylor Grazing Act. Furthermore, the consideration of the permanent retirement of grazing privileges is contrary to the intent of the Taylor Grazing Act and beyond the authority of this LUPA/EIS.

**Comment Number: NVCASG-14-0091-6**

**Comment Excerpt Text:**

Inconsistency with NRS 278.243 and 278.246

NRS 278.243 states that a “A…county whose governing body has adopted a master plan pursuant to NRS 278.220 may represent its own interests with respect to land and appurtenant resources that are located within the…county and are affected by policies and activities involving the use of federal land.”

NRS 278.246 empowers the County to “bring and maintain an action…before any federal agency, if an action or proposed action by a federal agency or instrumentality with respect to the lands, appurtenant resources or streets that are located within the…county impairs or tends to impair the traditional functions of the…county or the carrying out of the master plan.”

Eureka County has adopted a master plan pursuant to NRS 278.220 and is therefore empowered to represent its own interests regarding the DEIS alternatives “involving the use of federal land.”

Also, the DEIS alternatives “impairs or tends to impair the traditional functions of the…county or the carrying out of the master plan.”

BLM and USFS must document in the EIS that since we have represented our own interests in the process, there has been a failure to bring the alternatives in compliance with our represented interest through honoring of the County’s plans, policies, requests and proposed measures and the DEIS alternatives “impairs or tends to impair the traditional functions of the…county or the carrying out of the master plan.” However, we believe these inconsistencies can be diminished or removed altogether by BLM and USFS coordinating with Eureka County to implement our plans and policies and reach consistency as required.

**Comment Number: NVCASG-14-0109-9**

**Comment Excerpt Text:**

24, C, Action LG 1, 226

This Alternative C action proposes to eliminate permitted livestock grazing in PPMAs for an estimated grazing reduction of about 1.3 million AUMs across the planning area. This proposal is absurd and unrealistic, as livestock grazing is a recognized use of public lands and vitally important to maintaining and improving sage-grouse habitat and reducing the threat of devastating wildfires. The economic activity associated with permitted grazing also represents important contributions to rural economies and communities. Further, this proposal is
not consistent with the provisions and legal requirements in the Taylor Grazing Act, the Federal Land Management and Policy Act, the Forest Management Act. Based on these reasons, this alternative must be eliminated from further consideration in this EIS.

Comment Number: NVCASG-14-0120-20
Comment Excerpt Text:
BLM failed to comply with requirements of Executive Order 13211. Executive Order 13211 requires a Statement of Energy Effects for all significant regulatory actions that are likely to have a significant adverse impact on the supply, distribution, or use of energy. Restrictions on the mining of minerals used in oil and gas production processes will have an impact on the drive for energy independence in the U.S.

Comment Number: NVCASG-14-0125-2
Comment Excerpt Text:
Action D-LG 23 contemplates the "retirement of grazing privileges on all voluntary relinquishments in PPMAs and PGMAs where removal of livestock grazing would enhance the ability to achieve GRSG habitat objectives." See DEIS Table 2.6. The consideration of any permanent retirement of grazing permits that are subject to preference under the TGA would stand in contrast to the clear intent of the law. See Office of the Solicitor, US. Dept. of the Interior, M-37008, Memorandum Regarding Retirement of Grazing Lands at 5 (May 13, 2003)

Comment Number: NVCASG-14-0169-1
Comment Excerpt Text:
Land use plans must recognize the rights granted by the Mining Law to enter, explore, and develop mineral resources on the public lands. A land use plan cannot change the law’s authorization to use public lands that are open to location under the Mining Law. Areas may only be removed from operation of the Mining Law by congressional withdrawal or in accordance with the withdrawal provisions of Section 204 of FLPMA. Restrictions in a particular land use plan have no force and effect on the right of entry until one of the two procedures stated above has occurred. Further, in areas open to mineral entry, or closed subject to valid existing rights, the land use plan cannot be used to preclude mining or restrict certain types of mining activities. For example, land use plans cannot be used to "zone" areas where open pit mining is not allowed, ban cyanide use, prohibit placer mining, or generally place limits on the type or size of an operation.

Comment Number: NVCASG-14-0169-2
Comment Excerpt Text:
The Mining and Minerals Policy Act of 1970, which declares that it "is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in (1) the development of economically sound and stable domestic mining, mineral, metal and mineral reclamation industries, (2) the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs, .... " 30 U.S.C. § 21a. BLM's planning criteria for the proposed LUPA omit any reference to this important Congressional policy statement. It is also evident that BLM and the Forest Service overlooked this important national policy in formulating LUPA elements and alternatives.

Comment Number: NVCASG-14-0169-23
Comment Excerpt Text:
The USFWS has had a long-standing policy of working to conserve "candidate" species through several means, including a grants program funds conservation projects by private landowners, states and territories; and two voluntary programs - Candidate Conservation Agreements (CCAs) and Candidate Conservation Agreements with Assurances (CCAs) - engage participants to implement specific actions that remove or reduce the threats to candidate species, which helps stabilize or restore the species and can preclude the need for ESA listing.

2. Additionally, the Service is directed by Congress "make prompt use" of emergency listing authority under Section 7 of the ESA if warranted for candidate species, 16 U.S.C. § (b) (3) (C) (iii). None of these
presently existing important ESA tools are accounted for in this NEPA process.

**Comment Number: NVCASG-14-0169-33**  
**Comment Excerpt Text:** Alternative C proposes to designate 12,249,700 acres as areas of critical environmental concern (ACESs) for GRSG conservation, which would include (1) withdrawing land from mineral entry, (2) prohibiting oil, gas, and geothermal leasing, (3) prohibiting or severely restricting grazing, (4) prohibiting renewable energy projects, and (5) restricting ROWs. These management actions are contrary to the multiple use mandates under FLPMA and the NFMA. Further, certain ACECs may be subject to valid existing rights, and therefore, may conflict with the General Mining Law of 1872.

**Comment Number: NVCASG-14-0169-34**  
**Comment Excerpt Text:** Alternative F also proposes to designate substantial acreage as ACECs for GRSG conservation. These designations are contrary to the multiple use mandates under FLPMA and the NFMA. Further, certain ACECs may be subject to valid existing rights, and therefore, may conflict with the General Mining Law of 1872.

**Comment Number: NVCASG-14-0171-4**  
**Comment Excerpt Text:** The County reminds the agencies that the Public Rangeland Improvement Act (1978) requires consultation, cooperation and coordination with the grazing permittees for almost all the strategies proposed in the DEIS that affect the grazing prescriptions. While we understand that this is the law and we don’t expect that the BLM/FS would try to circumvent this requirement, we believe it would eliminate a lot of misunderstanding with the environmental community and the general public if the DEIS stated that clearly throughout the document.

**Comment Number: NVCASG-14-0175-1**  
**Comment Excerpt Text:** The Taylor Grazing Act was signed into law in 1934 for the purpose of stabilizing the rangeland livestock industry and fostering economic development for ranchers and the communities in which they live. The Draft Environmental Impact Statement (DEIS) suggests grazing permits may be terminated permanently (DEIS Vol. 2 pg. 166, etc.) The BLM has no authority, supported by case law, for this action.

**Comment Number: NVCASG-14-0196-2**  
**Comment Excerpt Text:** Alternatives B, C, F and to some extent, Alternative D, as they are inconsistent with multiple-use mandates in the Federal Land Policy and Management Act of 1976 (FLPMA), the National Forest Management Act of 1976 (NFMA), the National Multiple Use and Sustained Yield Act of 1960 (MUSYA), and the General Mining Law. These land use restrictions are not legally, technically or economically practical or feasible and should not be considered as reasonable alternatives.

**Comment Number: NVCASG-14-0198-3**  
**Comment Excerpt Text:** Importantly, the withdrawal of lands in Nevada is directly at odds with the Mining and Materials Policy Act of 1970 which encourages the federal government to foster the development of minerals on federal lands among other policies.

**Comment Number: NVCASG-14-0199-30**  
**Comment Excerpt Text:** Nevada law now requires the Nevada Division of State Lands to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems on public lands, as well as private lands with the private landowners’ consent. NRS 321.594. It also requires the establishment of a mitigation credit system, prioritization and implementation of projects for sagebrush ecosystem improvement, and creation of the Account to Restore the Sagebrush Ecosystem, which must be used to establish and carry out programs to preserve, restore, and enhance sagebrush ecosystems in the State of Nevada. See
NRS 321.594(2); NRS 232.162; and NRS 232.161. The No-Action Alternative should acknowledge these existing state and federal conservation mechanisms.

Comment Number: NVCASG-14-0199-36
Comment Excerpt Text:
Alternative F includes the same action as Alternative B that would make applicable BMPs (Appendix E of the NTT) mandatory as COAs within PPMAs. DEIS, Ch. 2 at 256 (Action FLOC 2). As noted above in the section on Alternative B, this action conflicts with other language in the DEIS and the provisions of the General Mining Act of 1872 that prevents the Agencies from imposing use restrictions on mining claims. The Final LUPA should incorporate reasonable BMPs as guidance for locatable minerals, not as mandatory conditions of approval.

Comment Number: NVCASG-14-0200-6
Comment Excerpt Text:
The resulting DEIS should only have presented detailed analyses of alternatives that comply with FLPMA, NFMA, the Mining Law, etc. Alternatives B, C, D, and F do not meet this requirement and should not have been considered in detail.

Comment Number: NVCASG-14-0205-1
Comment Excerpt Text:
Under Section 4 of the ESA and a court order, the USFWS must make its decision whether to list the GRSG by September 2015 based on the most current and available science. The effort by BLM to amend its LUPs to respond to the 2010 WBP decision presumes that the state of science as to the need to list the GRSG has remained static. As will be discussed below, that is not the case.2

2. In the present case, the current scientific state of GRSG biology, including the scientific basis underpinning the original bases for listing, must again be accounted for by the USFWS since in its original 2010 Determination. A simple decision of "warranted" in 2010 does not permanently enshrine the underlying science as the Service moves to gather the appropriate data for its decision by September, 2015, per stipulation.

Comment Number: NVCASG-14-0205-25
Comment Excerpt Text:
Quoting Connelly is cited at least 57 times in Chapter 3 alone. Quoting Connelly’s summary of sage-grouse studies is NOT use of the best available science. The original studies and publications that Connelly merely references or summarizes are the best available science, not Connelly’s interpretations of those studies and publications. Many of the documents referenced in Connelly are not available to the public. Some are available, but only for a fee.

Quoting Connelly’s quotation of other authors violates the Information Quality Act of 2001 (Section 515 of Public Law 106-554).

Comment Number: NVCASG-14-0224-5
Comment Excerpt Text:
Energy Policy Act of 2005
Section 363 of the Energy Policy Act of 2005 (EPAct) requires federal land management agencies to ensure that lease stipulations are applied consistently and to ensure that the least restrictive stipulations are utilized to protect many of the resource values to be addressed. The LUPA/DEIS ignores established BLM policy that states "the least restrictive stipulation that effectively accomplished the resource objectives or uses for a given alternative should be used." Moreover, the agencies have failed to demonstrate that less restrictive measures were considered but found insufficient to protect the resources identified. A statement that there are conflicting resource values or uses does not justify the application of restrictions. Discussion of the specific requirements of a resource to be safeguarded, along with a discussion of the perceived conflicts between it and oil and gas activities must be provided. Clearly, an examination of less restrictive measures must be a fundamental element of a balanced analysis and documented accordingly in the FEIS.

Comment Number: NVCASG-14-0226-2
Comment Excerpt Text:
There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in
the DEIS by suggesting that grazing permits may be terminated permanently (see DEIS Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing.

**Comment Number: NVCASG-14-0238-22**

**Comment Excerpt Text:**

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.”

**Comment Number: NVCASG-14-0259-2**

**Comment Excerpt Text:**

The Secretary of Interior is required under the Lincoln County Conservation Recreation and Development Act of 2004 to issue ROWs to SNWA for the GWD Project in Lincoln and Clark County, including "... wells, well fields, pipes, pipelines ..." Thus, excluding all ROWs from GRSG habitat, regardless of the type of GRSG habitat (preliminary priority or preliminary general), would be incompatible with prior BLM authorization for the GWD Project and Federal legislation.

**Comment Number: NVCASG-14-0265-3**

**Comment Excerpt Text:**

Elko County asserts that the alleged best current scientific data utilized by the USFWS, in their summation of the measures and policies for Sage-Grouse population and habitat protection and conservation is not the best current scientific information available. Elko County contends that federal land managers must base Sage-Grouse and habitat decisions on the best current available science and not the threat of litigation. Elko County argues that the current data and information utilized by the USFWS to develop the posture and summation of federal land and wildlife managers will cause further loss of millions of acres of federally managed public lands resources, wildlife and wildlife habitat.

**Comment Number: NVCASG-14-0265-4**

**Comment Excerpt Text:**

We have established that USFWS does not have a basis to list the GRSG as warranted but precluded under the Endangered Species Act (ESA) based on the mandates of the act. The USFWS have relied on an ambiguous and discerning clause concerning animal habitat as the sole issue. The “Elko County Greater Sage-Grouse Management and Conservation Strategy Plan” has identified the malfeasance of the USFWS GRSG populations in a white paper entitled “The Greater Sage Grouse Does Not Warrant Listing Under the Endangered Species Act.” Prepared by; Quinton J. Barr, Range Consultant, Western Range Services.

Mr. Barr states: Any answer to this question must be consistent with the primary purposes of the ESA and its definitions of endangered and threatened species. R. Barr concludes that the ESA states that the primary purposes of the Act are to: 1] “provide a means whereby ecosystems upon which endangered species and threatened species depend may be conserved” and, 2] “provide a program for the conservation of such endangered species and threatened species” (see ESA, Sec. 2(b) Purposes) (1). Since these purposes apply specifically to “endangered species and threatened species” a finding that a species is either endangered or threatened must occur before a species or the ecosystem (habitat) upon which it depends, falls under the purview of the Act. By definition under the ESA, an “endangered species” is “any species which is in danger of extinction” and a “threatened species” is “any species which is likely to become an endangered species within the foreseeable future” (see ESA, Definitions, Secs. 3(6) and 3(20)) (1). Thus, under the ESA, a species can only be listed as endangered if it faces imminent extinction, or as threatened if it is at risk of extinction in the foreseeable future.
Comment Number: NVCASG-14-0265-6
Comment Excerpt Text:
However, as the USFWS is considering the ESA listing of an indigenous North American species, the Greater Sage-Grouse, numerous studies have disclosed and proved that the primary predator of the GRSG nest and younglings is the Raven (Corvus corax) a nonnative invasive species. This reality alone should command legislative changes to the Migratory Bird Treaty Act to remove the common raven from the protected list to ensure the protection and security of future GRSG populations and other indigenous species that the common raven is known to predate in the United States. The USFWS is considering the listing of the GRSG and subsequently will make critical decisions that will have severe negative impacts to public and private lands in eleven western states. Changes to the Migratory Bird Treaty Act must be made to provide the tools for local and state agencies to control the predation of the Greater Sage-Grouse as an indigenous North American species while addressing sage steppe habitat using alternative management practices to curtail wildland fire.

Comment Number: NVCASG-14-0285-54
Comment Excerpt Text:
The Nevada – Northeastern California RMP Amendment should cure these problems for BLM and Forest Service-managed lands and projects on federally managed minerals by establishing Priority and General Habitat boundaries as inviolate and permanent designations (at least throughout the life of the Plan) and by precluding exceptions or waivers of sage grouse measures within these respective habitats. BLM must ensure that all Priority Habitat and/or General Habitat protections are nondiscretionary standards, so the agency can rely on them as conservation measures that are adequate and reliable in the context of Endangered Species decision making by the U.S. Fish and Wildlife Service.

Comment Number: NVCASG-14-0285-87
Comment Excerpt Text:
We caution the BLM that there is a need to achieve regulatory certainty in fulfillment of the USFWS Policy on Effectiveness of Conservation Efforts (“PECE Policy”). Throughout Alternatives D and E, uncertainty is introduced through discretionary exception criteria, which would be applied in a manner that renders it impossible to know how broad the exceptions would be, covering how many acres, and resulting in negative impacts on sage grouse the magnitude of which would not be possible to calculate due to the impossibility of forecasting the degree to which exceptions would be granted. We understand that it is the agency culture of the BLM to reserve for itself broad discretionary authority to maintain a flexible approach to land management, as the NEPA and FLPMA statutes under which the agency is accustomed to operate grant broad discretion to choose any number of outcomes as long as process-based procedures are followed on the way to reaching the final agency action. The Endangered Species Act, however, is an entirely different statute, with substantive requirements that threats to the persistence of candidate species be addressed in a manner that incorporates scientifically sound and defensible protection measures to ensure that they will be eliminated or minimized. If the BLM crafts a final sage grouse plan amendment that leaves to future discretion the question of whether protective measures will actually apply within Priority or General Habitats, it eliminates the certainty that regulatory measures will be enforced, and thereby undermines the plan amendment’s ability to be relied upon as an adequate regulatory measures in the context of the ultimate question of whether to list the greater sage grouse under the Endangered Species Act.

Comment Number: NVCASG-14-0308-5
Comment Excerpt Text:
The LUPA/DEIS is deficient on required baseline information that would give the reader context in reviewing the preferred alternative. The CEQ regulations require consideration of a “No Action” alternative in an EIS for good reason. The “No Action” alternative provides the baseline information required to determine the likely effects of the action alternatives. In an environmental review of plan amendments that are aimed at conserving sage-
grouse this baseline data includes sage-grouse lek data and surveying/monitoring information and livestock grazing management information, both of which are seriously lacking.

**Comment Number: NVCASG-14-0309-40**

*Comment Excerpt Text:*
We raise the issue of Amendment 2 (which resulted from 1990s litigation by the Nevada Wildlife Federation), because an expanded version of Amendment 2, with equal protections for GRSG riparian brood rearing habitats and much more conservative use standards as triggers for livestock removal, provide a reasonable template for agency management of any areas that continue to suffer grazing. This is NOT a substitute for agencies first conducting a fair and valid capability and suitability analysis for sage-grouse habitats, and finding lands where grazing conflicts need to be ended.

**Comment Number: NVCASG-14-0311-17**

*Comment Excerpt Text:*
In an opinion by Idaho Federal District Judge B. Lynn Winmill, he made a statement in dicta that the NTT Report is the best available science. See Western Watersheds Project v. Salazar, 2012 WL 5880658 at *2 (D. Idaho Nov. 20, 2012). But Judge Winmill's comment was not based on a thorough discussion of the merits of the NTT Report, especially in light of subsequent reports and scientific statements that throw into question the validity of the NTT Report and its creation. For example, the Service's Conservation Objectives Team ("COT") Report also purports to be the best available science. See Section 1.1.1. The State of Nevada's plan purports to be the best available science. See Section ES.8.5.

**Comment Number: NVCASG-14-0311-18**

*Comment Excerpt Text:*
WAFWA sent a letter to the Secretary of the Interior on May 16, 2013 cautioning against using the NTT Report's "one size fits all" approach. The NTT Report suffers from possible Federal Advisory Committee Act problems due to the constitution and makeup of the NTT Committee and the lack of compliance with the Federal Advisory Committee Act's standards. 5 U.S.C. App. 2, §§ 1-16. Peer review comments on the NTT Report dated December 18, 2012 also raise a number of concerns related to the scientific integrity of the Report. These reviewer comments were attached to correspondence from Secretary Salazar to Congressman Doc Hastings dated December 18, 2012. The review comments speak for themselves but specific comments raise significant concerns:

- "The approach taken in the document is rather short-term and narrow."
- "This seems a strange blend of policy loosely backed by citations, with no analysis of the science."
- "Lack of consideration of space, and particularly (in this document) time is a critical mistake that, to me, renders this document problematic, if not dangerous."
The FEIS should explain how these and other critical comments were incorporated into the final version of the NTT Report that was issued very shortly after this critical peer review.

**Comment Number: NVCASG-14-0312-6**

**Comment Excerpt Text:**
Alternative C. Comment: This is not consistent with the Taylor Grazing Act nor the BLM's multiple use mandate. This would eliminate all grazing which would result in an annual loss of $136 million of economic output, $50 million in labor earnings and 1489 full time job losses.

**Comment Number: NVCASG-14-0342-13**

**Comment Excerpt Text:**
The Agencies have a legal obligation to comply with the General Mining Law, Mining and Minerals Policy Act, and FLPMA to recognize the Nation's need for domestic sources of minerals and the right to explore. It is at best careless, and at worst remarkably disingenuous, to identify locatable minerals as a "principle use" and then fail to identify the applicable laws for managing them and then propose management actions that are contrary to the General Mining Law and outside BLM's discretion as described above.

**Comment Number: NVCASG-14-0342-26**

**Comment Excerpt Text:**
1. The USFWS has had a long-standing policy of working to conserve "candidate" species through several means, including a grants program funds conservation projects by private landowners, states and territories; and two voluntary programs - Candidate Conservation Agreements (CCAs) and Candidate Conservation Agreements with Assurances (CCAAs) - engage participants to implement specific actions that remove or reduce the threats to candidate species, which helps stabilize or restore the species and can preclude the need for ESA listing.

2. Additionally, the Service is directed by Congress "make prompt use" of emergency listing authority under Section 7 of the ESA if warranted for candidate species, 16 U.S.C. § (b) (3) (C) (iii). None of these presently existing important ESA tools are accounted for in this NEPA process.

**Comment Number: NVCASG-14-0342-29**

**Comment Excerpt Text:**
Some of the LUPA alternatives propose withdrawing land from mineral entry. Any withdrawals from mineral entry conflict with the General Mining Law of 1872 and is not consistent with FLPMA's multiple use mandate or the specific directive pertaining to minerals in FLPMA § 102(a) (12).

**Comment Number: NVCASG-14-0342-3**

**Comment Excerpt Text:**
Withdrawals of the magnitude proposed under Alternatives B, C, D, and F conflict with the FLPMA's multiple use mandate, § 22 of the General Mining Law, the Mining and Minerals Policy Act, and cannot be implemented through the LUPA process.

**Comment Number: NVCASG-14-0342-39**

**Comment Excerpt Text:**
Alternative F also proposes to designate substantial acreage as ACESs for GRSG conservation. These designations are contrary to the multiple use mandates under FLPMA and the NFMA. Further, certain ACECs may be subject to valid existing rights, and therefore, may conflict with the General Mining Law of 1872.

**Comment Number: NVCASG-14-0342-4**

**Comment Excerpt Text:**
Moreover, the BLM's NEPA review and LUPA amendments are not the appropriate mechanisms by which to make these sorts of land use withdrawals. BLM's Surface Management Handbook explicitly provides that land use plans may not limit mining activity.

**Comment Number: NVCASG-14-0342-5**

**Comment Excerpt Text:**
The Mining and Minerals Policy Act of 1970, which declares that it "is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in (1) the development of economically sound and stable domestic mining,
mineral, metal and mineral reclamation industries, (2) the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs. . . ." 30 U.S.C. § 21a. BLM’s planning criteria for the proposed LUPA omit any reference to this important Congressional policy statement. It is also evident that BLM and the Forest Service overlooked this important national policy in formulating LUPA elements and alternatives.9

The proposed withdrawal of millions of acres from energy and mineral exploration and leasing is directly at odds with this statute. The Agencies must reconsider these measures in light of its multiple use obligations under FLPMA and the Mining and Minerals Policy Act.

Comment Number: NVCASG-14-0342-6
Comment Excerpt Text:
None of the DEIS documents identify the Mining and Minerals Policy Act in the list of planning criteria.

Comment Number: NVCASG-14-0344-12
Comment Excerpt Text:
Section 363 of the Energy Policy Act of 2005 (EPAct) requires federal land management agencies to ensure that lease stipulations are applied consistently. The Draft LUPA/DEIS ignores established BLM policy that states "the least restrictive stipulation that effectively accomplished the resource objectives or uses for a given alternative should be used." A statement that there are conflicting resource values or uses does not justify the application of restrictions. An examination of less restrictive measures must be a fundamental element of a balanced analysis and documented accordingly in the FEIS.

Comment Number: NVCASG-14-0348-1
Comment Excerpt Text:
The DEIS further estimates that the proposed grazing reductions with Alternative C will result in an annual loss of $136 million in total economic output, $50 million in labor earnings, and 1,489 full-time jobs across the sub area. Alternative C is clearly inconsistent with the BLM multiple use mandate and existing laws such as the Taylor Grazing Act.

Comment Number: NVCASG-14-0351-4
Comment Excerpt Text:
Furthermore, nowhere does the Constitution of the United States delegate authority to the federal government to manage a native and non-migratory wildlife species. The Constitution has supremacy over acts of congress, including the ESA. Therefore this EIS has no legal basis or authority to proceed. Additionally, since the Draft EIS must recognize state authority and state police powers and coordinate any management plan with state land use plans, the Draft EIS fails to follow established federal law.

Comment Number: NVCASG-14-0358-1
Comment Excerpt Text:
Alternative C is clearly inconsistent with the BLM multiple use mandate and existing laws such as the Taylor Grazing Act.
Comment Number: NVCASG-14-0367-20
Comment Excerpt Text:
In the Energy Policy Act of 2005, Congress called for approval of non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity within ten years of the enactment of the act. Furthermore, on May 18, 2001, President Bush issued Executive Order (E.O.) 13212, “Actions to Expedite Energy-Related Projects,” establishing the policy that federal agencies should take appropriate actions, consistent with applicable law, to expedite projects to increase the production, transmission, or conservation of energy.

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

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

Comment Number: NVCASG-14-0367-7
Comment Excerpt Text:
This sage-grouse management policy described in the NTT Report, in conjunction with the NOI and the IMs, elevates sage-grouse management above other multiple uses on the federal public lands. This is the case even though BLM and the FS have established their multiple-use management mandate, which trumps single-species management, in the Federal Land Policy and Management Act of 1976, as amended, (FLPMA), the National Forest Management Act of 1976 (NFMA), and the Multiple-Use Sustained-Yield Act of 1960.

Comment Number: NVCASG-14-0367-8
Comment Excerpt Text:
NFMA establishes a multiple-use and sustainable yield policy with respect to the management of national forests. Specifically, NFMA calls for the coordination of the multiple diverse uses of National Forest System (NFS) lands, including “outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness.” Therefore, any measures that prefer single-species management over multiple-use management on NFS lands conflict with the multiple-use mandate plainly stated in statute.

Comment Number: NVCASG-14-0371-1
Comment Excerpt Text:
Unfortunately, the plan and the Environmental Impact Statement (EIS) do not adequately protect wild horses and burros in accordance with federal laws and regulations. The information included in these documents is outdated and incomplete. The EIS does not adequately reflect the Bureau of Land Management’s (BLM’s) MANDATE to protect wild horses and burros vs. its DISCRETION to authorize livestock grazing.

Comment Number: NVCASG-14-0375-1
Comment Excerpt Text:
In the description of wild horse use, only sections of the Wild Free Roaming Horses and Burros Act (WFRH&B Act) that could be interpreted as restricting wild horse use are included, omitting basic premise words such as "protected, integral." When
quoting FLPMA, again, only the sections that could be interpreted as limiting wild horse use are quoted, yet the fact is that FLPMA was not intended to derogate any existing premise of law, such as protecting wild horses on public land. Another such example of the possible misrepresentation of the WFRH&B Act can be seen in this statement made on page 62 of Chapter 3: "BLM and Forest Service policies and regulations also direct that wild horses and burros are to be managed as self-sustaining populations of healthy animals at minimal feasible levels." The actual language of the Act is: "All management activities shall be at the minimal feasible level." The statement made in the GSGPS limits horses; the actual statement in the Act limits management. This should be rectified.

Comment Number: NVCAG-14-0396-2
Comment Excerpt Text: Grazing Permit Retirement: There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated permanently (see DEIS Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing.

4. GREATER SAGE-GROUSE

4.1 NTT REPORT/FINDINGS

Comment Number: NVCAG-14-0066-3
Comment Excerpt Text: Alternative B. Development of this alternative is based on a report that was developed by wildlife managers and biologists in the absence of other key experts, such as range scientists. The effects from this alternative, at least as they relate to measures imposed on permitted livestock grazing and their resulting economic effects, were not adequately disclosed in this DEIS. Further, the report was developed without regard to existing land use laws, regulations, and mandates.

Comment Number: NVCAG-14-0071-1
Comment Excerpt Text: Many of the proposed conservation initiatives contained in the Alternatives, particularly Alternative B, come from the National Technical Team Report (NTI) produced in 2010. This report has been shown to be flawed in many respects. It mischaracterizes previous scientific work, relies on invalid assumptions and analysis, contains many errors and omissions, lacks adequate peer review, and has now been replaced as the best available science by subsequent research reports produced by the USGS and others (M. Maxwell, "BLM’s NTI Report: Is It the Best Available Science or a Tool to Support a Predetermined Outcome, Northwest Mining Association, 2013).

The use of setbacks and buffers around leks is an excellent example of faulty science. The NTI report and other agency documents have proposed buffers which would restrict how close one could work from a lek. The restricted radius has varied from no restrictions to 1-mile, 2-mile, 3.2-mile, and 4-mile distances. Sound science needs to be presented in the Draft EIS to support these criteria. Relevant site-specific factors need to be taken into consideration in determining such buffers. Examples of such factors include topographical relief, the quality of a site’s habitat, the probability of sage-grouse actually nesting within the buffer area, time of year, duration of the project, and the like.

Comment Number: NVCAG-14-0091-15
Comment Excerpt Text: Additionally, we have a major concern with the way the DEIS inappropriately cites grazing related literature out of context. For example, Chapter 4, p. 15 states “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 NTI 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/year-long to managed systems that defer or rest much of the landscape from grazing during the sagegrouse nesting season. For ground nesting birds in general, Schultz (2010), 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.”

Comment Number: NVCASG-14-0091-40
Comment Excerpt Text:
The NTT Report failed to make use of the latest scientific and biological information available. The NTT Report is a selective incorporation of data and studies from a small number of GRSG advocates. It directly contradicts DOI Order No. 3305 on scientific integrity (DOI employees and contractors “must never suppress or alter, without new scientific or technological evidence, scientific or technological findings or conclusions.”)

The NTT Report also failed to acknowledge lower impact technologies and mitigation currently in use by the oil and gas industry, including specifically those detailed in Ramey, Brown, and Blackgoat (2011) and in a presentation to the NTT by BLM staff. In addition, the NTT report asserts that impacts from oil and natural gas development are “universally negative and typically severe” but provides no scientific data to support that assertion. This evidences bias against oil and gas in the NTT Report, which is contrary to the ESA and the Data Quality Act.

Comment Number: NVCASG-14-0091-41
Comment Excerpt Text:
There are substantial technical errors in the NTT Report including misleading use of citations and use of citations that are not provided in the “Literature Cited” section. This makes it difficult to provide scientific verification of the NTT Report’s claims.

Comment Number: NVCASG-14-0091-42
Comment Excerpt Text:
Two of the researchers, J.W. Connelly and B.L. Walker, are referenced frequently in the NTT Report, but 34% of the citations had no corresponding source available to review. This limits the ability of outside reviewers or the public to verify claims in the NTT Report and reduces the report’s scientific credibility. Additionally there are articles listed in “Literature Cited” that are not used within the NTT Report itself. The NTT Report is guilty of misleading use of authority. For example, the NTT Report stipulates that with regard to fuel management, sagebrush cover should not be reduced to less than 15%. However, Connelly et al. 2000, the source cited, does not support this proposition. Connelly et al. 2000 states that land treatments should not be based on schedules, targets, and quotas. Connelly et al. 2000 distinguished between types of habitat and provides that corresponding sagebrush canopy percentages which vary from 10 percent to 30 percent depending on habitat function and quality. These issues evidence bias and a lack of transparency and reproducibility in contravention to the Data Quality Act. They also violate Executive Order 13563, which calls for “objectivity of any scientific and technical information and processes used to support [an] agency’s regulatory actions.”
**Comment Number: NVCASG-14-0091-8**

Comment Excerpt Text:
The use of the NTT report is extremely problematic as it contains overly burdensome recommendations that are not based on local conditions in Nevada. The NTT report asserts that oil and natural gas and grazing “impacts are universally negative and typically severe,” but provides no scientific data to support that assertion. The report selectively presents “scientific” information to support overly burdensome conservation measures that are not based on local conditions. The Amendments rely too heavily upon a select few studies utilized by the NTT report, but also ignores other data and studies that clearly demonstrate impacts from oil and natural gas are not universally negative and typically severe. BLM should refrain from directly incorporating any of the NTT report recommendations into the proposed or final EIS. The use of the NTT report is problematic as it contains overly burdensome, blanket recommendations that are not based on local conditions. An independent review of the report shows that it contains many methodological and technical errors, cherry-picks scientific information to justify the report’s recommendations, and was developed by a small group of specialist advocates with narrow focus. The NTT report does not adequately represent a comprehensive and complete review of the best scientific data available and is inappropriate for primary use. (see Megan Maxwell, BLM’s NTT Report: Is It the Best Available Science or a Tool to Support a Pre-determined Outcome?, http://www.nwma.org/pdf/NWMA-NTTReview-Final-revised.pdf; Rob Roy Ramey, Data Quality Issues in A Report on National Greater Sage-Grouse Conservation Measures, Produced by the Sage-Grouse National Technical Team (NTT), September 19, 2013).

**Comment Number: NVCASG-14-0169-6**

Comment Excerpt Text:
In addition to having been overcome by subsequent scientific review and assessment of GRSG science, the use of the NTT Report to inform any "NTT-Only" Alternative or "Adjusted" Alternative is inappropriate because Instruction Memorandum (IM) 2012-044, directing consideration of the NTT Report, has expired. The IM expired September 9, 2013, well ahead of the publication date of the LUPA/DEIS reviewed here.

However, there is no acknowledgment in the DEIS documents of the expiration of the IM or explanation of any continuing authority to include any NTT Report recommendation for GRSG conservation into any proposed Alternative. This IM has apparently failed to continue as a policy directive for the agency.

**Comment Number: NVCASG-14-0169-7**

Comment Excerpt Text:
The DLUPA/DEIS incorporates the NTT Report's habitat management recommendations for GRSG priority habitat, including prescriptive restrictions and categorical prohibitions on access and use of lands within priority habitat including, among others: 1) 3% limit on surface disturbance; 2) 50-70% sagebrush cover threshold; 3) four-mile No Surface Occupancy (NSO); 4) Right-of-Way (ROW) exclusion and avoidance areas; 5) one disturbance per 640 acres; and 6) mineral withdrawals.

The DLUPA/DEIS proposes arbitrary conservation measures based on unproven assumptions that: 1) a minimum range of 50-70% of the acreage in sagebrush cover is required for long-term persistence of sage-grouse; 2) that discrete anthropogenic disturbances must be limited to less than 3% of the total sage-grouse habitat regardless of ownership, NTT Report at 6-7; and 3) a 15-25% minimum canopy cover is necessary in all sage-grouse seasonal habitats.
These arbitrary measures conflict with studies that indicate sagebrush cover preference differs between seasons. Thus, using a single percent cover is inappropriate and is not supported by the literature. A one-size-fits-all limit on disturbance to less than 3% of the total habitat is arbitrary, which is discussed in detail below. The United States Geological Survey (USGS) Report indicates that habitat fragmentation "generally begins to have significant effects on wildlife when suitable habitat becomes less than 30 to 50 percent of the landscape", which directly contradicts the threshold stating that 70% of the landscape must be suitable habitat in order for the sagegrouse to persist.

Comment Number: NVCASG-14-0169-8
Comment Excerpt Text:
Other deficiencies present in the NTT Report and associated studies include lack of independent authorship, methodological issues, and data quality issues such as failure to identify limiting factors, inadequate sampling, and use of inferior equipment. 19 Accordingly, any element of an Alternative chosen by BLM that relies on NIT will be legally flawed.

Comment Number: NVCASG-14-0169-9
Comment Excerpt Text:
While the NTT Report may have some experimental value, it must be narrowly considered in the context in which it was derived. Notably, at the time the NTT Report was prepared there was no USFWS directive to the states and Federal land management agencies. However, the landscape was fundamentally changed when the USFWS issued the COT Report. The COT Report was designed to "serve as guidance to Federal land management agencies, state sage-grouse teams, and others in focusing efforts to achieve effective conservation for this species."

Comment Number: NVCASG-14-0195-6
Comment Excerpt Text:
Serious concerns regarding the NTT’s compliance with the Data Quality Act, DOI Order No. 3305 on scientific integrity, and Executive Order 13563 which calls for "objectivity of any scientific and technical information and processes used to support [an] agency's regulatory actions."

Comment Number: NVCASG-14-0198-4
Comment Excerpt Text:
Many of the proposed conservation initiatives in the Alternatives, particularly Alternative B, come from the National Technical Team Report or NTT produced in 2010. This report has been shown to be flawed in many respects. It mischaracterizes previous scientific work, relies on invalid assumptions and analysis, contains many errors and omissions, lacks adequate peer review, and has now been replaced as the best available science by subsequent research.
reports produced by the USGS and others (M. Maxwell, "BLM's NIT Report: Is It the Best Available Science or a Tool to Support a Pre-determined Outcome, Northwest Mining Association, 2013).

Comment Number: NVCASG-14-0199-4
Comment Excerpt Text:
The use of the NTT report is extremely problematic as it contains overly burdensome recommendations that are not based on local conditions in Nevada. The NTT report asserts that oil and natural gas "impacts are universally negative and typically severe," but provides no scientific data to support that assertion. The report selectively presents "scientific" information to support overly burdensome conservation measures that are not based on local conditions. The Amendments rely too heavily upon a select few studies utilized by the NTT report, but also ignores other data and studies that clearly demonstrate impacts from oil and natural gas are not universally negative and typically severe. BLM should refrain from directly incorporating any of the NTT report recommendations into the proposed or final EIS.

Comment Number: NVCASG-14-0199-45
Comment Excerpt Text:
Two of the researchers, I.W. Connelly and B.L. Walker, are referenced frequently in the NTT Report, but 34% of the citations had no corresponding source available to review. This limits the ability of outside reviewers or the public to verify claims in the NTT Report and reduces the report's scientific credibility. 16 Additionally there are articles listed in "Literature Cited" that are not used within the NTT Report itself. 17

Comment Number: NVCASG-14-0201-20
Comment Excerpt Text:
Table 2.5. Description of Alternative Actions, Alternative B:

Among other issues, the NTT Report failed to make use of the best available scientific and biological information available. The NTT Report is a selective incorporation of data and studies from a small number of GRSG advocates. It directly contradicts DOI Order No. 3305 on scientific integrity. Specifically, DOI employees and contractors "must never suppress or alter, without new scientific or technological evidence, scientific or technological findings or conclusions." 6


The NTT Report failed to undergo an adequate peer review. The peer review of the NTT Report was conducted by Nevada Department of Wildlife Director, Ken Mayer.7 There is no evidence that Mr. Mayer has: (1) ever served as an editor or associate editor of a scientific journal; (2) organized a previous scientific peer review using accepted standards; (3) served as a peer reviewer at a scientific journal; or (4) ever published a peer-reviewed scientific paper in a reputable scientific journal.

In this case, the NTT Report also failed to address several comments and issues raised by peer reviewers.9 Some of the issues the NTT Report failed to include support for the flawed reasoning behind consolidating all GRSG seasonal habitats and the use of one-size-fits-all regulatory prescriptions such as disturbance caps and four-mile buffers. 10 This is contrary to DOI and BLM guidelines on the Data Quality Act. 11 It also contradicts BLM's own Data Quality Act memorandum specifically addressing peer review 12 Accordingly, BLM's reliance on the NTT Report should be carefully reconsidered and it is likely that selection of Alternative B, or individual elements of Alternative B, would be subject to the same criticisms and legal challenges.
Comment Number: NVCASG-14-0205-17
Comment Excerpt Text:
The NTT report did not acknowledge or make use of best available scientific and commercial data. This includes information that had been compiled by the BLM and provided to the NTT. The NTT omits numerous scientific papers and reports on energy, livestock, mining, and fluid mineral mitigation measures for sage grouse, the mitigation of raven predation on sage grouse, the fact that sage grouse disperse over greater distances than previously thought, and that they traverse (fly) over or around roads, agricultural areas, and oil and gas development. The NTT report recommended numerous one-size-fits-all regulatory prescriptions and made no allowance for recommendations for including local sage grouse conservation plans (i.e. county-level, working group, or private land) that have tailored conservation measures to local conditions, including unique habitat and threats, and socio-economic factors.

Comment Number: NVCASG-14-0224-1
Comment Excerpt Text:
We object to BLM’s reliance upon the NTT report as its principal guiding document, particularly for oil and gas leasing and operations, because it failed to utilize any type of systematic cataloging and quantitative evaluation to determine the type, extent and effectiveness of mitigation measures currently employed by the oil and gas industry. Moreover, the NTT report is clearly biased as evidenced by its assertion that oil and gas “impacts are universally negative and typically severe,” particularly since the NTT utilized little or no useful and site-specific data upon which to base that conclusion. In fact, this statement is predicated upon a select few studies while ignoring other data and studies that clearly demonstrate impacts from oil and gas are not universally negative and typically severe. While we acknowledge there may be temporary decreases in lek counts within close proximity to initial well construction and other activities, this cannot be construed to indicate general population declines. Rather, it has been scientifically demonstrated that the GRSG are simply temporarily displaced to other areas with less activity until the initial area returns to a less active state.

Comment Number: NVCASG-14-0224-2
Comment Excerpt Text:
An overview of the Cooper Ornithological Society’s Monograph: Studies in Avian Biology (Monograph), the primary source of information relied upon by the NTT (and the USFWS in making its 2010 listing determination), was conducted by the Center for Environmental Science, Accuracy and Reliability (CESAR) in February 2012 entitled “Science or Advocacy?” which found:

- Significant mischaracterization of previous research;
- Substantial errors and omissions;
- Lack of independent authorship and peer review (3 of the authors of the NTT are also the authors, researchers, and editors on 3 of the most cited sources in the NTT.)
- Methodological bias;
- Invalid assumptions and analysis; and
- Inadequate data.

CESAR was not alone in finding significant fault with the Monograph. Reviews were also conducted separately by scientists commissioned by the State of Colorado which found the same exact defects. Not
surprising, theirs and other comments on the
Monograph were ignored by DOI and the NTT.
Similar findings regarding the NTT report were made
in a review recently prepared for Western Energy
Alliance in which it was discovered that “the NTT
report represents a partial presentation of scientific
information to justify a narrow range of preferred
conservation measures and policies that will be
imposed as land use regulations by the BLM. In
contrast, an objective scientific review would have led
to a broadening of conservation alternatives for
decision makers to choose from.”

I Review of Data Quality Issues in A Report on
National Greater GRSG Conservation Measures
Produced by the BLM GRSG National Technical
Team (NTT) Dated December 21, 2011. Dr. Rob
Ramey, III, Wildlife International Inc. (Attachment A)

**Comment Number:** NVCASG-14-0285-79
**Comment Excerpt Text:**
The National Technical Team Report prescribes a
number of conservation measures for sage grouse
General Habitat, the lands outside priority habitat.
These include avoidance for the purposes of rights-
of-way and enhanced riparian area protections, for
example. The Nevada – Eastern California DEIS does
not appear to consider alternatives to provide all
enhanced 63 protections for sage grouse Priority and
General Habitats of the type recommended in the
National Technical Team report. Under current BLM
policy, the agency must fully consider implementing
the recommendations of the National Technical
Team in at least one alternative, and this direction
applies to Priority and General Habitats alike. This
shortcoming should be addressed in the Final EIS, and
General Habitats should be accorded the protections
necessary to maintain viable populations of this BLM
Sensitive Species.

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

**Comment Number:** NVCASG-14-0288-1
**Comment Excerpt Text:**
Much of the information and alternatives within the
LUP is based on the BLM’s National Technical Team
(NTT) report. We find great fault with this report
and in its development and therefore cannot support
any alternative based on it. The NTT report did not
include input from any affected stakeholder or
interdisciplinary experts aside from state and federal
scientists and specialists; it ignores regional variances
in sage grouse needs, is not a comprehensive
representation of the literature and research
surrounding livestock grazing and other uses, and has
not been scientifically peer reviewed for accuracy.
For these reasons, any alternative based on the NTT
report is not justifiable.

**Comment Number:** NVCASG-14-0290-4
**Comment Excerpt Text:**
Alternative B is based on the National Technical
Team (NIT) Report, produced by the Sage-Grouse
National Technical Team. The NIT Report creates
policies that assume Sage-Grouse conservation is the
highest and best use of the land, while subordinating
other interests, such as mineral exploration and
development. The EIS needs to reevaluate the
adequacy of the NIT Report and whether it is based
on sound science and if it is legally defensible. The EIS
(or an appendix to the EIS) should fully justify the
scientific methods used and legality in the NIT Report
and the conclusions drawn.

**Comment Number:** NVCASG-14-0291-4
**Comment Excerpt Text:**
Alternative B is based on the National Technical
Team (NTT) Report, produced by the Sage-Grouse
National Technical Team, dated December 21, 2011.
The NTT Report creates policies that assume Sage-
Grouse conservation is the highest and best use of
the land, while subordinating other interests, such as
mineral exploration and development. The NTT
Report evolved without adequate analysis of its legal
adequacy, the economic impacts these policies will
have on local communities, and the nation’s economy.
The NTT Report does not contain the latest science
or best biological judgment to assist in making
management decisions regarding Sage-Grouse. Furthermore, the NTT Report does not utilize all available and current/recent scientific research regarding Sage-Grouse. The NTT relies on studies that have been criticized for:

- Significant mischaracterization of previous research;
- Substantial errors and omissions;
- Lack of independent authorship and peer review;
- Methodological bias;
- A lack of reproducibility;
- Invalid assumptions and analysis; and
- Inadequate data

**Comment Number: NVCASG-14-0309-22**

**Comment Excerpt Text:**

DEIS at 1-4 shows BLM knows it is to consider “all applicable conservation measures when revising or amending its LUPs in GRSG habitat, including the measures developed in the NTT”. This does not limit the consideration to just the measures of the NTT.

Given the information on Threats presented in the WBP Finding and Knick and Connelly 2011 Studies in Avian Biology, urgent action is needed to - including stronger action than the NTT. But BLM’s Alternative significantly diminishes NTT protections, and worsens segregated management of occupied habitat. Even the COT, after jettisoning entire populations, claimed that all remaining habitats were critical. BLM’s alternative would allow up to 10% of the Priority Habitat to be changed. Depending on the location of this habitat in relation to areas crucial to sage-grouse populations, such incursions could be devastating.

**Comment Number: NVCASG-14-0311-17**

**Comment Excerpt Text:**

In an opinion by Idaho Federal District Judge B. Lynn Winmill, he made a statement in dicta that the NTT Report is the best available science. See Western Watersheds Project v. Salazar, 2012 WL 5880658 at *2 (D. Idaho Nov. 20, 2012). But Judge Winmill’s comment was not based on a thorough discussion of the merits of the NTT Report, especially in light of subsequent reports and scientific statements that throw into question the validity of the NTT Report and its creation. For example, the Service’s Conservation Objectives Team (“COT”) Report also purports to be the best available science. See Section 1.1.1. The State of Nevada’s plan purports to be the best available science. See Section ES.8.5.

**Comment Number: NVCASG-14-0311-18**

**Comment Excerpt Text:**

WAFWA sent a letter to the Secretary of the Interior on May 16, 2013 cautioning against using the NTT Report's "one size fits all" approach. The NTT Report suffers from possible Federal Advisory Committee Act problems due to the constitution and makeup of the NTT Committee and the lack of compliance with the Federal Advisory Committee
Act's standards. 5 U.S.C. App. 2, §§ 1-16. Peer review comments on the NTT Report dated December 18, 2012 also raise a number of concerns related to the scientific integrity of the Report. These reviewer comments were attached to correspondence from Secretary Salazar to Congressman Doc Hastings dated December 18, 2012. The review comments speak for themselves but specific comments raise significant concerns:

- "The approach taken in the document is rather short-term and narrow."
- "This seems a strange blend of policy loosely backed by citations, with no analysis of the science."
- "Lack of consideration of space, and particularly (in this document) time is a critical mistake that, to me, renders this document problematic, if not dangerous."

The FEIS should explain how these and other critical comments were incorporated into the final version of the NTT Report that was issued very shortly after this critical peer review.

**Comment Number: NVCASG-14-0342-10**
**Comment Excerpt Text:**
To achieve the primary objective the NTT Report sets forth sub-objectives. Two of the four sub-objectives assert that 70% of the range within priority habitat needs to provide “adequate” sagebrush habitat to meet sage-grouse needs, and that discrete anthropogenic disturbances in priority habitat be limited to less than 3% of the total sage-grouse habitat regardless of ownership NTT Report at 7. These objectives are not supported by the literature.

**Comment Number: NVCASG-14-0342-11**
**Comment Excerpt Text:**
Other deficiencies present in the NTT Report and associated studies include lack of independent authorship, methodological issues, and data quality issues such as failure to identify limiting factors, inadequate sampling, and use of inferior equipment. Accordingly, any element of an Alternative chosen by BLM that relies on NTT will be legally flawed.

**Comment Number: NVCASG-14-0342-12**
**Comment Excerpt Text:**
Simplifying GRSG management by proposing "one-size-fits-all" habitat prescriptions or percent disturbance thresholds fails to target the specific sub-regional and population scale factors, as well as seasonal habitat preferences. The simplistic "one-size-fits-all" approach advanced in the NTT Report and adopted into the DLUPA/DEIS completely fails to recognize this variation and complexity which is a critical flaw. Consequently, the habitat management recommendations proposed under NTT-weighted Alternatives not only fail to protect GRSG and GRSG habitat range-wide, but they could harm, rather that conserve the GRSG and will result in adverse consequences, such as increased risk of catastrophic fire and habitat destruction, and unnecessary and overly burdensome management of the regulated community.

**Comment Number: NVCASG-14-0342-28**
**Comment Excerpt Text:**
The science BLM relies upon in the DEIS documents, in particular to support Alternative B, the "NTT-only" Alternative, does not, in fact, represent the "best available science" standard. Rather, the NTT relies on studies that have been criticized for:

- Significant mischaracterization of previous research;
- Substantial errors and omissions;
- Lack of independent authorship and peer review;
- Methodological bias;
- A lack of reproducibility;
- Invalid assumptions and analysis; and
- Inadequate data.

**Comment Number: NVCASG-14-0342-7**
**Comment Excerpt Text:**
The NTT Report evolved without adequate science, analysis of its legal adequacy, or analysis of the economic impacts these policies will have on local communities and the Nation's economy. This
fundamental flaw was recognized by Department of Interior employees involved with developing the NTT Report.

**Comment Number: NVCASG-14-0342-8**
**Comment Excerpt Text:**
The use of the NTT Report to inform any "NTT-Only" Alternative or "Adjusted" Alternative is inappropriate because Instruction Memorandum (IM) 2012-044, directing consideration of the NTT Report, has expired. The IM expired September 9, 2013, well ahead of the publication date of the LUPA/DEIS reviewed here.

However, there is no acknowledgment in the DEIS documents of the expiration of the IM or explanation of any continuing authority to include any NTT Report recommendation for GRSG conservation into any proposed Alternative.

**Comment Number: NVCASG-14-0344-1**
**Comment Excerpt Text:**
The use of the National Technical Team (NTT) report is flawed because the measures developed and presented in this report were developed without any scope or boundaries. Therefore, many of the conservation measures in the NTT report to not account for the potential repercussions on the public land users.

**Comment Number: NVCASG-14-0344-23**
**Comment Excerpt Text:**
Table 2.5. Description of Alternative Actions, Alternative B:

Among other issues, the NTT Report did not use of the best available scientific and biological information available. The NTT Report is a selective incorporation of data and studies from a small number of GRSG advocates. The NTT Report also did not acknowledge lower impact technologies and mitigation currently in use by the oil and gas industry, including specifically those detailed in Ramey, Brown, and Blackgoat (2011) and in a presentation to the NTT by BLM staff. In addition, the NTT report asserts that impacts from oil and natural gas development are "universally negative and typically severe" but provides no scientific data to support that assertion. This evidences bias against oil and gas in the NTT Report, which is contrary to the ESA and the Data Quality Act. It also appears to contradict DOI Order No. 3305 on scientific integrity.

**Comment Number: NVCASG-14-0344-24**
**Comment Excerpt Text:**
There are substantial technical errors in the NTT Report including misleading use of citations and use of citations that are not provided in the "Literature Cited" section." This makes it difficult to provide scientific verification of the NTT Report's claims.9

Two of the researchers, J.W. Connelly and B.L. Walker, are referenced frequently in the NTT Report, but 34% of the citations had no corresponding source available to review.2 This limits the ability of outside reviewers or the public to verify claims in the NTT Report and reduces the report's scientific credibility.21 Additionally there are articles listed in "Literature Cited" that are not used within the NTT Report itself22

Errors of omission in the NTT Report include numerous scientific papers and reports on oil and gas and mitigation measures. For example, work by Renee Taylor, and others, demonstrates that temporary GRSG population variations can occur in historic oil and gas areas in Wyoming. The NTT Report also fails to address papers and reports on mitigation of raven predation on GRSG, the fact that GRSG disperse over greater distances than previously thought, and that, while temporary disturbance may occur in response to human activities, GRSG traverse over or around roads, agricultural areas, and oil and gas development.23

The NTT Report appears not to have undergone an adequate peer review. In this case, the NTT Report also failed to address several comments and issues raised by peer reviewers.24 Some of the issues the NTT Report failed to include support for the flawed reasoning behind consolidating all GRSG seasonal habitats and the use of one-size-fits-all regulatory prescriptions such as disturbance caps and four-mile
buffers.25 This is contrary to DOI and BLM guidelines on the Data Quality Act.2° It also contradicts BLM’s own Data Quality Act memorandum specifically addressing peer review.27 Accordingly, BLM’s reliance on the NTT Report should be carefully reconsidered and it is likely that selection of Alternative B, or individual elements of Alternative B, would be subject to the same criticisms and legal challenges.

Comment Number: NVCASG-14-0344-6
Comment Excerpt Text:
The use of the NTT report is particularly problematic because it contains recommendations that are not based on local conditions in Nevada and this are overly burdensome and not likely to be effective. The NTT report asserts that oil and natural gas "impacts are universally negative and typically severe," but provides no scientific data to support that assertion. More concerning is the apparent approach taken in the report to selectively present "scientific" information to support overly burdensome conservation measures that are not based on local conditions. The Amendments rely too heavily upon a select few studies utilized by the NTT report, but also ignores other data and studies that clearly demonstrate impacts from oil and natural gas are not universally negative and typically severe.

Comment Number: NVCASG-14-0348-2
Comment Excerpt Text:
Alternatives B, C, and F are all based entirely or partially on the NTT Report. The measures in the NTT report provide little if any flexibility; there is no opportunity for case-by-case examination of the site-specific conditions and issues. These types of regulations are overly burdensome. Alternative E includes the types of flexibility that is needed to maintain opportunities for Outfitters like myself and other land users. The approach of examining how each of the land agencies’ programs contribute to the decline of sage grouse, and then seeking to modify the programs to eliminate the impacts creates hardships on the land users, often with insignificant benefits to sage grouse. However, we find that the use of the NTT report to develop alternatives for the Draft DEIS to be problematic. This report is flawed in many ways and the conservation measures generated by this report need to be reconsidered. Many of the conservation measures in the NTT report have no regard for the potential repercussions on the public land users; they focus only on sage grouse, regardless of the magnitude of the benefit to sage grouse of actions carried out under each resource program. As such, alternatives based on the NTT report do not comply with the multiple-use concept under FLPMA. This is a single-species management approach to a complex issue, and there are unintended consequences from such an approach.

Comment Number: NVCASG-14-0359-1
Comment Excerpt Text:
Please look into the NTT report and the review conducted on this study. It does not provide sufficient evidence that the bird is threatened, endangered or in need of protection and specifically warns using it for such a determination. In addition there is no peer reviewed research backing up this sort or any sort, of a listing.

Comment Number: NVCASG-14-0367-6
Comment Excerpt Text:
We also note that the NTT Report is inconsistent with the requirements of FACA. In enacting FACA, Congress declared that “standards and uniform procedures should govern the establishment, operation, administration, and duration of advisory committees” and that “the public should be kept informed with respect to the number, purpose, membership, activities, and cost of advisory committees.” In accordance with these declarations, FACA requires the publication of a Federal Register notice when an advisory committee is established. Despite this mandate, no Federal Register notice was published with respect to the preparation of the NTT.

Another central principle imposed by FACA is to “require the membership of the advisory committee to be fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee.” This requirement of balanced participation was not adhered to in the
preparation of the NTT. According to the NTT, members of the team included personnel from “the BLM, State Fish and Wildlife Agencies, USFWS, Natural Resources Conservation Services (NRCS) and U.S. Geological Survey (USGS).” Despite the diverse balance of federal agency personnel represented, no private interests from industry or the NGO arena were present, thereby preventing the committee from considering the requisite range of perspectives.

4.2 CONSERVATION OBJECTIVES TEAM (COT) REPORT

Comment Number: NVCASG-14-0188-5
Comment Excerpt Text:
BLM should carefully reconsider its reliance on the COT Report in the Draft LUPA/DEIS. A more balanced approach to landscape scale management is warranted.

Page 16, 1.5.2. Issues Identified for Consideration in the Nevada and Northeastern California Sub-region Greater Sage-Grouse LUPAs

The list of bullets continues the theme of the COT Report - "protect", "limitations", "restrictions", and "avoidance and exclusion areas;" these terms set the tone and imply emphasis of one resource at the expense of another, not the multiple-use concept that is espoused as being included the Draft LUPA/DEIS document. There is no mention of an ecological approach to resolving the issues, just restrictions on what can be done on public lands. "Best Science" should be more than a list of what cannot be done on public lands.

Comment Number: NVCASG-14-0195-5
Comment Excerpt Text:
The COT report does not represent a comprehensive scientific review; rather, it is simply an incomplete examination of limited literature and unpublished reports that were used to "identify conservation objectives to ensure the long-term viability of the GRSG.” In fact, the COT report provides no original data or quantitative analyses and notably fails to review all of the available scientific literature on the GRSG. Consequently, this severely limited review perpetuates outdated information and assumptions in the COT report.

Comment Number: NVCASG-14-0224-3
Comment Excerpt Text:
Of primary concern is that the COT report does not represent a comprehensive scientific review; rather, it is simply an incomplete examination of limited literature and unpublished reports that were used to "identify conservation objectives to ensure the long-term viability of the GRSG.” In fact, the COT report provides no original data or quantitative analyses and notably fails to review all of the available scientific literature on the GRSG. Consequently, this severely limited review perpetuates outdated information and assumptions in the COT report.

An example of its inadequacy is the fact that the COT report’s threats analysis, population definitions, current and projected numbers of males, and probability of population persistence are heavily based upon a paper by Edward O. Garton. Notably, Garton et al. 2011 is the most frequently cited paper in the COT report. The same significant methodological biases and mathematical errors within the COT report were also present in the final revisions of Garton et al. 2011. Moreover, the fact that the data and programs used in Garton et al 2011 are not available for public review and are not reproducible, seriously compromises the scientific integrity of the COT report.


4 Rob Roy Ramey, Data Quality Issues in the Greater Sage Grouse (Centrocercus urophasianus)

Comment Number: NVCASG-14-0253-2
Comment Excerpt Text:
The preferred alternative does not allow for adaptive management. Found in the USFWS' Greater Sage Grouse Conservation Objectives: Final Report, also referred to as the COT Report, under Appendix B: Policy for the Evaluation of Conservation Efforts when Making Listing Decisions adaptive management is defined as a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. An adaptive, case-by-case approach will ensure that efforts and resources expended in the name of greater sage-grouse conservation are well spent. Ecosystems vary; site potential, plant communities, soil types, environmental influences, precipitation patterns and plant production and vigor are highly variable and cannot be appropriately managed by single-source standards and guidelines. The regulations should allow flexibility to land users.

Comment Number: NVCASG-14-0309-10
Comment Excerpt Text:
In 2013, FWS considered it “best available science” to base population information on lek data that was over 5 years old. The population analysis in the COT Report Table used the Garton (Knick and Connelly 2009/2011) population analysis numbers of 2007 or 2008, and the prior decade. Using 5 year old lek data in 2013 to draw conclusions on the status of populations impacted especially by the 2007-2008 fires makes little sense.

Comment Number: NVCASG-14-0309-11
Comment Excerpt Text:
FWS in the COT used 500 birds as a threshold for population viability. See COT Table Population abundance and estimated quasi-extinction risk. Yet recent science, such as the BSSG Proposed Rule – shows a much higher number, citing Trail.

Comment Number: NVCASG-14-0309-25
Comment Excerpt Text:
The DEIS at 1.1.2 fails to provide an adequate analysis and take a hard look at the negative impacts of the COT process and outcome. The COT did not undergo NEPA. The DEIS fails to take NEPA’s required hard look at the severe blow the COT habitat cuts dealt to sage-grouse conservation, habitats and population viability in neighboring Idaho – and that will have adverse effects on viability of populations shared with Nevada and other neighboring states. The DEIS cannot blindly accept the results of the COT group (various agency staff and a Wyoming operative). Prominent sage-grouse scientists distanced themselves from the COT. The harmful and negative aspects of the COT habitat cuts and segregation must be fully aired and subject to scrutiny under NEPA in this current DEIS process. They have not been. This is critical since the harmful Idaho State Plan habitat cuts and segregation are inter-twined with the COT mapping. Idaho BLM then in the DEIS mimics the COT segmentation to some degree, diminishing Priority habitat by 1.6 million acres, and adding a new habitat segmentation category of “medial” habitat.

Comment Number: NVCASG-14-0309-27
Comment Excerpt Text:
The COT cuts in habitats reduce conservation and viability of populations, and appear to be based on the desires of the often anti-conservation pro-development western states with conservative Governors who control the state wildlife Departments.

The COT perpetuated the WAFWA categorization of sagebrush habitat that has been used to mask concerns about loss of increasingly isolated populations and openly track declines– the Management Zones. Grouse populations were lumped in SMZs – based on generalized vegetation communities. But the vegetation communities of the contrived MZs have no real relation to the health/condition of sage-grouse habitat, or the viability of the species. Sage-grouse can survive just fine in sagebrush vegetation in any of the SMZs – and
can move between some of the SMZs. The use of this SMZ category allows agencies to overlook sharp declines (or the disappearance/extirpation) of entire populations the Quinn PMU in NV for example, and soon likely the Hamlin area birds), or overlook very low numbers until it is too late) The MZs typically lump several smaller or isolated populations in with a couple of larger ones in the 7 vegetation-based SMZs.

The COT mapping made large-scale cuts in sage-grouse habitat (in Idaho BLM PPH, IDFG Key see Idaho comments XXX), including habitat specifically identified for restoration, where sagebrush and other plant species had been seeded in fire rehab efforts by BLM. There is no objective analysis of the adequacy of the measures in COT with these cuts to be able to sustain populations over time.

The Garton et al. Chapter in Knick and Connelly 2011 found all populations with enough birds left to analyze were declining (based on 2007 and previous decade lek counts). There were significant viability concerns recognized, and all populations were recognized to be declining. So the COT, instead of moving habitat protection and restoration efforts forward to conserve populations, represents a large step backwards, with FWS retreating on sage-grouse protections.

After making the cuts, the COT then states that all the surviving “Priority Areas for Conservation” habitats must be protected. Yet both Alt D and E allow large-scale new development to take out even crucial habitats in the PAC areas in Nevada, and chronic disturbance to cause death by a thousand cuts to habitats.

NV now has occupied habitat, vs. BLM PPMA and PGMA.

There is no information provided in the DEIS on why the habitat and name changes/categories were made, or how having different habitat categories is in the interest of the birds. This is not a conservation action in the context of declining and increasingly fragmented populations.

The DEIS describes the “Affected Environment”, but it fails to provide information based on actual populations insufficient detail necessary to understand past losses, current conditions, and existing and foreseeable threats. Lek status, actual habitat conditions and losses, etc. are not sufficiently provided and assessed.

Crucial information on seasonal habitats for PMUs, sub-populations and populations is not assessed. Its location, habitat quality and habitat quantity must be provided.

Comment Number: NVCASG-14-0309-31
Comment Excerpt Text:
FWS Director Ashe’s Intro letter to the COT claims it minimizes habitat threat, which is the opposite of what it actually does because the COT cuts out areas of occupied sage-grouse habitats. FWS Ashe claims that minimization means that things will, eventually, get better: “measures put in place now will eventually arrest a declining population trend”. There is no certainty in this. Ashes states he asked the COT to make a recommendation on the degree to which threats need to be reduced or ameliorated to conserve GRSG so that the birds would no longer be in danger of extinction or likely to become in danger in the foreseeable future. He reiterates the meager WAFWA 2006 goals to reverse negative trends and achieve positive or neutral trends. Those WAFWA goals were based in part on the floristic-based MZs that lumped separate populations together. There is no update in the COT or the DEISs, based on lek data up to the present, of what has occurred since those 2006 goals, and especially how more intensive counting efforts were taken into account.

PACs are termed highly important for long-term viability. The COT “encourages but does not require” that attention be paid to important habitat outside PACs. (If it is important, it should have been in the PAC). The COT Report at 10 also admits that vegetation treatments for livestock forage result in loss or fragmentation of habitat. This is ignored in the DEIS. The treatments that are being conducted have the similar effects for a significant time period as do
livestock forage projects. Plus, they may have long-term irreversible impacts, if cheatgrass/weeds invade.

**Comment Number: NVCASG-14-0328-2**

*Comment Excerpt Text:*
Alternative D includes a requirement of "no net unmitigated loss" of GRSG habitat in lieu of specific anthropogenic disturbance caps. The Draft LUPA/EIS does not provide adequate specificity regarding how the "no net unmitigated loss" standard would be implemented to determine its consistency with the COT report or whether it would be a suitable replacement for a disturbance cap. Please provide further clarification of how this approach would be consistent with the COT report, including specifics on how, when and where it will be applied, particularly in regard to wildfire and anthropogenic disturbances.

**Comment Number: NVCASG-14-0328-7**

*Comment Excerpt Text:*
None of the alternatives specifically indicate as their goal the COT objective for removal or controlling PJ “...at a rate at least equal to the rate of pinyon-juniper incursion" and therefore, none completely meet the COT objective.

**Comment Number: NVCASG-14-0328-8**

*Comment Excerpt Text:*
To help meet the COT objective fully, Alternative D should include:

1. A commitment to make a goal of obtaining no net gain in PJ encroachment into GRSG habitat, and/or annual acreage projections of PJ removal.

2. The stated objective of removing all conifers within 1000 meters of a lek or other important seasonal habitat

3. An old-growth exception to the conservation measure should be included; if the lek is within 1000 meters of an old growth pinyon-juniper stand the old growth should be retained for its value to the ecosystem and other species. Please include a management decision that describes the factors that will be used to determine what constitutes old growth juniper.

**Comment Number: NVCASG-14-0328-9**

*Comment Excerpt Text:*
In addition to the stated actions for Alternative D, and to ensure further compliance with the COT objective, it should include the following:

1. Stipulate that new onsite wind and solar development for powering existing facilities will take place within the existing developed footprint of the facility whenever possible, or otherwise sited to avoid impacts to GRSG habitat.

2. Do not allow such onsite wind developments within 4 miles of a lek or other seasonally important habitat areas.

3. State that noise limits will be held to within 10db above ambient at leks, and never more than 34db total.

4. Indicate that noise levels are cumulative, and that ambient levels are not to be recalculated following a new development.

5. New facilities to be located on existing rights areas will be sited in non-habitat areas whenever possible.

6. Develop a method to track and quantify the level and density of disturbance will be created, and describe its methodology.

7. Indicate that analyses of any proposed exceptions to stipulations will be performed to ensure their compliance with the COT objectives

**Comment Number: NVCASG-14-0344-15**

*Comment Excerpt Text:*
Noble does not believe the COT Report is a scientific document. The report does not provide a comprehensive and unbiased review of all of the available scientific literature on the GRSG. As a result, it perpetuates outdated information and assumptions! Finally, it is inconsistent with the
requirements of the Data Quality Act and does not use best available science.

Comment Number: NVCASG-14-0344-16
Comment Excerpt Text:
The COT Report’s threats analysis, population definitions, current and projected numbers of males, and probability of population persistence are heavily based upon a paper by Edward O. Garton. Garton et al. 2011 is the most frequently cited paper in the COT Report. There are serious methodological biases and mathematical errors with the COT Report. These issues were ignored in the final revisions of Garton et al. 2011. Furthermore, the data and programs used in Garton et al. 2011 were not peer reviewed, reviewed by the public and therefore the results are not reproducible. This seriously harms the scientific integrity of the COT Report.

Comment Number: NVCASG-14-0344-17
Comment Excerpt Text:
While the COT Report says that "there is an urgent need to 'stop the bleeding' of continued population declines" it fails to mention hunting, which is the most well-documented and tracked data source of GRSG mortality. The COT Report, however, proposes that activities that may have never been shown to cause a population decline should be regulated. The COT Report’s recommendation to regulate non-threatening activities combined with its disregard of a major, actual threat to GRSG demonstrates a clear lack of scientific integrity in the COT Report.

Comment Number: NVCASG-14-0344-18
Comment Excerpt Text:
Moreover, there is no evidence of any reproducible, quantitative methodology used in assigning rankings to threats in each population and GRSG management zone. The ranking of threats in the COT Report appears to be entirely subjective.

4.3 Policy Guidance

Comment Number: NVCASG-14-0003-10
Comment Excerpt Text:
BLM fails to comply with IM 2012-044 which requires a “reasonable range of conservation measures” be considered, disclose inconsistencies between proposed conservation measures under Alternatives B, C, D, and F and existing statutory and regulatory authorities including FLPMA, NFMA or the General Mining Law. Moreover, BLM has no obligation to incorporate any NTT conservation measures because the IM expired September 9, 2013. To that end, BLM must explain its decision to include the NTT Report’s conservation measures prominently, especially in light of their lack of applicability to the Planning Area.

Comment Number: NVCASG-14-0003-12
Comment Excerpt Text:
As a designated sensitive species under BLM Manual 6840, sage-grouse conservation must be addressed in the development and implementation of RMPs on BLM lands…if an RMP contains specific direction regarding sage-grouse habitat, conservation, or management, it represents a regulatory mechanism that has potential to ensure that the species and its habitats are protected… during decision-making on BLM lands…However, the information provided to us by BLM did not specify what requirements, direction, measures, or guidance has been included in the newly revised RMPs to address threats to sage-grouse and sagebrush habitat. Therefore, we cannot assess their value or rely on them as regulatory mechanisms for the conservation of sagegrouse…Although RMPs, AMPs, and the permit renewal process provide an adequate regulatory framework, whether or not these regulatory mechanisms are being implemented in a manner that conserves sage-grouse is unclear (75 Fed. Reg. 13910 at 13975–77, emphasis added).

Comment Number: NVCASG-14-0003-13
Comment Excerpt Text:
BLM maintains the new conservation measures, including those found in the NTT Report are required to respond to the WBP determination. The
BLM does not use Manual 6840 or ESA as a foundation upon which to build. In fact, the BLM never references Manual 6840 in the DLUPA or the NTT Report, nor does it explain the need for an entirely new regulatory approach. As such, it inappropriately discards an existing agency policy without ever justifying the radical change advanced in the DLUPA/DEIS, and is thus arbitrary and capricious.

Comment Number: NVCAGS-14-0003-15
Comment Excerpt Text:
Consideration of specific required management actions contained in Manual 6840 must be referenced in the Alternatives and Environmental Consequences chapters, and described in detail in an appendix, so that the public can objectively evaluate the potential effectiveness of the sage-grouse conservation measures in Manual 6840 and whether BLM is consistently implementing the required conservation measures.

Comment Number: NVCAGS-14-0003-16
Comment Excerpt Text:
Additionally, if the monitoring data collected as required by Manual 6840 revealed that the conservation measures were not having the desired effect; BLM would be required to use the adaptive management tools and other authorities it already has to make appropriate adjustments to the conservation measures. Manual 6840 also provides for the protection of all ESA-listed, candidate, proposed species and their habitat for a period of five years following delisting, which is consistent with provisions under the ESA for species listed as threatened or endangered (Manual 6840 at .2), but not for a candidate species. Thus, this provision in Manual 6840 provides more protection for candidate species, like the sage-grouse, than the ESA. This extra measure of required protection for candidate species that BLM policy already establishes in Manual 6840 needs to be discussed in a revised DLUPA/DEIS that is made available to the public for an additional public comment period.

Comment Number: NVCAGS-14-0003-3
Comment Excerpt Text:
BLM claims that “[t]he LUPAs will be limited to providing direction specific to the conservation of GRSG species and habitats” (Ch.1 at 19), but then fails to identify Manual 6840 as the guiding document in the planning criteria (See Ch.1 at 19-21), or reference the policy at all (See Ch.7 References), which seems negligent in light of the purpose of Manual 6840. Instead, the DLUPA arbitrarily imposes a completely new regulatory framework without providing a reasonable explanation for doing so, and is therefore arbitrary and capricious.

Comment Number: NVCAGS-14-0003-4
Comment Excerpt Text:
Failing to analyze full and consistent implementation of existing policies and conservation measures, like those contained in Manual 6840, IM-2005-024: National Sage-Grouse Habitat Conservation Strategy (2004 Strategy), Fundamentals for Standards for Rangeland Health (43 C.F.R §4180.1), existing Best Management Practices (BMPs) as an alternative (a “Manual 6840 Alternative”), and an alternative which complies with USFWS “Warranted but Precluded” finding for sage-grouse in the EIS documents is arbitrary and capricious and does not comply with NEPA requirements (discussed infra, Section II). Consequently, BLM must revise the DLUPA/DEIS to include a detailed analysis of the above alternatives and provide the public with an opportunity to review and comment upon the revised draft document. Additionally, the failure to provide a detailed evaluation of Manual 6840 and other BLM policies pertaining to sage-grouse conservation is inconsistent with the guidance in Section 6.6 of BLM’s NEPA Handbook (H-1790-1)

Comment Number: NVCAGS-14-0200-8
Comment Excerpt Text:
The omission of Manual 6840 suggests that BLM may not be fully or consistently implementing the existing policies in Manual 6840. A revised DEIS must evaluate the impacts associated with full and consistent implementation of the conservation measures in Manual 6840.
**Comment Number: NVCASG-14-0205-19**

Comment Excerpt Text:

26, 2.8.1

“Within the Nevada and Northeast California Sub-region, there are no consistent guidelines in place that specifically require the monitoring of GRSG habitat condition. Monitoring that occurs in this type of habitat is associated with monitoring and meeting the objectives of other resource programs.”

Comment:

This statement is false and needs to be deleted. The consistent guidelines are in place. BLM Sensitive Species Manual 6840 includes BLM guidelines specifically requiring monitoring of GRSG habitat conditions as well as the habitat conditions of other sensitive and special status species.

As clearly stated in Manual 6840 and quoted verbatim herein:

C. Implementation. On BLM-administered lands, the BLM shall manage Bureau sensitive species and their habitats to minimize or eliminate threats affecting the status of the species or to improve the condition of the species habitat, by:

1. Determining, to the extent practicable, the distribution, abundance, population condition, current threats, and habitat needs for sensitive species, and evaluating the significance of BLM-administered lands and actions undertaken by the BLM in conserving those species.

2. Ensuring that BLM activities affecting Bureau sensitive species are carried out in a way that is consistent with its objectives for managing those species and their habitats at the appropriate spatial scale.

3. Monitoring populations and habitats of Bureau sensitive species to determine whether species management objectives are being met (emphasis added).


**Comment Number: NVCASG-14-0205-20**

Comment Excerpt Text:

26, 2.8.1

“Specific vegetation treatment projects are implemented through other range, wildlife, or vegetation management programs that seek to improve habitat for big and small game species including GRSG and its habitat. In many cases the habitat requirements for other species overlap with that of GRSG in the context of the overall goals and objectives for wildlife habitat in general or for other species.”

Comment:

Change to state that “BLM Manual 6840 explicitly directs BLM to manage GRSG and other sensitive species and habitat to promote their conservation and to minimize the likelihood and need for listing under the ESA… In compliance with existing laws, including the BLM multiple use mission as specified in the FLPMA, the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA.”

The US Forest Service lists sage-grouse as a sensitive species and has similar direction in Forest Service Manual 2670.

The DEIS authors have completely ignored existing BLM Manual 6480 direction and mistakenly (or falsely) portray the No Action Alternative to state that GRSG are not managed directly, but instead
managed as a fall out of other game management actions.

In a search of the entire EIS, though other BLM and Forest Service manuals are cited, there is a complete lack of reference to the most pertinent BLM and Forest Service agency direction in regard to special status/sensitive species including greater sage-grouse – the agencies own special status/sensitive species manuals. This oversight needs to be corrected.

Comment Number: NVCASG-14-0205-21
Comment Excerpt Text:
27, 2.8.1

“Within the BLM’s Nevada side of the sub-region, there are no BLM LUP goals, objectives, or management actions that specifically address protection or conservation of GRSG habitat within the management framework for woodland products.”

Comment:

Change to state that “Under BLM Manual 6840, BLM offices in California and Nevada are explicitly directed to manage GRSG and other sensitive species and habitat to promote their conservation and to minimize the likelihood and need for listing under the ESA… In compliance with existing laws, including the BLM multiple use mission as specified in the FLPMA, the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA. The US Forest Service lists sage-grouse as a sensitive species and has similar direction in Forest Service Manual 2670.”

BLM Manual 6840 provides clear direction for addressing protection and conservation of GRSG habitat under the No Action Alternative, within existing LUPs, within the management framework of invasive and noxious weed programs.

Comment Number: NVCASG-14-0205-22
Comment Excerpt Text:
27, 2.8.1

“Within the sub-region, with the exception of the California BLM field offices, there are no LUP goals, objectives, or management actions identified specifically for addressing protection or conservation of GRSG habitat within the management framework of the invasive and noxious weed management program.”

See previous comment – Revise text to state that “BLM Manual 6840 applies to all LUPs and explicitly directs BLM to manage GRSG and other sensitive species and habitat to promote their conservation and to minimize the likelihood and need for listing under the ESA… In compliance with existing laws, including the BLM multiple use mission as specified in the FLPMA, the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA. The US Forest Service lists sage-grouse as a sensitive species and has similar direction in Forest Service Manual 2670.”

In December 2011 BLM created IM 2012-044 “Land Use Planning Strategy”, requiring BLM to consider all applicable conservation measures when revising or amending its RMPs in sage-grouse habitat.

Comment Number: NVCASG-14-0205-54
Comment Excerpt Text:
80, 4.5.4

“Under Alternative A, there are no “fallback standards” (standards applied when other approaches to grazing management have not been effective) in PPH and PGH.”

Comment:

The statement needs to be rewritten to state that “Under Alternative A, the “fallback standards” (standards applied when other approaches to grazing management have not been effective) in PPH and PGH are BLM Manual 6840 and FSM 2670.”
Comment Number: NVCASG-14-0292-2
Comment Excerpt Text:
In fact, all seven of the Management Zones exceed a population of 500 breeding adults, and five of the Zones greatly exceed the minimum effective population of 5,000 individual birds below which greater sage-grouse are considered to be at risk for long-term extinction. Additionally, estimates for the rate of decline in greater sage-grouse populations from 1985 through 2007 have averaged about 1.4% per year. See FWS Findings, page 13922. Assuming that current management practices endure and this rate of decline continues indefinitely, it would take more than 330 years for the existing greater sage-grouse population to dwindle below the minimum effective population. Speculating what might occur over three centuries from now reaches well beyond the foreseeable future. Thus, there are now numerous areas that will support populations that exceed the minimum effective population of 5,000 birds into the foreseeable future to preclude listing the greater sage-grouse as threatened under the ESA.

Comment Number: NVCASG-14-0367-3
Comment Excerpt Text:
The IMs Constitute a Rulemaking That Should Have Undergone NEPA Analysis

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

Comment Number: NVCASG-14-0367-4
Comment Excerpt Text:
Additionally, the NOI was issued to help guide the preparation of an EIS. NEPA implementing regulations specifically address what actions are allowed during the time period in which an EIS is being prepared, and state that “[w]hile work on a required program environmental impact statement is in progress and the action is not covered by an existing program statement, agencies shall not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment.” Applied here, the December 2011 IMs do not fall into any of the exemptions associated with this rule and constitute an independent action with an environmental impact for which the appropriate NEPA analysis should have been completed.

4.4 RANGE OF ALTERNATIVES

Comment Number: NVCASG-14-0003-50
Comment Excerpt Text:
BLM asserts: Alternative D adjusts the delineation of PPH and PGH to reflect existing land uses, use authorizations, land allocations, and habitat considerations; it adds or subtracts mapped PPH or PGH to create PPMAs and PGMAs across the sub-region… (DLUPA Ch. 2 at 7).

Yet BLM proposes the following Objectives and management actions under Alternative D which are in conflict with the above statement:

- Objective D-SSS-AM 1: In PPMA where large scale disturbance has occurred, manage adjoining PGMA as PPMA” (DLUPA Ch. 2 at 61), o Action D-SSS 7: Implement the RDFs in areas outside of mapped PPMA and PGMA where GSG use has been observed or suspected, areas and habitats which may be necessary to maintain viability of GSG, or where the activity would affect GSG or their habitat in PPMA or PGMA.” (DLUPA 2-92 to 93).
Comment Number: NVCASG-14-0050-4
Comment Excerpt Text:
The Preferred alternative fails to incorporate measures that would result in exclusion of activities known to be detrimental to sage-grouse or sage-grouse habitats, relies on discretionary measures such as “avoidance” rather than “exclusion” of activities, and includes numerous exceptions and exemptions where protective measures will only apply on a conditional basis. This is particularly relevant to the BLM objective of initiating “proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA” (Manual 6840.02(B)), since the lack of adequate regulatory mechanisms to conserve sage-grouse and their habitats was identified as a primary threat leading to the FWS’ warranted but precluded finding for the species.

Comment Number: NVCASG-14-0050-6
Comment Excerpt Text:
The Center requests that the agencies map and implement a conservation reserve system for the recovery of the sage grouse. Tools to implement and sustain such as system are limited however the agencies should take advantage of all existing land designations to do so, and pursue more durable and lasting designations through rule-making and Congressional actions.36 Primary among existing designations are the Area of Critical Environmental Concern authorized in the BLM’s regulations, and the USFS may “adopt special designations through plan amendment or revision” to conserve natural resources (36 CFR § 219.27). The USFWS should administratively designate sage grouse conservation areas in the current planning process with similar purpose and management as BLM ACECs to conserve sage-grouse and other sagebrush dependent species on National Wildlife Refuges in the planning area.


A primary concern is that none of the administrative designations now in existence provide for long term assurances that the lands will be managed for the recovery and conservation of the grouse. As a parallel effort, the Center urges the agencies to pursue new authorities to enter into long term conservation for the grouse and other species that provide for durable protections.

At the heart of the effort to avoid the extirpation and extinction of the sage grouse, there must be a profound and fundamental recognition that further habitat declines are very serious in nature. Early conservationist Aldo Leopold once said, “To keep every cog and wheel is the first precaution of intelligent tinkering.”37 Due to the heavy impacts of man, fire and climate change on the landscape, we are facing a crisis of losing the “cogs” that form an intact and functional sage grouse ecosystem. Immediate steps are needed to stabilize the losses and lay the foundation for future recovery.38

Towards this end, the Center and others are proposing a system of habitat reserves to provide for the survival and recovery of the grouse. The Center has developed a draft map of what the reserve system would constitute in Nevada, based on our personal experience and awareness and the best and most recent science available.39 While we lack the resources to develop a similar map for the California portion of the planning area, we request that the agencies undertake such a mapping exercise following the same protocols we used that are described further on in our comments.

Rationale and details for this proposed reserve system are now provided.

Greater sage grouse are a landscape species.40 Migratory populations have large annual ranges that can encompass >2,700 km2 / 667,184 ac.41 Generally more strongly affected by habitat loss and fragmentation.42 Although conclusive data on minimum patch size is unavailable, conserving large expanses of sagebrush steppe is the highest priority to conserve sage-grouse.43 44 One study identified ten lek complexes that were >5,000 km2 / 1,235,526 ac (range 5,395–100,288 km2) and 8 of them contained >100 leks (range 143–1,139).45 Some sagebrush-dependent species use different habitat composition, structure or succession than sage grouse prefer. Protecting large blocks of habitat will also help preserve a mosaic of different habitats of varying successional stages used by sage-grouse and other sagebrush-dependent species.

36 For fuller discussion, refer to the Sage-Grouse Recovery Alternative, pages 28-31. Large-bodied birds like sage grouse are


39 See Map 1.

40 Connelly et al. 2011a.

Preserving large habitat islands in itself is not enough – these centers must be inner-connected for several reasons.

Knick et al. stated that, “Species that have multiple interconnected populations are more likely to persist because risk of extirpation caused by regional events…connectivity among populations ensures that recolonization can occur following local extirpation assuming that sufficient habitat remains.”46

In addition, some sage grouse populations (known as “migratory”) move long distances between seasonal habitats, sometimes in two distinct movements.47 Annual movements of 40-160 km by sage grouse along established routes have been reported.48 Thus Beck et al. recommended conserving habitat corridors to facilitate easier movement for migratory sage grouse.49

Protecting smaller habitat patches can help connect larger areas. Successful conservation strategies for sage grouse would preserve networks of populations and/or habitat patches, including connecting smaller lek complexes within 18 km that could serve as intermediary islands of habitat for dispersing sage grouse.50

i. Courtship, breeding and nesting areas

In the spring, during the breeding season, sage-grouse males seek out courtship areas, known as “leks” that are open areas of bare soil, short grass steppe, windswept ridges, or exposed knolls in which to gather and perform their ritualized mating displays and breed with females.51 An important factor affecting lek location appears to be proximity to as well as configuration and abundance of nesting habitat.52

Leks are normally “traditional”, and occur in the same location each year. Some leks studied by early investigators have persisted for 28–67 years since first counted. The presence of broken bird-point arrowheads on some leks suggests that sage-grouse had used those sites for at least 85 years. Leks and the number of attending males are regularly used to monitor the long-term status of populations because of their traditional locations.53

Although the actual lek sites are typically open areas, they are usually located in the midst of denser shrub

44 Connelly et al. 2011b.


46 Knick et al. 2013.

47 Connelly et al. 2011a.

48 Ibid.


50 Knick and Hanser. 2011.


stands, which together provide the necessary combination of visibility, protection, food, and thermal regulation.54

In a recent study looking at greater sage grouse across six western states, it was reported that 90% of the active leks were surrounded by areas having greater than 40% sagebrush cover. Further, 99% of the active leks were in landscapes with less than 3% of the area in human development.55 Successful leks occurred in areas with low road densities—less than 1 km/km² of secondary roads, less than .05 km/km² of highways, and less than .01 km/km² of interstate highways. Another pertinent finding was that habitat suitability was highest when power line densities were less than .06 km/km²; leks were absent where power line densities exceeded .2 km/km². With respect to communication/cellular towers, leks were absent when tower densities exceeded .08 km/km².56

Wisdom et al. reported that areas extirpated of sage grouse had 27 times the human density, 3 times more area in agriculture, were 60% closer to highways, and had 25% higher density of roads than what was found in occupied habitat. Also, it was found that power lines and cellular towers had significant impacts on whether or not a habitat was occupied.57

Studies published by Braun in 1977 and Connelly in 2000 initially set the standard that leks should be buffered by a 3.2 km or 3.1 mile radius, both to provide security for the grouse and to acknowledge the fact that many, but by no means all, female grouse will nest in the immediate area of the lek.58

51 Manier et al. 2013.


53 Ibid.

54 Manier et al. 2013.

55 Knick et al. 2013.

56 Ibid.

57 Wisdon et al. 2011.

However, more recent studies have suggested that the 3.2 km is questionable as to whether or not it adequately provides for the conditions needed for successful breeding and nesting.

It was found in one study that a 3 km buffer encompassed only 45% of the nesting females associated with that lek, while a 5 km buffer accommodated 64% of the nests. It was also reported that nests located within 1 km of another nest tended to have lower nesting success likely due to enhanced prey detection by predators.59 The same study further suggests that to protect and maintain sage grouse populations residing in relatively contiguous sagebrush habitats, managers should minimize or halt actions that reduce the suitability of nesting habitats within 5 km of a lek until detailed site specific monitoring suggested otherwise. It also noted that a substantial number of females nested distances greater than 5 km from a lek and that this additional increment of individual recruitment could be important for population viability.60

For a related grouse, the U.S. Fish and Wildlife Service recommended “... avoiding placing wind turbines within 5 miles [8 km] of known leks (communal pair formation grounds) in known prairie grouse habitat”.61

Johnsgard indicated that there was no obvious relationship between lek location and nest site. In 5 different studies involving more than 300 nests the average distance between lek and Sage-grouse nest where the females was first seen or captured was 3.5 mi (5.6 km).62

A majority (~90%) of nesting and brood-rearing habitat was within 10 km (6.2 miles) of active leks in Alberta (Aldridge and Boyce 2007); 97 percent of
nests were found within 6.2 miles of leks where females were marked in the Powder River Basin in Montana and Wyoming.63

Walker et al. in another study found that the impacts from energy development on lek persistence and nesting were still apparent at a distance of 6.4 km from the disturbance.64

Connelly et al. reported in their assessment for the Western Governors’ Association that road traffic within 7.6 km had adverse impacts on male grouse attendance at leks.65


60 Ibid.


64 Walker et al. cited in Naugle et al. 2011.

65 Connelly et al. 2004.

ii. Brood-raising areas

Brood rearing habitats are a very important component of sage-grouse habitats. A mosaic of upland sagebrush vegetation intermixed with mountain meadows and spring systems compose brood rearing habitat. These habitat types are fairly limited in Nevada because of the dry climate exhibited throughout the majority of the Great Basin. These habitats have been impacted by improper livestock grazing practices (whether prior or current), overutilization by wild horses, and pinyon and juniper encroachment.66

Placing a heavy focus on habitat protection around leks is not suitable for ensuring the viability of sage grouse populations. Studies have shown that both nest and brood rearing habitats are on average 6 km from leks, and it is not until 10 km from leks that one reaches the threshold where 90% of the habitat occurs.67

Brood occurrence is greater in more heterogeneous sagebrush stands, where patchy cover reduces predator efficiency but still affords necessary forb resources. Sage grouse are more abundant in patchy habitats containing a mix of mesic, forb-rich foraging areas interspersed within suitable sagebrush escape cover.68

Broods are typically found in areas near nest sites for the first 2–3 weeks after hatching. Such habitat needs to provide adequate cover and areas with sufficient forbs and insects to ensure chick survival in this life stage.69

As the chicks get older, sage-grouse tend to move into more moist areas (streambeds or wet meadows) because as herbaceous vegetation dries out, wetter areas provide more forbs and insects for hens and their chicks.70 Droughts resulting in reduced cover can make these habitats risky for sage grouse chicks, particularly if livestock grazing intensities have exacerbated the vegetative declines.71

iii. Wintering habitat
As previously mentioned, although leks are important focal points for breeding and subsequent nesting in the surrounding region, other seasonal use areas and habitat requirements may be equally limiting to sage-grouse populations.72


Suitable and diverse winter habitats are critical to the long-term persistence of grouse populations.73 As summer ends, the diet of sage grouse shifts from a diet of insects, forbs and sagebrush to one comprised almost entirely of sagebrush.74 In winter, the grouse depends heavily on sagebrush for cover, habitat selection being driven by snow depth, the availability of sagebrush above the snow, and topographic patterns that favorably mitigate the weather.75

Abundance of sagebrush at the landscape scale greatly influences the choice of wintering habitat. One study found that the grouse selected for landscapes where sagebrush dominate over 75% of the landscape with little tolerance for other cover types.76 Because appropriate wintering habitat occurs on a limited basis and because yearly weather conditions influence its availability, impacts to wintering habitat can have large disproportional effects on regional populations. One study in Colorado found that 80% of the wintering use occurred on only 7% of the area of sagebrush available.77 Additionally, some degree of site fidelity to winter areas is suspected to exist, and wintering areas not utilized in typical years may become critical in severe winters. 78

Due to sagebrush losses in Nevada, the NDOW considers winter habitat to be at a premium and in some cases essential and irreplaceable.79

Lower elevation sagebrush winter habitat used by sage grouse may also constitute important winter areas for big game and early spring forage areas for domestic livestock. Due to differing vegetative condition requirements, land treatments on lower elevation sagebrush areas to increase big game or livestock forage at the expense of sagebrush cover and density could have long-term negative consequences for the grouse.80

Sage grouse in the Powder River Basin were 1.3 times less likely to use otherwise suitable winter habitats that have been developed for energy (12 wells/4 km2), and avoidance was most pronounced in high-quality winter habitat with abundant sagebrush.81

iv. Linkages

Because use and availability of these seasonal habitats are spread across a given landscape, sagegrouse require vast areas of contiguous sagebrush to meet their needs on an annual basis.82 Although leks are important focal points for breeding and subsequent nesting in the surrounding region, other seasonal use areas and habitat requirements may be equally limiting to sage-grouse populations. Population size and isolation can have serious negative impacts on genetic variability and population persistence.83

73 NDOW 2012.


Science informs us that populations of rare species in small, disjunct areas of occupied range have a high risk of extirpation, and that the probability for extinction increases for populations that become increasingly small and isolated.  

Naugle et al. recently observed, that the severity of impacts to sage grouse from human disturbances, in particular energy development dictate the need to shift from a local to a landscape view for basing conservation actions.

Any conservation reserve system for sage grouse must ensure the connectivity between metapopulations are preserved. GIS modeling can identify sage-grouse habitat, at a larger scales. There are limitations to a GIS-designed reserve system—for instance, within areas identified by GIS modeling as nesting habitat, there is some local variability in which sites are actually suitable for nesting, nests may be clumped in one area and not another, or local topography makes a linear distance from a lek meaningless. Still, for purposes of identifying crucial habitat for the grouse it is a crucial first step. As inventory and telemetry work advance, the system can be fine-tuned. The important thing is that key habitats and linkages not be lost and the precautionary principle applied to sage grouse management.

b. Mapping Details and Protocols

Based upon the above scientific evidence, the map of sage grouse conservation reserve areas was developed using the following methodology:

- The latest GIS shape files were obtained from the Nevada Department of Wildlife (“NDOW”) containing leks and the departments Habitat Categorization Map.
international treaties and other statements, little work has been done to implement this principle.” From: http://definitions.uslegal.com/p/precautionary-principle/

- Per advise from NDOW, habitat categories 1 and 2 were equivalent to areas defined in the DEIS as “preliminary priority habitat”.
- Active leks were buffered with an 8.5 km radius. This is consistent with the protocol used by Doherty et al.87
- Because the NDOW categories 1 and 2 emphasize nesting and brood raising habitats, and do not fully consider the perhaps equally important wintering distributions of the grouse, we also mapped sage grouse winter distribution obtained from shape files provided by the NDOW.88 The actual wintering habitat is variable depending on the severity of the winter weather and local topography, so known winter distribution of the bird was judged to be the most suitable substitute.
- The mixed ownership (“checkerboard”) lands either side of Interstate 80 were excluded, as were a 10-mile buffer around major towns.
- Areas of combined habitat blocks were delineated using best professional judgment taking into account factors such as area isolation from other areas and bisection of areas by major roads and interstates. As a rule, the outer margins of either priority habitat or winter distribution were used to guide the delineation. The resulting propose Sage Grouse Conservation Areas (“SGCA”), number eight distinct areas, covering much of what remains of sage grouse habitats in Nevada (refer to Maps 1 & 2).


These nine areas total almost 26,028,300 acres, and include over 14,403,600 acres of priority habitat and almost 18,230,300 acres of winter distribution; note: these numbers are NOT additive because many of the mapped priority habitat acres are also winter habitat.

It should be noted that in the total area encompassed by these nine areas, there are lands that do not host sage grouse life-time habitat needs for a number of reasons – previously disturbed, agriculture lands, privately developed lands, hostile terrain or habitat types, to name a few. They contain lands that once provided habitat but due to disturbances like wildfire no longer do; these lands should be considered for restoration by the appropriate agencies. The management prescriptions that occur in following sections of this letter apply only to sage grouse existing habitat and areas to be restored, not to non-habitat. They also apply only to federal lands managed by the Bureau of Land Management, U.S. Forest Service and U.S. Fish and Wildlife Service.

Table 1 provides a breakdown of the pertinent federal agency land ownership in the SGCAs.

Table 1 – Federal Agency Ownership in proposed

Comment Number: NV-CAG-14-0071-4

Comment Excerpt Text:
The disturbance cap concept would limit development within a certain area based on an arbitrary percentage of land which could be developed. If that percentage was already met, it would preclude development of valid existing rights and new mineral finds entirely. It is not clear at all how this cap for development in sage-grouse lands has been calculated. The concept of an artificial disturbance cap has been disavowed in regulatory schemes throughout the country and is fatally flawed. How does one apply a fixed limit on development within a non-quantified amount of land? What is the unit we are measuring the allowed percentage of impact against? One claim, one property, one section (360 acres), one “sage-grouse unit”? Even from a sage-grouse protection viewpoint, this concept does not take into account site-specific qualities of the landscape and applies a one-size-fits-all mentality -
meaning sometimes sage-grouse would win and other times they would lose.

**Comment Number: NVCASG-14-0083-19**
**Comment Excerpt Text:**
Ch: 1, Sec: 1.7, Pg. No.: 22

Text Referencing: Relationship to Other Policies, Plans, and Programs - This planning process will recognize the many ongoing programs, plans, and policies that are being implemented in the planning area by other land managers and government agencies.


**Comment Number: NVCASG-14-0091-25**
**Comment Excerpt Text:**
Just as currently unclassified habitat may need to be classified as PPMA/PGMA in the future, it is likely that many areas currently designated as PPMA/PGMA should be removed and classified as non-habitat. What type of process will be used to facilitate additions, subtractions, or designation changes (from PPMA to PGMA and vice versa)? Will this be at the discretion of the BLM and USFS? USFWS? Other conservation and industry partners? What criteria will be used and who will determine the criteria?

**Comment Number: NVCASG-14-0091-26**
**Comment Excerpt Text:**
Goal-D-SSS-AM I

Please provide quantitative definitions for "large scale disturbance" and "adjoining PGMA." It is impossible to accurately analyze impacts and provide useful comments when a potentially-significant measure such as this goes undefined. Additionally, this objective could result in more restrictive management on habitat that is of limited use to GRSG. Significant use restrictions should not be imposed in areas with low potential to maintain or restore GRSG populations. The magnitude of use restrictions should be relative to the importance of an area to GRSG populations. Development should be encouraged to utilize less important and highly disturbed habitats instead of more pristine or high quality habitats. By classifying PGMA as PPMA in highly disturbed situations, the DEIS is removing the incentive for industry to use poor or general habitat. Who will decide what quantitative measures are used to determine what constitutes "large scale disturbance" and "adjoining PGMA?" What methods will be used to make these determinations and will they be subject to collaborative input? Are there plans to monitor the effectiveness of this objective and make changes based on monitoring?

**Comment Number: NVCASG-14-0099-2**
**Comment Excerpt Text:**
We would like to see options like grass banks and some limited grazing buyouts (as outlined in S258, the Grazing Improvement Act) as management tools that could be used to help improve habitat in PPMAs.

**Comment Number: NVCASG-14-0120-11**
**Comment Excerpt Text:**
it is inappropriate for BLM to adopt buffers and restrictions based on purported impacts to GRSG from noise or visibility without accounting for potential topographic considerations that may reduce the need for overly burdensome restrictions. A hill or a valley may operate as a natural buffer between activities supposedly causing disturbance to a lek, and more restrictive buffer areas based on generic distance limitations might be unnecessarily restrictive.

**Comment Number: NVCASG-14-0132-1**
**Comment Excerpt Text:**
The identification of “Preliminary Priority Habitat” (PPH) and other zones is, in and of itself, a Land Use Plan – level decision that requires its own NEPA and Decision-making process. This is akin to the agencies identifying de-facto “critical habitat” for the species, without the species having been listed. Such NEPA and appealable Decision-making is a necessary
precursor to any decision-making process on how to manage the different zones.

The agencies should withdraw the proposed Land Use Plan Amendment until after they have completed a separate NEPA and decision-making process relative to what constitutes “priority habitat” that is the “highest conservation value to maintaining or increasing GRSG populations” (and “other” habitat). This is particularly the case because the “priority” habitat includes areas that are not sage-grouse habitat, i.e. perennial grasslands, annual grasslands, and juniper woodlands.

Comment Number: NVCASG-14-0132-18
Comment Excerpt Text:
Action D-Veg D 3. This Action item should be eliminated from the final document. If “drought” is defined as any precipitation less than the long term average, and “post drought” management is to ensue after a year of less-than-average precipitation, then BLM and FS would be managing the landscape as being in an emergency situation nearly all the time. Further, “drought” is not adequately defined in the DEIS.

Comment Number: NVCASG-14-0132-27
Comment Excerpt Text:
Action D-FFM 20. This Action item, and others like it, should be removed. It is important that there be “one set of rules”, and it is not biologically reasonable that “General Habitat” should be managed as “Priority Habitat”, if a fire burns in “Priority Habitat” next to it. If it were priority habitat, the GRSG would be using it now, and the DEIS presents no science-based information to state that the GRSG will utilize the general habitat in any greater manner than they did before the fire.

Comment Number: NVCASG-14-0132-3
Comment Excerpt Text:
The agencies have not demonstrated the capability of converting large-scale perennial or annual grasslands to “natural”, native, shrub-dominated conditions. This is one of the reasons that perennial and annual grasslands, and especially areas seeded to exotic perennial grass species, should NOT be considered “priority” habitat, but should have their own designation. This also has ramifications to the overall approach of banning or severely restricting multiple resource use in these “priority” habitats that are not dominated by sagebrush. This also demonstrates that some of the basic assumptions of the DEIS are not valid.

Comment Number: NVCASG-14-0132-5
Comment Excerpt Text:
I could find no definition of “occupied sage-grouse habitat” but the document itself states that PPH or PGH overlap areas denoted by NDOW as “occupied”, “suitable”, and “potential” habitats; however, the two concepts are not the same.

The document fails to equate (and cannot equate) an area as being “occupied habitat” based upon the definition and description of PPH and PGH, and vice-versa.

Further, while it may follow that sage-grouse are tied to sage-brush, it does not follow that sagebrush is always occupied by sage-grouse

Comment Number: NVCASG-14-0132-7
Comment Excerpt Text:
as to residual vegetation heights for nesting sage-grouse, the entire document is silent to the fact that the cited authors (e.g. Connelly et al 2000) measured residual vegetation after the hens had left their nests, not at nest-initiation. Hausleitner et al 2005 is not even referenced by the document, let alone relied upon; however, Hausleitner et al 2005 established that residual heights of 3.5-3.9 inches characterized the nest bowl and surrounding 1 meter around the nest bowl at the time of nest-initiation. Significant vegetative growth occurs between nest-initiation and post-hatch

Comment Number: NVCASG-14-0144-5
Comment Excerpt Text:
Why Does BLM only consider increased management of feral horses and burros and not reductions in population? Overpopulation has a potentially significant impact on sage grouse and restrictions and
limitations on populations should be strongly considered.

Comment Number: NVCASG-14-0151-12
Comment Excerpt Text:
individual indicator values in Table 2.6 do not by themselves define site suitability. Overall habitat suitability descriptions require an interpretation of the relationships between the indicators and other site-specific factors such as fragmentation. Professional expertise and judgment are required for these steps (Stiver, et al. 2010). Habitat objectives should be developed based on ecological site descriptions, current site condition and state and transition models where available.

Comment Number: NVCASG-14-0151-13
Comment Excerpt Text:
Alternative: D, Section: Sub-Objective C-SSS 4, Page Number: 87

Review Comment: It will be impossible to “eliminate” all “anthropogenic disturbances” that threaten GRSG; and it would be in conflict to the BLMs multiple use mandate to attempt to do so. As such, the word “eliminate” should be stricken, and the objective should focus on minimizing such impacts.

Comment Number: NVCASG-14-0151-15
Comment Excerpt Text:
Alternative: D, Section: Action D-SSS-CC 1, Page Number: 133

Review Comment: The County requests that this action be removed and NOT included in the final document or ROD. It is inappropriate to use climate change as a means of mapping and managing PPMAs. Predicting areas that Sage-grouse “might” use based on climate and subsequent vegetation is completely off base, and the fact that PPMAs can already be refined on a 5-year basis suggests that the same actions can occur based on real time developments rather than faulty predictions.

Comment Number: NVCASG-14-0169-20
Comment Excerpt Text:
The No Action Alternative must discuss, in detail, BLM Manual 6840 and its detailed and effective policies that protect both listed and candidate species consistent with the Secretary’s authority under the ESA and balance competing resource values as required by FLPMA.

Comment Number: NVCASG-14-0169-21
Comment Excerpt Text:
If BLM does not believe the conservation measures prescribed in Manual 6840 are sufficient, then it must explain and quantify those deficiencies. Otherwise, the public cannot gauge and understand the need (if any) for land use management changes in BLM’s Preferred Alternative.

Comment Number: NVCASG-14-0169-22
Comment Excerpt Text:
The No Action Alternative fails to properly analyze the existing conservation measures and authorities the BLM is already using to conserve the GRSG and its habitat. The No-Action Alternative proffered by the Agencies must acknowledge Manual 6840 as the status quo, baseline policy governing present GRSG conservation. If BLM believes that such existing regulatory mechanisms are inadequate, then the burden is on the agency to explain how and why this is so. As an example of the possibility of no meaningful public participation in this process, the Commenters note that the BLM public meeting in Reno, Nevada, on December 5, 2013 was merely an “open house” format attended by representatives of the Commenters. There was no formal presentation provided to the public, although representatives of BLM were available for questions. The graphic information provided by BLM at that meeting did not include any comparative discussion whatsoever of Alternative A, the No Action alternative, which calls into question whether the agency is seriously considering it as an alternative.
Comment Number: NVCASG-14-0169-27
Comment Excerpt Text: the boundaries of the Preliminary Priority Management Areas (PPMA) and Preliminary General Management Areas (PGMA) represent a broad-scale evaluation of habitat and are intended to identify potential GRSG concerns at the landscape level and should not be used for making planning decisions at the project level. See, Nevada Department of Wildlife, Greater Sage-Grouse Habitat Categorization White Paper, p. 2 (March 2012). Accordingly, the LUPA should provide that any PPMA or PGMA designated area may be redesignated if the existing designation is shown, through verified on-the-ground habitat and land-use conditions, to be unwarranted. The LUPA should allow the revision without requiring a plan amendment. Further, the LUPA must describe the procedure for redesignating habitat.

Comment Number: NVCASG-14-0171-15
Comment Excerpt Text: The County urges the BLM/FS to put forth a strategy for WHB that prioritizes gathers in the areas that overlap with important Sage Grouse habitat.

Comment Number: NVCASG-14-0171-33
Comment Excerpt Text: Connelly et al. (2000) says 15-25% is acceptable. Total shrub cover greater than 40% is an inflated objective. Studies utilized by WAFWA for their guidelines had both successful and unsuccessful nesting less than 20%. Northeast California studies by Popham and Gutierrez (2003) indicated total shrub cover about 20% at the nest sites. None of the studies reported total shrub cover in the nest area over 31%. These studies indicate that there needs to be flexibility built into the habitat objectives and local science and conditions need to be utilized.

Comment Number: NVCASG-14-0182-2
Comment Excerpt Text: Absence of Focal Management Areas for Habitat Protection and Future Investments. None of the alternatives in the Draft LUP provides mechanisms for identifying, at the landscape scale, the most important habitat areas among the 17.7 million acres of total habitat in the planning area. Nor do any of the proposed alternatives provide clear guidance on how priorities will be set at the project scale. The Final LUP needs to be more specific in these respects.

Comment Number: NVCASG-14-0188-13
Comment Excerpt Text: Page 25, 2.8.1 No Action Alternative, Special Status Species/Greater Sage-Grouse Habitat; and Page 32, 2.8.1, No Action Alternative; Resource Allocation by Alternative
The Draft LUPAIDEIS incorrectly states that "There are currently no lands designated by the BLM or Forest Service as PPH or PGH within the sub-regional planning area; ... " This would be correct if modified to: There are currently no lands designated in by the BLM or Forest Service in the existing LUPs as PPH or PGH within the sub-regional planning area: ... “Currently, the BLM uses the PPH and PGH mapping to determine impacts and mitigation measures in projects being analyzed through NEPA, even though the existing LUPs do not include these designations.

Comment Number: NVCASG-14-0188-21
Comment Excerpt Text: Table 2.4 - Goal D-SSS-AM 1
Instead of stating additional PPMNPGMA be identified, this goal should focus on refining PPMNPGMA delineations (to include additions, subtractions, or MA class changes), based upon new science, non-anthropogenic impacts such as fire, restoration potential for severely impacted habitats, and monitoring of PPMA, PGMA, and non-classified habitats. Just as currently unclassified habitat may need to be classified as PPMNPGMA in the future, it is likely that many areas currently designated as PPMNPGMA should be removed and classified as non-habitat.
Comment Number: NVCASG-14-0188-24
Comment Excerpt Text:
Table 2.5 - Action O-SSS 7

Land use and development restrictions on lands outside PPMA/PGMA should not be based on qualitative descriptors such as "suspected use." Additionally, mapping PPMA/PGMA was intended to capture both A). regions and habitats which may be necessary to maintain GRSG viability, and B). buffers around essential habitats. Thus, land use restrictions above and beyond classified PPMA/PGMA are burdensome, duplicative, and are unlikely to contain GRSG habitats.

Comment Number: NVCASG-14-0188-36
Comment Excerpt Text:
Page 148, Section 4.9.8, Alternative E

Most of the "analysis" in this section consists of "Similar to Alternative A" or other alternative. However, similar is not "identical" and the authorized officer and the public need to know differences and they need to be quantified.

Page 151, Section 4.9.9, Alternative F

Most of the "analysis" in this section consists of "Similar to Alternative A" or other alternative. However, similar is not "identical" and the authorized officer and the public need to know differences and they need to be quantified.

Comment Number: NVCASG-14-0193-8
Comment Excerpt Text:
the Proposed Action (Alternative D) includes Action DREC-2, which states that, "no new recreation facilities would be constructed in PPMAs and PGMAs (e.g. Campgrounds, day-use areas, scenic pullouts, and trailheads)," (Chapter 2.8.2, p. 215). 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 this management action; otherwise we propose this be eliminated from consideration in the final plan, particularly since it conflicts with the BLM's multiple-use mandate.

Comment Number: NVCASG-14-0200-2
Comment Excerpt Text:
BLM fails to consider an alternative that amends the Resource Management Plans by implementing conservation measures as required in the December 2008 Manual 6840, Special Status Species Management or explain why the measures required under Manual 6840 are inadequate. Such an alternative is not only reasonable and, therefore, required to be considered in detail in the DEIS, it is preferable because it allows site-specific conservation measures in each RMP as opposed to the "one-size fits all" approach in the conservation measures recommended in the December 2011 National Technical Team Report (NTT Report) and carried through into the DEIS.

Comment Number: NVCASG-14-0201-12
Comment Excerpt Text:
3.9. Wilderness Areas/ACECs:

There is the pervasive belief that more wilderness or "near wilderness" through the designation of ACECs will sustain and conserve sage-grouse, as well as many other species and values. However, there is no data provided in the Draft LUPA/DEIS that demonstrates that sage-grouse populations or habitat are any better within wilderness areas or ACECs, than outside of these areas. Without demonstrated proof that these designations will actually improve sage-grouse populations, any additional designations as wilderness or ACECs should be avoided.

Comment Number: NVCASG-14-0201-27
Comment Excerpt Text:
Table 2.5. Description of Alternative Actions, Alternative C, SD 1:

BLM and Forest Service are required to use "best science" in their analysis. There is no data or science presented in the Draft LUPA/DEIS that sage-grouse populations are greater in existing ACECs than
elsewhere on public lands. Therefore, the proposed action of designating millions of acres as ACECs to protect sage-grouse and sage-grouse habitat is completely without basis. We are strongly opposed to the addition of ACEC designations under the false guise of conserving sage-grouse and sage-grouse habitat. This is unnecessary and unacceptable to our members.

The economic impacts of this action element are inadequately analyzed in Chapter 4. Such designations will impose economic hardships on our members and this is not mentioned in the Environmental Consequences, Section 4.19.

Comment Number: NVCASG-14-0201-9
Comment Excerpt Text:
3.1. Approach used in the Draft LUPA/DEIS

The general approach of the Draft LUPA/DEIS is based on how threats to sage-grouse as identified by the USFWS and by the COT report could be addressed by applicable BLM or Forest Service land management programs in order to strengthen regulatory mechanisms the USFWS will be reviewing as part of their listing decision. The NTT report followed a similar process, a program by program analysis of how each BLM or Forest Service program may result in impacts to sage-grouse or sage-grouse habitat. However, in each of these approaches there is no perspective provided with respect to the relative importance of a land management program specific impact. Consequently, the alternative development (at least Alternatives B, D, and F) clearly focus on program level actions.

The alternatives all try to identify how each BLM or Forest Service program includes, involves, or is related to a threat to sage-grouse and then provide recommendations for modifying the program to eliminate or reduce the threat, regardless of the magnitude of the impact of the threat to sage-grouse or their habitat. Consequently, there are likely to be changes made in various programs that will individually have minor benefits to sage-grouse or their habitat, and likely will cumulatively have minor benefits to sage-grouse and their habitat. However, actions such as road closures can have significant impacts on NOGA members' ability to conduct their business and have real economic impacts. These types of socioeconomic impacts were not adequately addressed in the Draft LUPA/DEIS.

This approach contrasts with a process that would seek to determine the magnitude or scale of the various threats, prioritize the threats, and then focus on ways to address the major threats (i.e., "fixes"). The next step would be to then determine which programs need to be modified to incorporate the "fixes" and how they need to be modified in order to reduce the major threats.

Comment Number: NVCASG-14-0202-10
Comment Excerpt Text:
"No unmitigated loss" of greater Sage Grouse habitat is not sufficiently defined. NREA utility members request that Alternative D be updated to include a clear and concise definition of what would constitute "no unmitigated loss" of greater Sage Grouse habitat.

Comment Number: NVCASG-14-0202-11
Comment Excerpt Text:
16. Alternative D (Chapter 2, page 230) states "... in PPMAs and PGMAs, require ROW holders to retrofit existing power lines and other utility structure with perch-deterring devices during the ROW renewal process." RDFs identified in Appendix A under the heading Wildlife/Greater Sage Grouse RDFs (page A-19) states "... work with existing rights-of-way holders in an attempt to install perch guards on all poles where existing utility poles are located within 3 miles of known leks, where necessary. Stipulate these requirements at grant renewal." This is inconsistent between Chapter 2 and Appendix A.

NREA utility members do not disagree with the application of anti-perch devices on their infrastructure. However, the statement in Chapter 2, page 230, implies the wholesale application of anti-perch devices across all NREA utility members'
infrastructure would support the application of anti-perch devices where appropriate, but not in locations which would not effectively benefit greater Sage Grouse. NREA utility members recommend altering this statement in Chapter 2, page 230, to reflect that perch discouragers will be applied where location specific evidence supports their application.

**Comment Number: NVCASG-14-0202-6**  
**Comment Excerpt Text:**  

None of the LUPA/DEIS described alternatives allow for the completion of a ground-based site assessment to accurately determine an area’s potential use by greater Sage Grouse. All alternatives rely on broad-scale habitat maps to distinguish areas to be considered as Preliminary Priority Management Areas (PPMA), Preliminary General Management Areas (PGMA), or Sage Grouse Management Areas (SGMA) where various restrictions and mitigation measures are to be implemented. However, each of these mapped areas are largely based on BLM Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH), which was itself derived from the Nevada Department of Wildlife’s (NDOW) Greater Sage Grouse Habitat Categorization Map. The White Paper associated with the Greater Sage Grouse Habitat Categorization Map states, "To apply these data to specific locations it is recommended that a field investigation be conducted by a qualified biologist for the purpose of impact assessment." (NDOW 2012). NREA utility member recommend the option for potential developers to perform a ground-based, site-specific habitat analysis at the planned disturbance area be added to each alternative where development is allowed in PPMA, PGMA, or SGMA, and that the results of this habitat assessment be considered when assessing potential impacts on greater Sage Grouse.

**Comment Number: NVCASG-14-0205-13**  
**Comment Excerpt Text:**  
13, 2.4.4

“Continued losses of GRSG habitat through natural events such as wildfire are expected to continue. Therefore, it is incumbent on the BLM and Forest Service to minimize loss of habitat or habitat functionality arising from discretionary agency actions or authorizations.”

Comment:

We recommend the statement be changed to state “Changes in GRSG habitat through natural events including wildfire are expected to continue. Under all alternatives discretionary actions can be used to better manage fuel loads, intensity of the fire, length of time that the fire burns, etc. in order to help create vegetative mosaics that provide for the diversity of habitat needed by GRSG and other sagebrush obligate species.”

Basis for comment: In an analysis conducted by the Nevada Department of Wildlife (NDOW), wildfires that occurred from 1999-2007 affected approximately 40% (364 of 912) of the active sage-grouse leks in Nevada. Additionally, these fires burned approximately 2.6 million acres of key sagebrush ecological types within the range of Greater Sage-grouse in Nevada amounting to a 12% loss of habitat over just 9 fire seasons.

**Comment Number: NVCASG-14-0205-15**  
**Comment Excerpt Text:**  
13, 2.4.4

“The concept of “no unmitigated loss” includes a suite of actions that can be taken to off-set or restore direct and indirect disturbances on GRSG habitat. This includes conducting restoration or other appropriate actions (e.g., fence marking to reduce collision risk, and avian predator diverters) in advance of or concurrent with human activities that disrupt GRSG behavior, remove habitat or degrade habitat quality, and/or functionality.”
Comment:

Prior to creating the “no unmitigated loss” concept of “GRSG habitat” management, BLM and US Forest Service need to inform the reader of the exact definition of GRSG habitat. As written, the DEIS is not legally adequate.

Comment Number: NVCASG-14-0205-18
Comment Excerpt Text:
There are numerous BLM and US Forest Service studies as well as academic studies from Nevada universities that demonstrate that increasing livestock grazing on public lands can enhance or restore native vegetation by reducing cheatgrass, which will directly enhance and restore GRSG habitat and maintain and increase GRSG abundance and distribution. Two examples include Pellant, Mike. 1996. Cheatgrass: The Invader That Won the West, Bureau of Land Management, Idaho State Office, 3380 Americana Terrace, Boise, Idaho 83706) and Field Guide for Managing Cheatgrass in the Southwest, United States Department of Agriculture Forest Service Southwestern Region TP- R3-16-4 December 2012).

Cheatgrass: The Invader That Won the West, Bureau of Land Management, Idaho State Office, 3380 Americana Terrace, Boise, Idaho 83706)

The University of Nevada also has a significant amount of information proving that increasing livestock grazing, in site-specific situations, can be used as a tool to lower fire risk by reducing the amount, height, and distribution of fuel. Livestock can also be used to manage invasive weeds in some cases and even to improve wildlife habitat (McAdoo et al 2007 at http://www.unce.unr.edu/publications/files/nr/2007/fs0721.pdf.

This under-used tool is the subject of a recent and timely publication, “Targeted Grazing: A Natural Approach to Vegetation Management and Landscape Enhancement.” (Launchbaugh 2006). There are numerous research papers including Davies (2011) that state 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.”

Comment Number: NVCASG-14-0236-1
Comment Excerpt Text:
Throughout the document there are various distances listed for the siting of structures or other disturbance activities in terms of miles (km) from leks, nesting habitat or winter ranges. We feel that these distances should have consistency throughout depending if the distance is from a lek or a winter habitat.

Comment Number: NVCASG-14-0238-6
Comment Excerpt Text:
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.

Comment Number: NVCASG-14-0238-7
Comment Excerpt Text:
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.

Comment Number: NVCASG-14-0252-2
Comment Excerpt Text:
Within the Goals and Objectives listed for the Action Alternatives, there is no rationale or basis for determining what constitutes acceptable numbers, acceptable levels or acceptable thresholds necessary to maintain abundance and distribution of sage grouse. This lack of rationale/basis creates un-
acceptable opportunity to justify un-warranted land use restrictions.

Comment Number: NVCASG-14-0278-3
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: 2-50-51

Comment: The following two statements in Alternative E are unrealistic and/or not grounded in any plant succession theory pertinent to the sagebrush region of the Great Basin.

- Alternative Limit habitat treatments in winter ranges to actions that maintain or expand current levels of sagebrush available in winter.
- Proactively monitor habitat and manage to ensure that it retains the attributes necessary to support viable GRSG populations.

The first bullet effectively eliminates any vegetation treatment that causes any reduction in sagebrush cover or density. Large tracts of sagebrush used in winter are at risk of catastrophic fire. In at least some situations fuel breaks are the only management tool to reduce the risk of large scale fire. This action eliminates an important management tool from an entire spectrum of sagebrush critical to grouse. The second bullet assumes we can maintain sagebrush on all sites on which sagebrush can grow, indefinitely. That never occurred and ignores all disturbance regimes that occur in sagebrush landscapes (see comment 2). The only management objective that may potentially be possible on existing sagebrush sites that have not transitioned to predominately cheatgrass sites is to maintain the perennial herbaceous community needed for site resilience (Chambers et al. 2007, Young and Mangold 2008, James et al. 2008, Davies 2008) following a disturbance that removes sagebrush. If the perennial herbaceous component is intact, vigorous and dense sagebrush and other shrubs will have a very high potential to reoccupy the site following typical disturbances (fire, Aroga moths, drought, excessive precipitation, etc.).

Comment Number: NVCASG-14-0285-55
Comment Excerpt Text:
In the absence of rigorous scientific evidence supporting the translation of habitat enhancement projects into increased sage grouse population numbers, BLM should exclude such projects from sage grouse Priority and General habitats.

Comment Number: NVCASG-14-0285-86
Comment Excerpt Text:
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of
existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns 68 within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment). 69

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12%
cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment). 70

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient
supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

Comment Number: NVCASG-14-0308-14
Comment Excerpt Text:
Action D-SSS-AM 9: GRSG habitat categorization and use management boundaries would be evaluated and adjusted based on continuing inventory and monitoring results every five years. Adjustments up to plus or minus ten percent of the mapped habitat within the population management zone would be made without further analysis.

The total PPH and PGH in the planning area is 16,018,100 acres (see above). Ten percent of the mapped habitat amounts to a whopping 1.6 million acres. This is actually larger than the 1,494,800 acres of “conserved areas” – wilderness, WSAs, ACEC, and IRAs cited in Table 3.61 (DEIS Chapter 3 at 123), and is only 20% smaller than the 2,091,200 acres of PPH and PGH in NE California/NW Nevada that are managed by the Alturas, Eagle Lake and Surprise Field Offices combined.

While it is understandable that minor fine-tuning may be needed in some localities because of the immense scale of the project are and the agencies heavy reliance on habitat models that have not been properly ground-truthed, the idea that adjustments of up to minus ten percent (10%) could made every five (5) years without further analysis is simply outrageous.

Comment Number: NVCASG-14-0309-23
Comment Excerpt Text:
Under Alternative D, it states that PGH in designated wilderness or wilderness study areas would be managed as PPMA. If an area was originally classified as PGH, it meant that the habitat in that location did not fit the criteria to be classified as PPH. Therefore, it does not seem accurate to reclassify PGH to PPMA just because it is in a wilderness study area. In other words, either an area contains the necessary habitat components to be classified as PPMA or it does not, independent of its location within a certain land designation.

Comment Number: NVCASG-14-0344-22
Comment Excerpt Text:
The Draft LUPA/DEIS incorrectly states that "There are currently no lands designated by the BLM or Forest Service as PPH or PGH within the sub-regional planning area; ..." This would be correct if modified to: There are currently no lands designated in the existing LUPs by the BLM or Forest Service as PPH or PGH within the sub-regional planning area; ... Currently, the BLM uses the PPH and PGH mapping to determine impacts and mitigation measures in projects being analyzed through NEPA, even though the existing land use plans do not include these designations.

Comment Number: NVCASG-14-0344-25
Comment Excerpt Text:
The first bullet on this page states, restriction of no new surface occupancy in PPMA during any time of the year. This restriction is unreasonable because it
assumes that all areas within PPMAs are used throughout the year. In contrast, the best science indicates that sage-grouse use different habitats at different times of the year (mosaic of lek, nesting, early brood rearing, late brood rearing, and winter habitat use), and some of these seasonal habitats can be at distance from other seasonal habitats. Therefore, there should be some allowance for the proponent to work with BLM and NDOW to do a habitat assessment in the vicinity of the proposed area of surface occupancy to determine which seasonal habitat(s) is present. If the habitat(s) occurs at many locations near and distant to the proposed surface occupancy, then disturbance activity that can be initiated before the sage-grouse season of occupancy should be allowed. As the season of occupancy arrives, the sage-grouse will have the choice of avoiding the activity associated with the surface occupancy by either leaving for another area of that seasonal habitat or staying at distance from the surface occupancy site. The key would be to ensure that the activity is initiated well before the seasonal habitat is likely to be used through timing limitations as conditions of approval, rather than initiate the activity after sage-grouse are present.

Comment Number: NVCASG-14-0347-3
Comment Excerpt Text:
The preferred alternative does not allow for adaptive management. Found in the USFWS’ Greater Sage Grouse Conservation Objectives: Final Report, also referred to as the COT Report, under Appendix B: Policy for the Evaluation of Conservation Efforts when Making Listing Decisions adaptive management is defined as a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. An adaptive, case-by-case approach will ensure that efforts and resources expended in the name of greater sage-grouse conservation are well spent. Ecosystems vary; site potential, plant communities, soil types, environmental influences, precipitation patterns and plant production and vigor are highly variable and cannot be appropriately managed by single-source standards and guidelines. The regulations should allow flexibility to land users.

For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed, as it appears it will be full force and effect. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come up with a 10-year plan that makes progress toward utilization objectives.

• The preferred alternative would not allow turnout of livestock within 3 miles of known leks from March 1 through May 15. It would also allow no sheep camps within 1.24 miles of known leks.
• Ch. 2 p. 195 states that, if priority or general nesting habitat does not reach “habitat objectives,” grazing will be deferred or reduced. The "habitat objectives" include:

Comment Number: NVCASG-14-0346-6
Comment Excerpt Text:
Chapter: 2, Section: Table 2.4, Page Number: 100
Comment: Alternative B D-VEG 2 proposes prioritization of habitat restoration at the sub-population and population scales. These scales are not adequately assessed for GSG in Nevada and would require widespread genetic analyses, ongoing {Oyler-McCance and Knick, pers. comm.}. In the absence of scientifically based population and sub-population metrics across the range of GSG in Nevada, we suggest that this statement be modified or eliminated. Additionally, a larger scale of prioritization might assist maximizing return on investment for currently limited funds.
In riparian areas and wet meadows, stubble height requirements of 4-6 inches.

Other objectives for all habitat areas are very prescriptive and will very likely not be feasible in many areas. For example, in nesting areas, perennial grass cover is to be at least 10%. If this objective is not being met, grazing will likely take reductions.

4.5 BEST AVAILABLE INFO BASELINE DATA

Comment Number: NVCASG-14-0003-18
Comment Excerpt Text:
In addition, BLM must discuss in the DLUPA/DEIS the baseline conditions and impacts associated with hunting, predation, and disease on sage-grouse populations. BLM’s failure to include these conditions and impacts results in an incomplete alternatives analysis. The DLUPA/DEIS must be revised to include a complete discussion of hunting, predation, and disease in the Affected Environment and Environmental Consequences chapters.

Comment Number: NVCASG-14-0003-21
Comment Excerpt Text:
BLM’s assertion that activity associated with energy and mineral development produce noise and human activity that disrupt the habitat and life-cycle of sage-grouse (Ch. 4 at 18, 19) is biased. For example, a recent study conducted on the Pinedale Anticline gas field shows that sage-grouse were not avoiding areas as a result of high levels of human activity but rather avoidance behavior was related to the density of the wells. This suggests that avoidance behavior is not a result of human activity as previously thought. BLM also fails to disclose that the prediction of population declines associated with human activity in Holloran 2005, and frequently cited in the DLUPA, have failed to occur; and that none of the noise studies cited in the NTT Report actually found a population decline in sagegrouse as a result of noise from oil and gas operations. BLM also fails to consider that other factors influence habitat selection such as topography and geology and distance from forested stands, which are not a result of human activity.

Comment Number: NVCASG-14-0003-22
Comment Excerpt Text:
AEMA recognizes that BLM has diverged from the NTT Report’s habitat objectives in lieu of habitat objectives based on studies conducted in the Planning Area (Tables 2.6 and 3.2), which AEMA believes to be a far superior use of science; however, the studies listed as “in preparation” or “in review” and the habitat objectives linked to these studies must be removed. At best, the data these studies provide is preliminary data, it certainly does not rise to the level of “Best Available Science” required by NEPA, and is not “substantially reproducible” pursuant the DQA, discussed in detail below.

Comment Number: NVCASG-14-0003-23
Comment Excerpt Text:
In addition, BLM relies on Garton et. al. 2011 to demonstrate population declines. However, Garton et. al. 2011 relied on antiquated lek count data which has long been criticized for failing to render statistically valid estimates of population numbers and trends, partially due to the non-random sampling, the fact that male sage-grouse move between leks, and differences in count methodology/definition of active lek. In addition, Garton et. al. is not reproducible due to the unknown and subjective criteria used to select the final data sets used in the models- a critical component of the scientific method, and uses sources such as “Anonymous.” BLM’s reliance on Garton et. al. is particularly problematic in light of recent work conducted by Dr. Robert Zink which shows that genetic data do not support the population predictions made by Garton et. al. Zink’s study, currently undergoing peer review, is the first study to link estimates of population trends with available genetic data and reveals that common genetic expectations of population reductions were not observed in the data. AEMA contends that Garton et. al. 2011 fails to meet the standards of quality pursuant the DQA (discussed in detail below), and therefore BLM must remove the findings of Garton.
et. al. 2011, and then revise and re-issue the DLUPA/DEIS.

Comment Number: NVCASG-14-0008-1
Comment Excerpt Text:
APLIC requests that the BLM consider these studies, which use current telemetry techniques and specifically investigate sage-grouse responses to power lines, when addressing power lines in its LUP update.


Comment Number: NVCASG-14-0050-13
Comment Excerpt Text:
The Center believes it is important to state that human-induced landscape-scale changes to sage grouse ecosystems pose a dire threat to the long term continued existence of the species. We are not alone. Miller et al. noted that sagebrush habitats are severely stressed across much of the range, and their total area likely will decline near future as a result of invasive species, fire, and climate change.


Comment Number: NVCASG-14-0050-17
Comment Excerpt Text:
Energy development can cause radical changes to sagebrush ecosystems. Analysis of oil and gas developments found cases where such lands contained twice as many roads and power lines and the density of development far exceeded the grouse’s threshold of tolerance. 138

Energy development and its related infrastructure impacts grouse in many ways, both direct and indirect, cumulatively and synergistically.

Males and females may abandon leks if repeatedly disturbed by raptors perching on power lines near leks, by vehicle traffic on nearby roads, or by noise and human activity associated with energy development. Collisions with power lines and vehicles and increased predation by raptors may increase mortality of birds at leks. Roads and power lines may also indirectly affect lek persistence by altering productivity of local populations or survival at other times of the year. Sage-grouse mortality associated lines and roads occurs year-round, and artificial ponds created by development that support breeding mosquitoes known to vector West Nile virus elevate risk of mortality from disease in late summer. Sage-grouse may also avoid otherwise suitable habitat as development. Impacts from well sites to leks were still evident out to 6.4 km from the well.139

136 Connelly et al. 2011a
137 Naugle et al. 2011.
138 Ibid.
139 Ibid.

Comment Number: NVCASG-14-0050-3
Comment Excerpt Text:
The Preferred Alternative D does identify 12,693,500 acres of preliminary priority habitat and 5,039,400 acres of preliminary general habitat on BLM and Forest Service-administered land in the planning area, which is 49,868,700 acres. However, priority habitat in the preferred alternative does not include Nevada.
Department of Wildlife ("NDOW") category 3 habitat, “habitat of moderate importance” to sage-grouse (Ch. 2, 33, Table 2-3; Ch. 3, 16).

The purpose for the Amendments is to “identify and incorporate appropriate conservation measures in LUPs to conserve, enhance, and restore GRSG habitat by reducing, eliminating, or minimizing threats to that habitat.”

Comment Number: NVCASG-14-0050-7
Comment Excerpt Text:
DEIS Tables 3.1 and 3.2 provides the agencies’ objective for providing healthy habitats for sage grouse. In general we find them satisfactory, however will now point out several short-comings that need to be addressed in the final amendments.

The DEIS establishes winter habitat objectives that call for sagebrush canopy cover to be greater than 10% and more than 25 cm tall, with greater than 80% of the land having sagebrush on it.89

Schroeder et al. found that shrub canopy cover on winter ranges generally varies from 6-43%.90 Studies in central Oregon found that sagebrush canopy cover was typically >20% at winter-use sites.91 In central Montana, sage-grouse selected dense (>20% canopy cover) stands of big sagebrush during winter.92 In Utah, Homer et al. found wintering grouse preferred shrub habitats with medium to tall (40-60 cm) shrubs and moderate shrub canopy cover (20-30).93 Connelly et al. reported that grouse use shrub heights of 25-35 cm above the snow, hence the called for 25-35 cm shrub height in the DEIS provides for a less tall shrub than preferred by the bird.94


Crawford et al. found that the height of sagebrush on winter ranges is typically 25-80 cm.95 Schoenberg found that sage grouse selected wintering areas having greater sagebrush cover than at random sites and sagebrush heights were 2-3 times greater at use verses random sites.96 Connelly reported total height of sagebrush at winter use sites by sage-grouse was greater than at random sites, and provided evidence suggesting that sage-grouse moved to taller sagebrush as snow depth increased.97

Robertson reported Wyoming big sagebrush canopy cover and height were consistently greater at use sites when compared to random sites.98

The Center therefore strongly believes that in light of the available science the winter habitat objectives should be adjusted to 20-30% crown cover with shrub heights 25-35 cm above the median snow level, or greater than 40 cm in height, whichever is taller.

Comment Number: NVCASG-14-0050-8
Comment Excerpt Text:
The DEIS gives passing coverage of the impacts of noise on sage grouse, and the Center now raises the prominence of this cross-cutting issue. We base our comments on newly published research and recommendations from Patricelli et al. regarding sound impacts on sage grouse.99


94 Connelly et al. 2000.


The authors state that acoustic communication is very important in the reproductive behaviors of sage grouse and that effective management of the natural soundscape is critical to the conservation and protection of sage grouse. While the paper specifically studies oil and gas production noise, the authors state that,

“Other types of anthropogenic noise sources (e.g., infrastructure from oil, geothermal, and mining, as well as wind development, off-road vehicles, highway traffic, and urbanization) are similar in acoustic frequency, amplitude, and timing to the noise played in this experiment, and response by sage-grouse to these other noise sources may be similar.”

Noise impacts sage grouse in several ways:

- Female sage grouse use male vocalizations to find males on the lek, and females use male vocalizations and displays to find a mate. Reduced female visitation of leks would decrease mating leading to reduced recruitment into the population. Studies show that industrial and other human-induced noises mask sage grouse communications.
- Noise has been shown to increase grouse corticosterone levels indicating increased physiological stress.
- Juvenile males were shown to avoid leks near natural gas drilling sites, and this effect was more pronounced when the leks were downwind of the drill site, and hence noisier.101
- Human induced noise can mask the sound of predators and increase grouse mortality, particularly in chicks since vocalizations between hens and chicks are generally soft and quiet.

Blickley found in a treatment-control paired study that there was an immediate and sustained decline in male grouse attendance on leks subjected to human noise associated with well sites (29% decline on study drilling noise leks and 73% decline on study traffic noise leks relative to paired non-noise leks) and evidence of similar declines in female attendance.102

Another study found that even light vehicular traffic of fewer than 12 vehicles/day substantially reduced nest initiation rates and increased the distance of nests from lek sites.103

As developed in our comments in Section 2, many critical breeding and brood-raising activities occur off- leks and often at significant distances from the lek. Hence, the impact of human induced noise should not be limited to that on leks, and in fact quite often extends several kilometers from the lek.
100 Ibid.


**Comment Number: NVCASG-14-0052-9**

**Comment Excerpt Text:**
TMA 22.5 Annual Lek Counts: Who is currently responsible for counts? Nevada Department of Wildlife? If there is a large discrepancy between the NDOW number and the Technical Team number, which will be considered the most scientifically correct?

**Comment Number: NVCASG-14-0061-1**

**Comment Excerpt Text:**
Unfortunately, the draft EIS does not fully outline the steps permittees have taken on the Modoc National Forest to improve sage steppe habitat and increase GSG populations. I would strongly urge you to fully disclose our proactive management and the standards and guidelines already in place on the Modoc National Forest in the EIS.

**Comment Number: NVCASG-14-0062-1**

**Comment Excerpt Text:**
Figure 1-2 in the EIS depicts Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH). PPH and PGH were developed from a Geographic Information System (GIS) mapping exercise and may not be accurate on the ground, especially in areas where mining occurs.

**Comment Number: NVCASG-14-0062-2**

**Comment Excerpt Text:**
We suggest that the EIS include a mechanism for withdrawal from PPH and PGH designation based on site-specific conditions where these designations are inaccurately reported.

**Comment Number: NVCASG-14-0064-3**

**Comment Excerpt Text:**
The benefits of early spring grazing as it relates to overall plant health and production in addition to providing for better sage grouse habitat is well documented. (Burkhardt and Sanders, 2012).

**Comment Number: NVCASG-14-0064-4**

**Comment Excerpt Text:**
Ch. 2 p. 195 states that, if priority or general nesting habitat does not reach “habitat objectives,” grazing will be deferred or reduced. The “habitat objectives” include:

- In riparian areas and wet meadows, stubble height requirements of 4-6 inches. Stubble height requirements as a trigger for livestock are never useful. Determination of stubble height in riparian areas should be determined at the conclusion of the growing season. The amount of biomass removed is of less importance as the amount that is left at the end of the growing season. Sufficient stubble height at the end of the growing season insures proper sediment capture that is important in providing for healthy riparian areas. Stubble height requirements as a trigger for livestock removal could, in some years, mean that livestock would never be able to graze at any time of year.

**Comment Number: NVCASG-14-0064-5**

**Comment Excerpt Text:**
The reference literature used as the background for recommending a buffer distance around a lek or nest refer primarily to citations of research on anthropogenic effects of noise and vehicular and...
machinery activities on birds in the distance they travel to find suitable low disturbance nesting sites. I did not find any research as to the social disturbance effects of an animal passing through the area of the lek or nest site be it a cow, sheep, elk, deer, wild horse, other game bird or an exotic introduced species of animal.

Comment Number: NVCASG-14-0069-2
Comment Excerpt Text:
The plan should consider important, new information concerning sage-grouse and sagebrush steppe.

The National Environmental Policy Act requires agencies to use “high quality” information in planning (40 C.F.R. § 1500.1(b)) and the BLM’s own sensitive species policy requires the agency to “obtain and use the best available information deemed necessary to evaluate the status of special status species in areas affected by land use plans” (BLM Manual 6840.22A) (see also BLM NEPA Handbook H-1790-1, 6.8.1.2 (January 2008), “Use the best available science to support NEPA analyses…”). The Forest Service, a cooperating agency in the Planning Strategy, also committed to using best available science in land use planning in its transitional 2000 planning rule (36 CFR § 219.35) and its new 2012 planning rule (77 Fed. Reg. 21162). Finally, planning criteria for the draft Nevada/NE California plan assures that all proposed management actions will be based on current scientific information and technology (Ch. 1, xix). The following new information related to sage-grouse and sagebrush steppe was published during preparation of the draft plan and should be considered in the final plan, as appropriate.


Sage-grouse require sagebrush-dominated landscapes containing minimal levels of anthropogenic disturbance. Ninety-nine percent of remaining active sage-grouse leks were in landscapes with less than 3 percent disturbance within 5 km of the lek, and 79 percent of the area within 5 km was in sagebrush cover.


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


Modeling indicates that the Wyoming sage-grouse core area conservation strategy, fully applied, plus $250 million invested in targeted conservation easements, would slow, but not stop projected sage-grouse population declines in the state. The Wyoming core area policy prohibits or restricts surface occupancy within 0.6 miles of sage-grouse leks, generally limits development to one site per 640 acres, and limits cumulative surface disturbance to 5 percent per 640 acres in core habitat.


The predicted cumulative impact of dense fluid minerals development (3.1 wells/km2) and West Nile virus outbreaks on greater sage-grouse quadrupled inactivity at leks in northeast Wyoming compared to the individual impacts of development or disease. Noting the deleterious effects of cumulative impacts on sage-grouse, the researchers concluded that "conservation measures should maintain sagebrush landscapes large and intact enough so that leks are not chronically reduced in size due to energy development, and therefore vulnerable to becoming inactive due to additional stressors." They also advised “placing new developments outside of core [habitat] areas has the greatest likelihood of sustaining [sage-grouse] populations.”


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


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

Comment Number: NVCASG-14-0071-5
Comment Excerpt Text:
Our company has worked long and hard on the issue of mapping sage-grouse and sage-grouse habitat throughout the development of the State of Nevada's Sage-grouse Conservation Plan. We are very concerned about the accuracy of the maps contained in the draft EIS which purport to describe various priority and general sage-grouse habitats. The State of Nevada has now funded a USGS-led effort to develop well-founded sage-grouse habitat maps for use in the Nevada Conservation Plan. When complete, the new USGS maps should be adopted by and used by all agencies managing lands in Nevada. Nothing is more frustrating for the regulated public than to be faced with different maps at different agencies. Furthermore, it is critical that all users of public lands be allowed to validate the specific sage-grouse maps for their project areas and to potentially adjust the previously mapped sage-grouse boundaries if they are found to be incorrect.
Correct maps are at the very heart of all of the management and regulatory programs. Without confidence in the maps, confidence in the entire effort is lost. The selected EIS alternative should ensure that the validity of the maps is established and maintained through frequent updates to reflect the changing patterns of the birds.

Comment Number: NVCASG-14-0083-1
Comment Excerpt Text:
a recent scientific study conducted in a portion of northern Nevada concluded that depredation accounted for 82.5% of the nest failures of sage grouse (Lockyer et al. 2013);

Comment Number: NVCASG-14-0083-2
Comment Excerpt Text:
another study concluded that nest depredation represents approximately 94% of sage grouse failures (Moynahan et al. 2007);

Comment Number: NVCASG-14-0083-3
Comment Excerpt Text:
ravens are responsible for 46.7% of sage grouse nest depredations in northern Nevada (Lockyer et al. 2013);

Comment Number: NVCASG-14-0083-37
Comment Excerpt Text:
the same study also concluded that an increase in one raven per 10 km2 was associated with a 7.4% increase in probability of Greater Sage Grouse nest failure in parts of northern Nevada (Lockyer et al. 2013);

Comment Number: NVCASG-14-0083-4
Comment Excerpt Text:
the same study also concluded that an increase in one raven per 10 km2 was associated with a 7.4% increase in probability of Greater Sage Grouse nest failure in parts of northern Nevada (Lockyer et al. 2013);

Comment Number: NVCASG-14-0083-66
Comment Excerpt Text:
The USFWS has failed to scientifically show that wind and solar energy is a direct impact to the GRSG habitat or populations.

Comment Number: NVCASG-14-0091-20
Comment Excerpt Text:
the same study also concluded that an increase in one raven per 10 km2 was associated with a 7.4% increase in probability of Greater Sage Grouse nest failure in parts of northern Nevada (Lockyer et al. 2013);

The DEIS incorrectly states that “There are currently no lands designated by the BLM or Forest Service as PPH or PGH within the sub-regional planning area; …” It is correct to say that there are currently no lands designated in by the BLM or Forest Service in the existing LUPs as PPH or PGH within the sub-regional planning area. Currently, the BLM uses the PPH and PGH mapping to determine impacts and mitigation measures in projects being analyzed through NEPA, even though the existing LUPs do not include these designations.

Other historical accounts and information identify that the effects of European contact has had a positive effect on Sage Steppe habitat, as well as wildlife populations in general. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)
Comment Number: NVCASG-14-0091-30  
Comment Excerpt Text:  
Action D-SSS-AM  

Change so that the habitat maps can be updated less than five years if there is information and better science.

Comment Number: NVCASG-14-0091-43  
Comment Excerpt Text:  
Define what is considered a “tall structure.”

Comment Number: NVCASG-14-0091-44  
Comment Excerpt Text:  
In nesting sites, a blanket percentage of perennial grass cover is not founded in science. Perennial grass cover is dependent on the ecological site potential according to its current ecological state. Perennial grass cover decreases with increasing brush cover. Further, the table provides no units to inform of what “shrub cover <25^2” means.

Comment Number: NVCASG-14-0091-9  
Comment Excerpt Text:  
The areas of PPH and PGH are not based on the best available science and there is updated ESD state and transition models and GSG mapping (by Dr. Peter Coates) completed that are now the best science. Please incorporate.

Comment Number: NVCASG-14-0094-7  
Comment Excerpt Text:  
Chapter 3, Chart 3-3, Page 416.... Is there a statistically valid result from this Chart? You have the same number of Leks at a distance of 6-10 and 21-25 km from I-80. And almost the same results for the number of Leks at 11-15 and 31-35 Km from the I-80.

Comment Number: NVCASG-14-0095-2  
Comment Excerpt Text:  
LUPA/DEIS fails to include and the authors fail to base their conclusions on the historic record of sage grouse population changes as provided by eye witness accounts since the early Nineteenth Century. It is well established that sage grouse in Nevada were infrequently observed and not at all abundant prior to 1850. By 1950 sage grouse were very abundant at locations throughout what is now labeled as Great Basin sage grouse habitats. Written history and personal testimony shows that the historic high numbers of Sage grouse occurred after settlement brought the establishment of ranches in the Great Basin. Please correct your text to fully accept the series of reports authored by Nevada Assemblyman Ira Hansen and the web site of Nevada Naturalist and Rancher Cliff Gardner http://www.gardnerfiles.com/

Comment Number: NVCASG-14-0102-3  
Comment Excerpt Text:  
In a memo dated March 19, 2002 by Quinton J. Barr, Range Consultant for Western Range Service, he states, “(GRSG) Populations peaked in about 1930 and remained high through the 1960’s.”

- During this same time livestock numbers in Nevada were at their highest and predator control was being used extensively.

Comment Number: NVCASG-14-0114-2  
Comment Excerpt Text:  
Resource extraction in both exploration and development, whether fluid, locatable and salable minerals constitute discrete impacts to SG according to the National Technical Team (NTT) report.2 Sage-grouse are extremely sensitive to these discrete disturbance,(3) and thus resource extraction is
completely incompatible with SG habitat, “There is strong evidence from the literature to support that surface-disturbing energy or mineral development within sage-grouse habitats is not consistent with a goal to maintain or increase populations or distributions.”(4)


(4) NTT, 2011, pg. 19.

Comment Number: NVCASG-14-0116-10
Comment Excerpt Text: Short-term increases in forb production have been documented following fires” (Harniss and Murray 1973; Martin 1990; Pyle and Crawford 1996) but these findings were not related to sagegrouse population characteristics. In contrast, several studies have documented negative effects of fire on sage-grouse populations (Connelly et al. 2000b, Byrne 2002, Pedersen et al. 2003) and habitats (Fischer et al. 1996; Nelle et al. 2000). Connelly et al. (2000b) documented a significant decline for a sage-grouse breeding population following a prescribed fire and Byrne (2002) reported that greater sage-grouse avoided burns that were <20 years old.”

Comment Number: NVCASG-14-0120-3
Comment Excerpt Text: BLM cannot justify relying on the NDOW Category 3 habitat, which is of lower value and imprecise, for PGH and onerous restrictions applicable to PGH. See 4.3.1. As NDOW acknowledges, there are "known issues" with this particular habitat classification. In particular, NDOW notes that "R-3 landscape patches should be evaluated on a case by case basis to determine the true potential for meeting future sage-grouse needs."

Comment Number: NVCASG-14-0120-4
Comment Excerpt Text: The Draft EIS should address the significant limitations associated with relying primarily upon lek counts as the preferred methodology to determine GRSG populations and the efficacy of subsequent conservation measures. Lek counts have been in use since 1952 and have been found to be a remarkably inconsistent tool when attempting to estimate population sizes. Of primary concern is that the data collected are really non-random samples of sage grouse leks which fail to account for male GRSG at unknown leks, ignoring the fact that males move between leks and ignoring females or juveniles. Consequently, counting only males results in an unknown proportion of the total GRSG population.

Comment Number: NVCASG-14-0132-10
Comment Excerpt Text: Garton et al. 2011, the narrative states, relative to the Snake River Plain Management Zone that “Population trends, as indicated by average number of males per lek decreased over the assessment period by 54%, and average number of males per active lek decreased by 39% (Table15.52).” However, this statement is relative only to the false "timeline" that starts in 1965, i.e., about 15 years before any of the current LUPs were in place. (See also fourth reason, below). Table 15.52 reports that there has not been any decline between 1980-84 and 2000-07.
Comment Number: NVCASG-14-0132-21
Comment Excerpt Text:
Section 3.2.2. (page 7) The DEIS states “GRSG exhibit strong loyalty, also known as site fidelity, to seasonal habitats (including breeding, nesting, brood rearing, and wintering areas) even when the area is no longer of value (Connelly et al. 2004).” However, Connelly et al 2004 did not state such, and did not state that the birds keep coming back when the area is no longer of value. Although Connelly et al 2004 inferred fidelity to seasonal areas due to summer and winter ranges, they also state: “In contrast to the information on breeding site fidelity, there is little published information on site fidelity during other seasons.” Connelly et al 2004, p. 3-6. And: “Fidelity to winter areas has not been well studied, although some evidence of fidelity to winter areas among years has been demonstrated in Washington (Schroeder et al. 1999) and Wyoming (Berry and Eng 1985). In Utah, Welch et al. (1990) found that sage-grouse showed less fidelity to winter range than to other seasonal ranges.” Connelly et al 2004, p. 4-13.

Comment Number: NVCASG-14-0132-37
Comment Excerpt Text:
PPH that is perennial grassland or annual grassland is not only non-habitat, it must also be considered not “occupied”. Priority Habitats, if designated, should not include non-sage-grouse habitats such as crested wheatgrass and other perennial seedings or areas dominated by cheatgrass or areas of juniper encroachment and domination. While these areas may be important “restoration” zones, they should be so designated, but should not be considered “priority habitat” for a species of wildlife that does not occupy them. For example, according to Dr. Clait Braun, “crested wheatgrass is a biological desert and no value to sage grouse.” (Braun testimony in Idaho U.S. Federal Court). In addition, whether to include them or not as “highest conservation value” is a LUP-level decision that should undergo its own analysis and decision-making, rather than being a “foregone conclusion” that serves as the basis for this DEIS.

Comment Number: NVCASG-14-0132-39
Comment Excerpt Text:
The fifth reason is that Garton et al 2011 analysis only begins in 1965, and does not assess against the longer term of sage-grouse populations at the time of European settlement or even the date of passage of the Taylor Grazing Act. Instead, 1965 was during a time of long-term high-intensity predator control, including coyotes, eagles, hawks, and other avian and mammalian predators. For example Compound 1080 (sodium fluoroacetate) was used extensively on the federal rangelands from about the 1940s through about 1972. Likewise, the use of M-44s (containing sodium cyanide), which had a long history of use for predator control, was banned in 1972. In addition, there were much higher numbers of sheep, and therefore shepherders with their guns and dogs, during that period than since 1980. It is highly likely that the high numbers of sagegrouse, deer, and other prey species during that time period, is directly correlated to such long-term spacial and temporal predator control. The 1965 and surrounding numbers must therefore be considered an artificially elevated number of sage-grouse (over the prior or succeeding timeframes).

Comment Number: NVCASG-14-0132-4
Comment Excerpt Text:
BLM’s reliance upon Holechek et al 1988 and Holechek et al 1998 is wholly misplaced, because those works are literature reviews, and because the source documents do not support the conclusions stated therein.

Comment Number: NVCASG-14-0132-43
Comment Excerpt Text:
Section 3.2.2. (page 7) The DEIS purports to describe sagebrush characteristics and residual vegetation, citing Connelly et al 2000a. However, such characteristics, as pertains to residual vegetation
heights, is not the best science, because it reports what the vegetation characteristics were after the hens left the nest, or the entire nesting area. Substantial growth of vegetation occurs over the 30 days or so that the hen is incubating the eggs. Hausleitner et al 2005 recorded residual vegetation heights and other characteristics at the time of nest-initiation. The DEIS does not cite or otherwise rely upon Hausleitner et al 2005.

Comment Number: NVCASG-14-0132-6
Comment Excerpt Text:
Rangeland Health Assessments, including the Forest Service-equivalent Matrices, should never be used as a substitute for actual habitat measurements, and should never be used to supersede condition and trend analysis. The RHAs and Matrices are being used by the agencies in a manner that they were not intended by their developers. They were intended by their developers to inform the agencies of where to focus ongoing monitoring, not to be a Decision-making tool.

Comment Number: NVCASG-14-0132-7
Comment Excerpt Text:
as to residual vegetation heights for nesting sage-grouse, the entire document is silent to the fact that the cited authors (e.g. Connelly et al 2000) measured residual vegetation after the hens had left their nests, not at nest-initiation. Hausleitner et al 2005 is not even referenced by the document, let alone relied upon; however, Hausleitner et al 2005 established that residual heights of 3.5-3.9 inches characterized the nest bowl and surrounding 1 meter around the nest bowl at the time of nest-initiation. Significant vegetative growth occurs between nest-initiation and post-hatch.

Comment Number: NVCASG-14-0132-9
Comment Excerpt Text:
Relative to assessment of trends concurrent with the current LUPs, Garton et al 2011 should not be relied upon, for at least six reasons:

The first reason is that Garton et al 2011 uses "effective population sizes" that have not been established as relevant for Sage-grouse, at least as so far as I could determine from reading Garton et al 2011.

The second reason is that Garton et al 2011 analyzes a period of 1965-2007; however, the period of 1965-1980 predates the existence of almost all, if not all, of the LUPs that comprise Alternative A. To condemn management under the existing LUPs, one cannot reasonably start with an extremely high baseline that predates the LUPs existence.

The third reason is that Garton et al 2011 uses discreet, but ARBITRARY, five-year time periods.

Comment Number: NVCASG-14-0140-1
Comment Excerpt Text:
Chapter 1.1.1 BLM & FS Habitat Mapping and Chapter 1, Map1: We question the validity of the PPMA footprint represented in Chapter 1, Map 1 and discussed in Chapter1.1.1. We did some truth testing in the area we ranch in NQ Nevada and found that several of the areas included in the PPMA footprint are densely timbered with 75 year old Juniper forests, or thick mahogany forests covering hundreds of acres. Specifically and only as a small sample we present the following areas as proof: T47N, R19E Sections 27,22 and 21; T46N, R18E Sections 10,15,20,26,25 and 23; T47N, R20E Sections 29 and 30. Large areas within these sections have never supported GSG, nor ever will, but are included in your PPMA. They should be removed.

Comment Number: NVCASG-14-0143-1
Comment Excerpt Text:
The draft LUPA/DEIS, section ES.3 Purpose and Need completely omits a major threat to the GESG habitat, and that is disease. According to the U of Montana study "West Nile Virus: Ecology and Impacts on Greater Sage Grouse Populations" West Nile Virus (WNV)" outbreaks more common during drought"(1). We all recognize that the GRSG habitat in the west is in the midst of a severe drought, Figures 3.19. GRSG "hen survival July-August, 2003" was about 76% with no WNV and 20% with WNV.(2) Thus the hen population decreases by
nearly 75% and further information showed that WNV reduced the GESG population by 25% in 2003!(3) The GESG population had a lek attendance decline of about 85% in 2004 due to WNV. WNV was detected in the GESG in the states of CO, MT, ND, NV, OR, SD, UT, & WY. (1) "WNV affects both sexes and all age classes (5)" and "Lab tests confirm that all birds that contact disease die"(6). GRSG Survival scenarios show a decrease of GRSG of 6-9% per year!(1) The presentation also suggests ways to manage the land to reduce mosquito's population.


(6)Clark et al. 2006

Comment Number: NVCASG-14-0150-4
Comment Excerpt Text: Connectivity

Would suggest that on Chart 3-2, page 25 have “Wyoming and Northeastern Utah” added.

Winnemucca to the Utah State Line is approximately 234 miles. Within this distance less than 35% of the miles are adjacent to PPMAs or PGMAs within the first band (0-5 km) and less than 22% of this distance bisects PPMAs and/or PGMAs. It appears that a significant portion of the Interstate is not built within PPMAs or PGMAs. The conclusion of the data in Chart 3-3 that, “Of the highest 5 bound counts, 4 occur beyond 40 kilometers [24.8 miles], indicating that the corridor may be affecting GRSG to that distance.” may not be accurate (page 25 last sentence in the first paragraph). When looking at the habitat map and the location of I-80 it is fairly clear that between Winnemucca and the Utah State Line that a majority of the leks within this distance may be located outside the various bands because of adequate habitat. It appears that this EIS should not be using information from a Wyoming study that in itself does not have a scientific conclusion. The checker board of land could be having as much an effect because of the various land uses.

Comment Number: NVCASG-14-0169-11
Comment Excerpt Text: The USGS Report also states:

[the magnitude of the impacts of mining activities on sage-grouse and sagebrush habitats is largely unknown, but mining of various Federal mineral resources (locatable and saleable) currently affects approximately 3.6 percent of potential sage-grouse habitat directly (across all MZs) with indirect effects potentially affecting large portions (5-32 percent) of some MZs"

USGS Report at 71 (internal citation omitted). While the impacts to GRSG from mining are uncertain, the habitat loss due to mining range-wide are minor and temporary because lands are reclaimed after mining, and therefore can be mitigated with appropriate conservation measures including off-site mitigation for such impacts. It should be noted that BLM reports that GRSG populations can adapt to some habitat fragmentation and that GRSG are able to bypass unsuitable habitats during migration from one seasonal habitat to another (USGS Report at 26); and that GRSG can adapt to some level of habitat fragmentation. Id. at 25.

Comment Number: NVCASG-14-0171-33
Comment Excerpt Text: Connelly et al. (2000) says 15-25% is acceptable. Total shrub cover greater than 40% is an inflated objective. Studies utilized by WAFWA for their guidelines had both successful and unsuccessful nesting less than 20%. Northeast California studies by Popham and Gutierrez (2003) indicated total shrub cover about 20% at the nest sites. None of the studies reported total shrub cover in the nest area
over 31%. These studies indicate that there needs to be flexibility built into the habitat objectives and local science and conditions need to be utilized.

**Comment Number: NVCASG-14-0171-5**

**Comment Excerpt Text:**
First that the BLM and the FS include enough detail so the Service can be comfortable that species and habitat data can be easily interpreted across the entire landscape of this and the other DEIS planning areas. Second and equally important, if the monitoring protocol is not fully described in the DEIS so it can be subject to public review, as appears to be the case, that there be a firm commitment either in the DEIS or the Record of Decision that the cooperating agencies and Resource Advisory Councils can fully engage in the final development of the protocol.

**Comment Number: NVCASG-14-0188-11**

**Comment Excerpt Text:**
Page 21, 1.6. Development of Planning Criteria, second to last bullet item in this section Discussion of the PPH and PGH designation maps in the same paragraph that states the "Data will be consistent with the principles of the Information Quality Act of 2000 (Public Law [PL] 106-554, Section 515)" is not appropriate. These maps have been used without extensive ground truthing and where baseline studies have been conducted and have findings in conflict with the maps.

**Comment Number: NVCASG-14-0188-18**

**Comment Excerpt Text:**
Page 203, Alternative B and F, Action B-LG 16 and F-LG 16

No discussion of short-term or long-term time frames. Some treatments may take time to fully restore sage-grouse habitat values, and some treatments will provide long-term benefits to sage-grouse as the vegetation changes over time. As written, treatments with short-term impacts but long-term benefits could be prohibited under these alternatives.

**Comment Number: NVCASG-14-0188-22**

**Comment Excerpt Text:**
Table 2.4 Action D-SSS 2

There needs to be an agreed to and transparent mechanism to modify the delineation of PPMA and PGMA based on site-specific project data.

**Comment Number: NVCASG-14-0192-6**

**Comment Excerpt Text:**
3.2.3, p. 414 (p. 24) last paragraph

The phrase "detrimental effects of interstate highways on GRSG nesting" implies that it is interstate activities (traffic) at impact GRSG. Do referential studies specially address traffic use or are effects to GRSG due to the associated land use adjacent to interstates and other highways? If it is the latter, we suggest language such as "development associated with interstates/highways/roads..." be used whenever discussing the potential impact of interstates or highways not specific to vehicle/GRSG impacts or direct loss of habitat due to highway construction.

**Comment Number: NVCASG-14-0192-9**

**Comment Excerpt Text:**
3.2.3, p. 415 (p. 25), Chart 3-3.

Winnemucca to the Utah State Line is approximately 234 miles. With this distance less than 35% of the miles are adjacent to PPMA or PGMA within the first b d (0-5 km) and less than 22% of this distance bisects PPMA and/or PGMA. It appears that a significant portion of the Interstate is not built within PPMA or PGMA. The conclusion of the data in Chart 3-3 that, "Of the highest 5 bound counts, 4 occur beyond 40 kilometers [24.8 miles, indicating that the corridor may be affecting GRSG to that distance.], may not be accurate (page 25 last sentence in the first paragraph). When looking at the habitat map and the location of I-80 it is fairly clear that between Winnemucca and the Utah State Line that a majority of the leks within this distance may be located outside a 25 mile band because of adequate habitat.
Comment Number: NVCASG-14-0193-3
Comment Excerpt Text:
Research from McAdoo, Back, Klebenow, Burkhardt, and other Nevada sagegrouse biologists should be cited or used throughout the DEIS.

Comment Number: NVCASG-14-0199-13
Comment Excerpt Text:
Many of the proposed alternatives use arbitrary setbacks and buffer areas that are not based on sound science. Throughout the BLM Field Offices, the restricted radius from a lek has varied between no restrictions to 1-mile, 2-mile, 3.2-mile, and 4-mile distances. Sound science with technical references needs to be presented in the DEIS supporting these criteria.

Comment Number: NVCASG-14-0199-41
Comment Excerpt Text:
Page 21, 1.6. Development of Planning Criteria, second to last bullet item in this section:

Discussion of the PPH and PGH designation maps in the same paragraph that states the "Data will be consistent with the principles of the Information Quality Act of2000 (Public Law [PL] 106-554, Section 515)" is not appropriate. These maps have been used without credible ground truthing and where baseline studies have been conducted and have findings in conflict with the maps

Comment Number: NVCASG-14-0202-18
Comment Excerpt Text:
PERCH DISCOURAGER SPECIFIC COMMENT

31. Several Alternatives described in the LUPA/DEIS call for the implementation of perch discouragers on power line support structures. However, there are conflicting stipulations regarding the location of their placement on the landscape. Chapter 2 simply calls for resource agencies to work with utilities to apply perch discouragers but does not specify where, while Appendix A calls for their application within three miles of active leks.

Numerous researchers have documented golden eagle predation on Sage Grouse (Ellis 1985; Schroeder et al. 1999). Ellis (1985) observed lekking greater Sage Grouse flushing and ceasing lek activities in the presence of a golden eagle perched two kilometers (one mile) away. Ellis (1985) also found that golden eagle predation on greater Sage Grouse on leks increased from 26 to 73 percent of the total predation after completion of a transmission line within 200 meters (656.7 feet).

The use of power line support structures as perches and nesting substrate for greater Sage Grouse predators is well documented. Steenhof et al. (1993) noted that within one year of construction of a 373 mile transmission line in southern Idaho and Oregon, raptors and ravens began nesting on support structures. Within ten years of construction, 133 pairs of raptors and ravens were nesting along the line. The increased abundance of perches and nesting substrate can potentially have negative impacts on local greater Sage Grouse populations. Greater Sage Grouse nest success has been shown to be inversely related to the density of common ravens, which may increase in the presence of a transmission line (Schroeder et al. 1999). However, an increase in common raven density does not necessarily result in a decrease in greater Sage Grouse populations. Blomberg and Sedinger (2008) noted in the Falcon-Gondor transmission line study eight year review that common ravens observed at Sage Grouse leks near a new transmission line in Nevada increased from 14 to 75 during the first four years post construction. Despite the increase in common raven occurrences at leks, lek attendance by greater Sage Grouse did not decrease.

Despite the potential for predators utilizing the support structures for the Falcon-Gondor transmission line as predatory perches (as noted by Blomberg and Sedinger (2008) above), the final results of the ten-year study indicate that greater Sage Grouse did not react negatively to the presence of the transmission line (Nonne et al. 2013). After the ten year results were calculated, the distance to the transmission line was not a significant negative influence on nest survival, pre-fledgling survival or female survival. Nest, pre-fledgling, and female
survival would be expected to be negatively influenced if the transmission line caused an unfavorable advantage for predators. Male lek attendance and male movement between leks was also not negatively influenced by the presence of the transmission line.

**Comment Number: NVCASG-14-0205-18**

**Comment Excerpt Text:**
There are numerous BLM and US Forest Service studies as well as academic studies from Nevada universities that demonstrate that increasing livestock grazing on public lands can enhance or restore native vegetation by reducing cheatgrass, which will directly enhance and restore GRSG habitat and maintain and increase GRSG abundance and distribution. Two examples include Pellant, Mike. 1996.

Cheatgrass: The Invader That Won the West, Bureau of Land Management, Idaho State Office, 3380 Americana Terrace, Boise, Idaho 83706) and Field Guide for Managing Cheatgrass in the Southwest, United States Department of Agriculture Forest Service Southwestern Region TP- R3-16-4 December 2012).

The University of Nevada also has a significant amount of information proving that increasing livestock grazing, in site-specific situations, can be used as a tool to lower fire risk by reducing the amount, height, and distribution of fuel. Livestock can also be used to manage invasive weeds in some cases and even to improve wildlife habitat (McAdoo et al 2007 at http://www.unce.unr.edu/publications/files/nr/2007/fs0721.pdf.

This under-used tool is the subject of a recent and timely publication, “Targeted Grazing: A Natural Approach to Vegetation Management and Landscape Enhancement.” (Launchbaugh 2006). There are numerous research papers including Davies (2011) that state 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.”

**Comment Number: NVCASG-14-0205-25**

**Comment Excerpt Text:**
Quoting Connelly’s summary of sage-grouse studies is NOT use of the best available science. The original studies and publications that Connelly merely references or summarizes are the best available science, not Connelly’s interpretations of those studies and publications. Many of the documents referenced in Connelly are not available to the public. Some are available, but only for a fee.

Quoting Connelly’s quotation of other authors violates the Information Quality Act of 2001 (Section 515 of Public Law 106-554).

**Comment Number: NVCASG-14-0205-26**

**Comment Excerpt Text:**
7, 3.2.1

“thought to be a reduction of 44 percent from the range prior to Euro American contact (Connelly and Braun 1997; Schroeder et al. 2004). “

**Comments:**

Nye County recommends removing the statement because it is speculative and unsupported by facts or data. Connelly and other authors have described their rationale for delineation of a "Sage Grouse Conservation Area" to include a much larger area than that which sage grous are currently or historically found. The area includes a 50km buffer surrounding a hypothetical “pre-European sage grouse distribution” and large areas within “historic range”, but the authors provide no data or evidence of historic or current sage grouse populations (e.g. the desert of southeastern Utah). The 50km buffer increases the area of the author’s proposed “Sage Grouse Management Area” by over 450,000 km2.

As pointed out by the Center for Environmental Science, Accuracy and Reliability in the Ecology and
Conservation of Greater Sage-Grouse: A landscape species and its habitat (2013), the Knick and Connelly monograph relies critically on extensive GIS analysis to translate speculative habitat conditions into theoretical historical habitat, which is then compared to current potential sage grouse habitat.

**Comment Number: NVCASG-14-0205-27**

**Comment Excerpt Text:**

3.2.1

“Regional population declines have ranged from 17 to 47 percent (Connelly and Braun 1997). Although specific reasons for population decline differ across the range, the underlying cause is the loss, degradation, and fragmentation of suitable sagebrush habitat (Connelly and Braun 1997; Leonard et al. 2000; Aldridge et al. 2008). As sagebrush habitats increasingly overlap with natural resources (e.g., oil, gas, wind, minerals, agriculture, and recreation areas) and face increased landscape-level changes caused by exotic weeds, fire, and conifer encroachment (Connelly et al. 2004), populations have declined substantially, raising conservation concern for the species.”

Comment:

Delete the sentences from the EIS. To cite outdated 1997, extremely general data on population trends does not meet the Information Quality Act of 2001 and shows a bias against including the truth that sage-grouse populations in Nevada are stable.

- Historical records do not consist of quantitative surveys and cannot be compared directly to modern censuses
- Historically, no one surveyed specifically for sage-grouse
- Do not know where someone was actually looking for sage-grouse and didn’t find any
- Historical records do not distinguish between a few birds and many

Connelly (2004) Page 6-36 had the following to say about his Nevada population trend data, which the authors of the EIS failed to include: Nevada has identified 1,077 sage-grouse leks within the state but monitoring efforts have been erratic. Because of inconsistent census efforts, we were able to assess change in lek size from 1965 to 2003 but could only examine changes in populations from 1974 to 2003.

During the late 1960s and 1970s, relatively few leks were censused. However, the number of leks counted increased and then remained relatively stable until the late 1990s (Table 6.8). By 2000, monitoring efforts increased substantially when the average number of leks counted during 2000-03 increased by 146% over the average number of leks counted in 1995-99 (Table 6.8). Overall, the number of active leks monitored followed the same increasing pattern as total number of leks.

Instead, the recent State of Nevada data should be used including the following:

Since 1996, the lek counts show that Nevada has experienced a slight population increase when applying a logarithmic trend (Figure 2). This is largely due to a spike in the number of males attending leks in 2005 and is likely a result of several years of good recruitment.

SEE ATTACHMENT FOR SAGE GROUSE PRODUCTION GRAPH


**Comment Number: NVCASG-14-0205-28**

**Comment Excerpt Text:**

8, 3.2.2

“Sage-grouse use a variety of locations for leks, specifically open areas. Leks can occur on wind swept ridges and rocky knolls, low sagebrush, bare openings created by roads and fire, stock ponds, air strips, natural meadows, dry lake beds, alkaline flats, and ant hills (Patterson 1952, Giezentanner and Clark 1974, Connelly et al. 1981).”
Comment:

The EIS should use Nevada and NE California sage-grouse habitat data, where available. In Nevada sage-grouse prefer using sparsely vegetated sites for strutting, resulting in the use of such altered habitats as airstrips, gravel pits, cultivated fields, and roads. (Sage Grouse Habitat Requirements. Kent McAdoo, Natural Resources Specialist, Northeast Area Gary N. Back, Principal Ecologist, SRK Consulting, 2001).

The EIS needs to be rewritten to eliminate the biases that authors exhibited. Land uses that create lek habitat including airstrips, gravel pits, cultivated fields and roads should be assessed in light of their positive impacts to sage-grouse instead of identifying only their potential negative impacts.

Comment Number: NVCASG-14-0205-29
Comment Excerpt Text:

3.2.2

“Leks can be formed opportunistically at any appropriate site within or adjacent to nesting habitat (Connelly et al. 2000a), and, therefore, lek habitat availability is not considered to be a limiting factor for GRSG (Schroeder et al. 1999).”

Comment:

Nye County recommends deleting the sentence regarding lek habitat availability not being considered a limiting factor. The statement goes against biological principles. At some level, lek availability certainly can become a limiting factor.

This contradicts with the best scientific available. In Nevada, the lek itself and associated nesting habitat is categorized as essential and irreplaceable habitat http://www.ndow.org/uploadedFiles/ndoworg/Content/Nevada_Wildlife/Sage_Grouse/Sage-Grouse-Habitat-Categorization.pdf.

Comment Number: NVCASG-14-0205-42
Comment Excerpt Text:

4.3.1

“Holloran 2005” is cited eight times in Chapter 4 of the EIS to justify restrictions on land uses, especially energy development.

Comment:

Delete all reference to Holloran 2005.

The Information Quality Act of 2001 requires that information used by agencies be based upon verifiable and repeatable data, and not based upon opinion. Moreover, the EIS authors cannot selectively use results from Holloran (2005) to support its recommendations, while failing to state that they were statistically insignificant and contrary to more recent and comprehensive data.

The EIS and NTT Report fail to mention several key facts about the Holloran (2005) study that are contrary to accepted science. As an initial matter, Holloran (2005) was an unpublished dissertation that did not employ any hypothesis testing. Instead, Holloran (2005) used subjective interpretations of his results, or the equivalent of creating "just so stories" to explain results in light of a particular viewpoint.

That is not science, it is subjective opinion.

Additionally, as reported by Ramey (2013), the following data quality issues are identified in the study by Holloran (2005) that are relevant to the BLM’s continued reliance on it as a basis for decision making: Holloran (2005) only speculated on potential causal mechanisms of population decline, as his data and study design were focused only on localized effects. Additionally,

Holloran admitted that, "Identifying causes of population declines has remained elusive." And the “displacement theory” favored by Holloran (2005) does not provide any test of the hypothesis that local, temporary displacement of yearling sage grouse from
areas under intensive development has led to population level declines.

Holloran (2005) does not provide any data that population declines have occurred or that density-dependent effects have occurred in nearby areas, only that the results suggest that these might occur or have the potential to occur. He wrote, "The results from this study suggest that dispersal from developed areas could be contributing to population declines. Although the proportion of potentially displaced adult and yearling males and yearling females breeding and nesting in areas removed from gas field infrastructure is unknown, offsite populations could be artificially enhanced by gas development. Because of potential density-dependent influences on breeding and nesting success probabilities

(LaMontagne et al. 2002, Holloran and Anderson 2005), maintenance of these enhanced populations could require increasing the carrying capacity of offsite habitats."

Holloran (2005) also wrote that, "Adult male displacement and low juvenile male recruitment appear to contribute to declines in the number of breeding males on impacted leks. Additionally, avoidance of gas field development by predators could be responsible for decreased male survival probabilities on leks situated near the edges of developing fields (i.e., lightly impacted leks). Although site-tenacious adult females did not engage in breeding dispersal in response to increased levels of gas development, subsequent generations avoided gas fields, as suggested by the temporal shift in nesting habitat selection and differences in habitat selection by yearling and adult females. This suggests that the nesting population response is delayed avoidance of natural gas development. The results suggest that male and female greater sage-grouse displacement from developing natural gas fields contributes to breeding population declines." As one can readily see, this "strong science" relied upon by the NTT Report depends upon speculation, hypothetical worst-case scenarios coming true, and creating just-so-stories to explain results. It does not rely on hypothesis testing.

The EIS and NTT Report make no mention of the fact that Holloran (2005, page 82, Table 2) reported that the probability of survival was predicted to be higher (61.5 +6.4%) in disturbed areas than in less impacted areas (29.6 +18.1%) or control areas (48.5 +14.4%). This result is contrary to Holloran's (2005) own assertions regarding supposed population impacts.

The EIS and NTT Report make no mention of the fact that Holloran's (2005) predicted population declines (-8.7 to -24.4% annually) have simply failed to come true. Recent analysis of male lek-attendance trends by the State of Wyoming has instead found that the sage grouse population has been increasing since 1990, a clear refutation of Holloran's predictions of population decline. It is the litmus test of science that when such predictions fail to come true, the hypotheses/theories they are based upon are simply wrong (Platt 1964). The BLM cannot rely on studies cited that have been so clearly invalidated.

The purported impacts reported by Holloran (2005) were not based on full disclosure of the facts. Holloran (2005) did not acknowledge that the BLM had intentionally waived required mitigation stipulations on the Pinedale Anticline in order to facilitate his research on impacts to sage grouse without stipulations. It is a serious error of omission for the EIS and NTT Report to uncritically cite Holloran's (2005) conclusion that stipulations on the Pinedale Anticline were ineffective, when the stipulations were not actually in place. The BLM cannot rely on information that contains such errors of omission.


As explained in Taylor (2013), the “impacted” leks that Holloran 2005 documented “included leks intentionally impacted by BLM. Holloran (2005) used these BLM-impacted leks, which ultimately became inactive during the course of his study, in deriving
model-based estimates of population persistence. The exercise predicted localized extirpation of leks impacted by gas development at densities greater than 1 well per square mile. This work was completed in 2004 in the wake of a general statewide sage-grouse decline.

Predictions made at that time indicated extirpation of grouse was inevitable, not only for the development area but throughout the Upper Green. Since 2004, populations have increased. Given the long-term population fluctuations that sage-grouse exhibit range-wide, the results of any short-term modeling exercise must be interpreted with due circumspection.

The analysis of lek complexes in the area demonstrates that leks continue to be occupied even when impacted by the intensive natural gas magnitude regardless of the specific population being evaluated. A similar observation was made by Braun et al. (2002) relative to the sage-grouse in the McCallum Oil Field in North Park, Colorado, “During the 1973 to 2001 interval, number of male sage-grouse counted and active leks in this area fluctuated in synchrony with the entire sage-grouse population in North Park. These same fluctuations are seen range wide. Greater sage-grouse populations, like many wildlife populations, show periodic fluctuation in abundance and distribution. These fluctuations are likely the result of a suite of factors including climatic trends and anthropogenic influences.”

SEE ATTACHMENT for Figure 38 and Figure 45

**Comment Number: NVCASG-14-0205-49**
**Comment Excerpt Text:**
The cited studies provided no evidence of sage grouse population decline as the result of anthropogenic sound produced by the oil and gas industry. None of the noise studies cited in the NTT Report, Patricelli in review, Patricelli et al. (2010), Blickley et al. (in preparation), or Blickely and Patricelli (in press) had actually found a population decline in sage grouse as a result of noise from oil and gas operations.

**Comment Number: NVCASG-14-0205-6**
**Comment Excerpt Text:**
The LUPA should recognize that the boundaries of the Preliminary Priority Management Areas (PPMA) and Preliminary General Management Areas (PGMA) represent a broad-scale evaluation of habitat and are intended to identify potential GRSG concerns at the landscape level and should not be used for making planning decisions at the project level. See, Nevada Department of Wildlife, Greater Sage-Grouse Habitat Categorization White Paper, p. 2 (March 2012). Accordingly, the LUPA should provide that any PPMA or PGMA designated area may be redesignated if the existing designation is shown, through verified on-the-ground habitat and land-use conditions, to be unwarranted. The LUPA should allow the revision without requiring a plan amendment. Further, the LUPA must describe the procedure for redesignating habitat.

**Comment Number: NVCASG-14-0208-1**
**Comment Excerpt Text:**
The Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH) designations were each drawn at the landscape-level. Disclaimers should be introduced to the document stating that the habitat categories were drawn at a landscape-level scale and that this information is not to be used at the project-level, management scale. Site-specific surveys and high quality data with scientific interpretation must be used to determine appropriate management actions. It is not appropriate to make project-level determinations without the appropriate site specific data needed to determine the actual conditions.

**Comment Number: NVCASG-14-0211-1**
**Comment Excerpt Text:**
the decline in Sage Grouse has been of concern for many years. The following study was done in 1998 and this study needs to be considered within the EIS. The only things that have changed are the fact that there are more fences, more power lines, more encroachments from multiple use activities and FEWER SAGE GROUSE.
Comment Number: NVCASG-14-0219-3
Comment Excerpt Text: the Draft LUPA EISs apparently accept the erroneous FWS Findings that the greater sage-grouse is warranted for listing under the ESA without undertaking any critical examination of such findings, and then choose to ignore analysis of population levels and trends in favor of a focus on habitat conditions and trends without any consideration for how such habitat factors ultimately affect the grouse populations. Such approach fails to conform to the overriding purpose and need identified for the Draft LUPA EISs which is specifically tied to the desire to avoid listing the greater sage-grouse under the ESA.

Comment Number: NVCASG-14-0224-22
Comment Excerpt Text: This LUPA/DEIS section claims “All studies which assess impacts of energy development on GRSG have found negative effects on populations and habitats (Naugle et al. 2011).”

First, Naugle et al 2011 did not evaluate “all studies,” rather they studied a select few that support a small group of scientists’ preconceived notions. Naugle’s review ignored or misinterpreted several other studies, including Taylor et al (2007), Taylor et al (2010), and Harju et al (2010) among a host of others. It is also important to note that Naugle’s emphasis has historically been focused on limited areas within Management Zone 2 (Powder River Basin and Pinedale, WY), which contain significantly different habitat, threats and impacts than those found in Nevada. Of even greater importance is that Taylor et al (2007) (in publication) analyzed six oil and gas development areas and one control area (Harju et al. 2010 used the same seven areas) (in publication) in Wyoming with various degrees and ages of activity to determine GRSG population trends relative to intensity and timing of oil and gas development. They report that:

- GRSG population trends are consistent among populations regardless of the scope or age of energy development fields, and that population trends in the six development areas mirror trends state-wide;
- Application of the BLM standard GRSG stipulations appear to be effective in reducing the impact of oil and gas development on male-lek attendance;
- Male lek attendance in areas that are not impacted by oil and gas development is generally better than areas that are impacted;
- Displacement from impacted leks to non-impacted leks may be occurring; research is needed to assess displacement and its implications for developing GRSG conservation strategies;
- Lek abandonment was most often associated with two conditions, including high density well development at forty-acre spacing (sixteen wells per square mile), and regardless of well spacing when development activity occurred within a quarter-mile lek buffer;
- Extirpation of GRSG has not occurred in any of the study areas;
- Long-term fluctuations in GRSG population trends in Wyoming reflect processes such as precipitation regimes rather than energy development activity; however, energy development can exacerbate fluctuations in GRSG population trends over the short-term.


Comment Number: NVCASG-14-0224-23
Comment Excerpt Text: Another study conducted in the Wyoming Pinedale Anticline conducted by Ramey et al. (2011)18 reported that current stipulations and regulations for
oil and gas development in GRSG habitat are largely based on studies from the Jonah Gas Field and Pinedale Anticline. These and other intensive developments were permitted decades ago using older, more invasive technologies and methods. The density of wells is high due to the previous practice of drilling many vertical wells to tap the resource (before the use of directional and horizontal drilling of multiple wells from a single surface location became more common) and prior to concerns over GRSG conservation. These fields and their effect on GRSG are not necessarily representative of GRSG responses to less-intensive energy development. Recent environmental regulations and newer technologies have lessened effects to GRSG.

Comment Number: NVCASG-14-0224-24
Comment Excerpt Text:
The BLM/FS need to consider results of studies conducted by Ramey et al (2011) and Taylor et al (2007) in addressing the effects of oil and gas development on GRSG and GRSG habitat in NV.

Comment Number: NVCASG-14-0236-2
Comment Excerpt Text:
Site-specific, high quality data with scientific interpretation must be used to determine appropriate management actions. It is not appropriate to make project-level determinations without data such as a mitigation ratio of 3 acres for every 1 acre of disturbance in PPH without the collection of data needed to determine the actual conditions.

Comment Number: NVCASG-14-0240-3
Comment Excerpt Text:


Comment Number: NVCASG-14-0240-4
Comment Excerpt Text:
Therefore, I submit the following comments and related scientific research for BLM to review and consider before completion of the Final EIS.


Comment Number: NVCASG-14-0243-2
Comment Excerpt Text:
We all recognize that the GRSG habitat in the west is in the midst of a severe drought, Figures 3.19. GRSG "hen survival July-August, 2003" was about 76% with no WNV and 20% with WNV. Thus the hen population decreases by nearly 75% and further information showed that WNV reduced the GESG population by 25% in 2003! The GESG population had a lek attendance decline of about 85% in 2004 due to WNV. WNV was detected in the GESG in the states of CO, ID, MT, ND, NY, OR, SD, UT, & WY. "WNV affects both sexes and all age classes and "Lab tests confirm that all birds that contact disease die. GRSG Survival scenarios show a decrease of GESG of 6-9% per year! The presentation also suggests ways to manage the land to reduce mosquito’s population.


Clark et al. 2006


Comment Number: NVCASG-14-0253-4
Comment Excerpt Text:
The DEIS must address a large array of management options to properly analyze impacts and implement management actions that may be used. However, scientific research and documentation used within the DEIS is limited in scope to repetitive authors and does not adequately use literature by rangeland scientists and other professionals. This will limit the availability of management options and does not properly address the benefits of livestock grazing in relation to greater sage-grouse habitat conservation. Pertinent research is needed to address the functionality of the sagebrush ecosystem in regards to livestock grazing use and greater sage grouse habitat conservation.

Comment Number: NVCASG-14-0259-5
Comment Excerpt Text:
Clarify if the NDOW habitat characterization mapping process includes all documented leks (including inactive leks or leks of unknown status) or only active leks when delineating the PPH. While inactive leks or leks of unknown status may provide information about general habitat, only active leks should be used as the basis for the breeding density areas and delineation of the PPH.

Comment Number: NVCASG-14-0259-6
Comment Excerpt Text:
The Bi-State Sage-Grouse Technical Advisory Committee has effectively integrated telemetry and breeding density data into a Bi-State PPH map, and plans to conduct similar efforts for GRSG in Nevada (Coates 2013).

Comment Number: NVCASG-14-0259-7
Comment Excerpt Text:
The Draft LUPA/EIS habitat maps (Chapter 3) provide resource managers with broad-scale information to guide conservation and land-use planning efforts at the landscape scale (1: 100,000), but the maps are not intended to be used to delineate sage-grouse habitat at the project-level scale (http://www.blm.gov/nv/st/en/prog/wildlifegreater_sagegroselpreliminary_habitat.print.html). To apply the mapping results to specific locations, a field investigation must be conducted by a qualified biologist for the purpose of impact assessment (Ibid.).

Comment Number: NVCASG-14-0259-8
Comment Excerpt Text:
It is unclear from the Draft EISILUPA description of the NDOW habitat characterization mapping process whether local levels of occurrence or local breeding densities were considered in relation to the entire GRSG range to derive the priority habitat status.

Comment Number: NVCASG-14-0278-20
Comment Excerpt Text:
the Els fails to include a recent analysis of nest trampling by Schultz 2010 that demonstrates that livestock density in the Great Basin is insufficient to result in significant nest trampling.

Comment Number: NVCASG-14-0278-25
Comment Excerpt Text:
Chapter 5, page 42 states that grazing is a press form of disturbance (Knick 2011), which equates any grazing as a disturbance and harmful to sage-grouse. Late brood rearing habitat, which is largely meadows, has been identified by many as a critical habitat type for sage-grouse (e.g., Oakleaf 1971, Fischer et al 1996); yet managed grazing on this habitat type has been demonstrated to benefit sage-grouse (Oakleaf 1971, Neel 1980, Evans 1986, Klebenow 1985). Sage-grouse, therefore, can benefit from some level of disturbance in meadow habitat types. Laycock (1967) provided data that showed sheep can graze sagebrush
rangelands (tripartata in this case) with a depleted perennial herbaceous understory and increase the perennial herbaceous component through many years off all grazing on the sagebrush overstory. The latter study is important because the perennial herbaceous component of the community changed from a largely non-resilient to resilient state, while maintain sagebrush canopy cover that could be used for nesting or winter habitat.

Comment Number: NVCASG-14-0278-27
Comment Excerpt Text:
EIS Section: 3, Chapter & Page: 10

Comment: The following statement, "GRSG are currently estimated to occupy 165 million acres (668,000 square kilometers) across the western US and Canada" is a dramatic contradiction from the statement at the top of the page: "As a result, the 156 million acres of sagebrush that existed historically were reduced to 119 million acres by 2004. Currently, sagebrush communities and GRSG are at risk from multiple sources across multiple scales. About 56 percent of the potential distribution of habitat prior to Euro American contact is currently occupied by GRSG."

Comment Number: NVCASG-14-0285-37
Comment Excerpt Text:
Text on Affected Environment with regard to sage grouse habitat failed to discuss the winter habitat needs of the birds, in spite of clear scientific evidence that impacts to sage grouse by oil and gas development on winter ranges can have profound effects on the birds (Walker 2008).

Comment Number: NVCASG-14-0285-39
Comment Excerpt Text:
Please also make a formal determination regarding the disturbance cap in the context of sagebrush canopy cover, and if 3% is not the scientifically defensible threshold, then where that threshold should be set, for the same reasons as noted above for the 3% and 5% disturbance caps. Please review the studies listed above, and any and all additional studies that directly address the efficacy of a 3% disturbance cap, if any. We are unaware of any such studies, and in their absence federal agencies should employ the precautionary principle and utilize a 3% cumulative disturbance cap for all forms of disturbance. Knick et al. (2013) found that almost all active leks were found in areas with less than 10% cropland (Figure 5). This study included California and Nevada (Knick et al. 2013, Figure 2), indicating that its findings are directly relevant to this EIS.

Comment Number: NVCASG-14-0285-40
Comment Excerpt Text:
Finally, we would ask the responsible official to render a formal determination regarding any scientific support for allowing exceptions to the disturbance cap to be granted with or without mitigation when sage grouse populations are at or above population targets and stable. Please cite to scientifically valid studies that provide examples of mitigation that have increased the populations of sage grouse where they have been implemented, to offset losses to sage grouse populations in developed areas.

Comment Number: NVCASG-14-0285-41
Comment Excerpt Text:
Well pad Density Standards

The Preferred Alternative would not apply appropriate density limits for well pads and other surface disturbances as Conditions of Approval on existing fluid mineral leases, pursuant to National Technical Team recommendations. NTT (2011) recommendations would limit surface disturbances to no more than one per section on existing fluid mineral leases. This should be implemented for all leases (future and existing) and for other types of similar disturbance in the final plan. Please review the best available science and make a determination regarding whether one well pad/disturbance per section, or no limit at all, is the most scientifically supported approach or whether no limit on well pad density would best achieve the purpose and need of the plan amendment. Please consider the following studies which directly address the threshold of well density at which impacts to sage grouse occur: Holloran (2005), Doherty (2008), Walker et al.
(2007), Tack (2009), Taylor et al. (2012), and Copeland et al. (2013). Attachments 3, 4, 5, 51, 6, and 7, respectively. Each of these studies find significant declines of sage grouse populations as well densities exceed one pad per square mile, and some of these studies indicate negative effects on sage grouse at lower well pad densities.

**Comment Number: NVCASG-14-0285-42**

**Comment Excerpt Text:**

Effectiveness of Compensatory Mitigation

The federal agencies propose to compensatory mitigation and “no unmitigated loss” as a key element of Alternative D. DEIS at 45, 248. These are intended to offset impacts. Id. We call upon the Forest Service to reach a determination regarding the effectiveness of the proposed compensatory mitigation to result in no net loss of sagebrush populations for the area in question. Please document any and all scientific studies that conclude that compensatory mitigation efforts have yielded an increase in sage grouse populations for the area to which mitigation efforts apply. We are unaware of any cases in which a compensatory mitigation program has resulted in a significant increase in sage grouse compared to an untreated landscape. The fact that “compensatory mitigation” funding frequently is used to purchase conservation easements is problematic, because this is a paper transaction with legal ramifications preventing future potential losses, but can never yield population gains to offset the very real and immediate losses of sage grouse habitats and populations incurred as a result of industrial development.

**Comment Number: NVCASG-14-0285-43**

**Comment Excerpt Text:**

Effectiveness of Timing Limitation Stipulations for Leased Fluid Minerals

In Priority Habitats, Alternative D relies on timing limitation stipulations on exploratory drilling to prevent surface disturbance for salable minerals. This allows roads, pits, and other infrastructure to be built close to leks and within nesting habitats as long as construction activity occurs outside the breeding/nesting seasons. The BLM has relied heavily on timing limitation stipulations to mitigate impacts to breeding and nesting sage grouse, and the developments constructed using these timing limitations have had scientifically documented track records in terms of significant impacts to sage grouse breeding and nesting populations. Please evaluate the scientific basis for the effectiveness of timing limitation stipulations as an alternative to no surface occupancy stipulations, using the scientific studies cited in these comments and any other studies that examine the changes in sage grouse populations when drilling and construction activities are allowed within 4 miles of sage grouse leks, but construction and drilling activities are prohibited during the breeding and nesting seasons.

**Comment Number: NVCASG-14-0285-44**

**Comment Excerpt Text:**

Livestock Grazing Standard

Alternative D does not include measurable standards regarding residual stubble height for sage grouse hiding cover, nor does it address this issue indirectly by prescribing a maximum percentage of forage allowed to be removed by livestock grazing and trampling. The federal agencies must pursuant to NFMA reach a determination regarding the science that is most relevant, reliable, and accurate regarding the amount of forage that needs to remain to provide sage grouse hiding cover. For the Great Basin, Connelly et al. (2000) recommended leaving residual grass cover at least 18 cm in height, available during the nesting season. This finding was empirically confirmed by Hagen et al. (2007). We are concerned that the BLM’s emphasis on grazing to reduce cheatgrass in some alternatives will collaterally reduce nesting cover below this critical threshold. Herman-Brunson et al. (2009) found that sage grouse nest survival decreased when residual grass cover was < 16 cm in height. According to Kaczor (2008: 26) grass height is positively correlated with nest success, and this researcher recommended, “Land managers should attempt to leave or maintain maximum grass heights [greater than or equal to] 26 cm, the inflection point for 50% nest success.” See
Attachment 8, and see Kaczor et al. (2011), Attachment 9. Heath et al (1997) also found that near Farson, Wyoming, nests with taller grass heights were more successful than those with shorter heights. The agencies should implement a standard within the plan to address a measurable stubble height that must remain throughout the nesting season in grouse nesting habitat. We recommend at minimum using the 7.1-inch residual stubble height standard as recommended by Connelly et al. (2000). Attachment 10. The Forest Service should evaluate this standard and other residual stubble height standards for nesting and other habitats to determine which approach best represents the best science.

**Comment Number: NVCASG-14-0285-80**

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

**Comment Number: NVCASG-14-0285-88**

**Comment Excerpt Text:**


Christiansen, T. 2009. Fence Marking to Reduce Greater Sage-grouse (Centrocercus urophasianus)


Comment Number: NVCASG-14-0289-1
Comment Excerpt Text: the cattle ranchers who are running cattle on these public lands provide water in remote locations for their livestock, thereby providing water for Sage-Grouse as well as other wildlife. To suggest that removing livestock and all farming activity would be beneficial to bird habitats is just wrong.

Comment Number: NVCASG-14-0291-2
Comment Excerpt Text: At the Kings Valley Clay Mine site, since 2008, WLC has completed over 35 site-specific scientific surveys and reports, including the five reports listed below:

Western Lithium Corporation Kings Valley Lithium Project Humboldt County, Nevada. April 4, 2012.


These five reports are attached in PDF format and document actual site conditions in the vicinity of Township 44 North, Range 35 East. Since 2008, WLC and independent resource specialists (e.g., Great Basin Ecology, Inc.; JBR Environmental Consultants, Inc.; Enviroscientists, Inc.) have performed multiple site-specific scientific surveys at the Kings Valley site and have never documented any individual Sage-Grouse or found any Sage-Grouse sign (e.g., scat, tar, feathers, etc.) within Kings Valley Survey Boundary (JBR, 2012a, page 23; JBR, 2012b, page 5,6 and 10; Great Basin Ecology, Inc., 2013a; page 26).

Comment Number: NVCASG-14-0291-3
Comment Excerpt Text:
WLC requests the Sage-Grouse Habitat maps referenced in the Final EIS, specifically in the vicinity of Township 44 North, Range 35 East, be revised based on actual site-specific information presented in the biological reports cited above. A designation of Sage-Grouse Non-Habitat designation should be identified for areas generally south of Township 45 North and Range 35 East.

Comment Number: NVCASG-14-0291-5
Comment Excerpt Text:


The EIS needs to review, reference, and consider the two reports above (in addition to other commenters concerns responding to this EIS and other studies) and reevaluate the adequacy of the NTT Report and whether it is based on sound science and if it is legally defensible. The EIS (or an appendix to the EIS) should fully justify the scientific methods used and legality in the NTT Report and the conclusions drawn.

Comment Number: NVCASG-14-0292-5
Comment Excerpt Text:
The FWS Findings estimated that the recent range-wide greater sage-grouse population totals over 535,000 birds, which is 107 times larger than the minimum effective population of 5,000 birds. See FWS Findings6, Table 4, page 13921. Given the estimated number of males by Management Zone reported in Table 6 of the FWS Findings (see FWS Findings6, page 13923) and the female skewed sex ratio for greater sage-grouse (reported to average about two females to one male, FWS Findings6, pages 13916 and 13992), it is evident that all seven Management Zones exceed a population of 500 breeding adults, and five of the Zones greatly exceed the minimum effective population of 5,000 individual birds which precludes a population from the long-term risk of extinction. Thus, five Management Zones exceed the population size below which greater sage-grouse are considered to be at risk for long-term extinction, so there are at least five areas that support sufficient populations to preclude the greater sage-grouse from being listed as threatened under the
ESA according to data reported within the FWS Findings.

When discussing two stronghold habitat areas, the FWS Findings implicitly concede that the greater sage-grouse does not qualify to be listed as threatened under the ESA. The FWS Findings state “the ability of these strongholds to maintain high densities to date in the presence of several threats indicates that there are sufficient habitats currently to support the greater sage-grouse in these areas” (see FWS Findings6, page 13962) and admits that the FWS expects that these “two strongholds of contiguous habitat will still remain in fifty years even though the threats discussed above will continue there” (see FWS Findings6, page 14009). The FWS expectation that these two stronghold areas will maintain high densities (large populations) in fifty years, even in the face of existing threats, demonstrates that the species does not face extinction in the foreseeable future, so the greater sage-grouse is not threatened as defined under the ESA.

Given the proportional distribution of breeding males within the ten population areas identified for the Nevada sub-region (see NV Draft LUPA/EIS1, pages 3~26 – 3~32) and the total estimated greater sage-grouse population of 88,000 birds in California/Nevada (see FWS Findings6, table 4, page 13921), it is estimated that at least four populations in this sub-region greatly exceed the minimum effective population of 5,000 individual birds which precludes a population from the long-term risk of extinction. Thus, four Nevada populations likely support sufficient numbers to preclude the greater sage-grouse from being listed as threatened under the ESA.

Comment Number: NVCASG-14-0297-10
Comment Excerpt Text:
Research indicates approximately one-third of juvenile sage-grouse mortality is directly attributed to collisions with power lines (Beck, Reese, Connelly, and Lucia 200610; Flake, Connelly, Kirschenmann, and Lindbloom 201011).

Comment Number: NVCASG-14-0297-11
Comment Excerpt Text:
Furthermore, a new Avian Power Line Interaction Committee guideline manual was released in 2012 and should be referenced.

Comment Number: NVCASG-14-0308-3
Comment Excerpt Text:
The priority sage-grouse habitat areas includes some winter habitat but winter habitat is not specifically identified in the DEIS nor are the NDOW category 3 winter habitats included in the priority habitat areas. But a number of design features/management actions are related to winter habitat: Action D-FFME 3, Action D-FFME 6, and Action D-VEG 22). This is an absurd omission that must be corrected in the revised plan.

Comment Number: NVCASG-14-0309-15
Comment Excerpt Text:
Review of Figure 3-14 and comparison with the Population map Figure 3-3 shows the large number of OG leases already issued by BLM in the Quinn population, Southeast Nevada population: South Steptoe lease block, northern lake Valley lease block.

Comment Number: NVCASG-14-0309-19
Comment Excerpt Text:
The BLM and state must continue to track PMUs, within the Connelly et al. 2004 functional populations. The MZ concept should be abandoned, as it is designed to mask declines. Or else the baseline for understanding numbers in specific land areas of local populations will be shifted. Declines in specific land areas will not be able to be readily detected unless this is done. Agency so-called adaptive management will not be able to work unless careful, detailed and
transparent tracking of habitats, populations occur. This is vital to prevent further declines.

**Comment Number: NVCASG-14-0309-20**

**Comment Excerpt Text:**
The DEISs fail to map populations that extend into other states, if the land area is not being considered in the specific EIS. This thwarts an adequate cumulative effects analysis of the population, and the condition of its habitats and that’s to the population’s survival. It thwarts tracking of biologically functional populations spanning state lines. Compare the NV Figure 3-3 Pop/Sub-pop mapping to Table 3.3 FEIS 404. Table 3.3 shows the Connelly et al. 2004 Pops/Subpopulations where the PMUs are located within.

**Comment Number: NVCASG-14-0309-28**

**Comment Excerpt Text:**
The Idaho DEIS acknowledges: “From both a regional and rangewide perspective, the South Side Snake and Southwest Idaho populations are especially important to GRSG...because they comprise a substantial portion of the Great Basin core population shared with Nevada, Utah and Oregon”. This demonstrates the need for integrated and seamless analysis, transparent population tracking, and uniform management standards across the species range.

**Comment Number: NVCASG-14-0309-32**

**Comment Excerpt Text:**
The recent Owyhee 68 permit analyses (we incorporate these documents by reference into our comments here) illustrate these concerns. In the Chipmunk (Group 2), South Mountain, and Morgan processes, the small remaining local population spans state lines. This is part of the Owyhee sub-population of the northern Great Basin population that includes northern areas in the South Fork Owyhee and Little Owyhee regions of Nevada. The Connelly et al. 2004 northern Great Basin (Owyhee subpopulation) in NV DEIS Map has the subpopulation labeled as Northcentral Nevada, and this Owyhee subpopulation does not stop at state lines. We are concerned that there do not appear to be consistently used names for the subpopulations between states. It must also be assessed in the context of the South Central OR/Northern Nevada population (Montana Mountains and Trout Creek region), and the North Central Nevada population (Santa Rosa). The northeastern Nevada population must be examined in the context of the Idaho and Utah populations.

**Comment Number: NVCASG-14-0309-34**

**Comment Excerpt Text:**
Some different terms are used for different lek status in different states. It also appears that the term Occupied habitat may also vary from state to state. Now in Nevada we have Occupied habitat that might not include all habitat where birds are present.

A comparison must be made across all the states and EISs to sort out these and many other inconsistencies. WWP raised these concerns about inconsistencies in our scoping comments.

**Comment Number: NVCASG-14-0309-36**

**Comment Excerpt Text:**
The DEISs fail to discuss species characteristics such as evolutionary potential, demographic sustainability, ecological function, or social dynamics that influence species viability. The DEIS fails to address the historic range of habitat variability within the ecosystem, identify the maximum population level possible or estimate habitat carrying capacity of the ecosystem for sage-grouse. The DEIS fails to set quantifiable habitat or population objectives upon which to base management goals and measure progress toward those goals for a given population.

**Comment Number: NVCASG-14-0309-37**

**Comment Excerpt Text:**
BLM describes all lands being in the Planning area, but the DEIS analyzes BLM, Forest and split estate. We emphasize that sage-grouse populations occupy private lands, state lands, Reservation lands, energy/military areas, FWS wildlife refuge areas and other lands. The DEISs have wrongly failed to include other federal lands in DEISs across the West, and this must be corrected. For example, Sheldon NWR and Ruby NWR must be included in analysis here. We
Comment Number: NVCASG-14-0309-45
Comment Excerpt Text:
ID DEIS at 1-6 states that MT PPH was delineated based on MFWP’s modeling of GRSG Core Areas using a model based on male lek attendance and refined with seasonal habitat, telemetry, Connectivity, info and field review. “Occupied habitats not identified as Core Areas were delineated as PGH” (MFWP 2009). In Idaho, PPH and PGH were entified using a model incorporating sage-grouse breeding bird density, and lek connectivity models, informed with additional ancillary broad scale habitat data, seasonal habitat maps, connectivity info, expert opinion, population persistence model, local priority areas and ag and conifer filters. In Utah, yet another scheme was used.

Comment Number: NVCASG-14-0309-46
Comment Excerpt Text:
DEIS 1-16 describes the 2012 ID PPH mapping. Unfortunately, Idaho BLM then went on to sub-divide its management of PPH under the radar by internally carving PPH into lesser categories. For example, areas of PPH that were recovering from fires are mapped as “PPH – Grassland”. As is occurred in the Owyhee 68 permit analyses, BLM sacrificed those areas of PPH to spring grazing (despite spring grazing being very harmful not just to sage-grouse but also to native plant recovery). In other words, instead of acting to restore the body of priority habitat, BLM segregated PPH and treated the native “grasslands” that are supposed to be healing from fire disturbance, as a sacrifice zone. This is another way that BLM refuses to employ passive restoration or reduced grazing disturbance, needed to recover the full component of sagebrush, microbiotic crusts, and understory herbaceous vegetation to help prevent cheatgrass and provide habitat components.

Comment Number: NVCASG-14-0309-47
Comment Excerpt Text:
The data used in the Garton analysis is now more than five years old. The increasing shrinking/contraction and perforation of the GRSG range must be fully and accurately mapped. Areas of high risk should be shown on mapping. For example: Lincoln County NV and Quinn PMUs in NV, Weiser population in ID – now threatened by Oil and Gas leasing and the COT report writing it off, populations in eastern Idaho threatened by fire, wind energy, other energy, phosphate mining, chronic grazing degradation and disturbance, and the COT writing them off, etc.

Comment Number: NVCASG-14-0309-48
Comment Excerpt Text:
We also note that the description of the Forest Planning process (DEIS at 13) under NFMA allows for: Forest-wide standards; the establishment of Management Areas and direction applying to future activities; monitoring and evaluation requirements. Why, then, is the Forest not considering large Zoological Areas to provide for sage-grouse habitat and population needs? These should provide for the full set of habitat needs of local populations. Leks typically at lower elevation on BLM, nesting and brood rearing on both, potential winter use on windswept slopes, and movement corridors. This DEIS process must carefully define the set of habitat characteristics required by all local populations of sage-grouse. This LUPA process is likely to be the only time a multi-agency “hard look” will be taken at these needs. Uniform, protective actions and standards of use, along with livestock-free blocks of breeding habitat must be provided for, as well as brood rearing habitat quality. Further, there should be a multi-agency capability and suitability analysis to determine what lands, if any, are capable and suitable of supporting sage-grouse conservation, enhancement and restoration with continued livestock use.

Comment Number: NVCASG-14-0311-1
Comment Excerpt Text:
The DEIS continues this approach by failing to provide any current information on Sage-grouse populations in Nevada even though population numbers were obtainable in 2004 pursuant to the Service’s findings. BLM should update its population counts in Nevada before publishing the Final
Environmental Impact Statement ("FEIS") and Record of Decision. In addition, BLM, working with the Service, should determine how many birds are necessary to avoid a listing under the ESA so that the public and the agencies can accurately understand the situation as it currently exists and as it may need to change rather than simply relying on trend data as set forth in OEIS Section 3.2.2.

Comment Number: NVCASG-14-0311-8
Comment Excerpt Text:
Y-3 II is concerned about the lack of discussion within the DEIS of the impact of predators and disease on Sage-grouse populations. Disease and predation are among the explicit factors that the Secretary must consider when determining whether to list a species as threatened or endangered. 16 U.S.C. § 1533(a) (1) (C). Y-3 II recognizes that the Service concluded that disease and predation were not significant threats to the species so as to require a listing under the Act. However, the Service did provide significant details on the effects of both West Nile Virus and predation in its warranted but precluded finding. See 75 Fed. Reg. at 13966-973. Specifically, the Service's discussion of disease is dominated by West Nile Virus analysis. It is an important issue in the area of northeast Nevada where Y-3 II operates. For example, the Duck Valley Indian Reservation along the border of Idaho and Nevada closed its Sage-grouse hunting season in 2006 due to population declines resulting from West Nile Virus. Id. at 13968. The disease has been detected in ten states and one Canadian province and Sage-grouse survival is extremely low. Id. at 13969. The Service notes the need for a comprehensive monitoring program to determine the extent and effects of the disease range-wide. The disease is a "significant mortality factor for greater sage-grouse when an outbreak occurs ...." Id. at 13970.

Comment Number: NVCASG-14-0312-7
Comment Excerpt Text:
Alternative F. Managing GSG habitat based on "Reference State". Comment: This is basically a pre-settlement condition and is obviously unattainable, unrealistic and even if possible would actually result in the opposite of the goals and objectives of the sage grouse plan as prior to the introduction of livestock there is almost no data to suggest there were thriving sage grouse populations. In addition Alternative F "Reference States" would necessitate a 25% reduction in AUMs or 640,000 AUM loss resulting in annual economic losses of approximately $66 million (total output) $24 million in labor earnings and 252 full time job losses.

Comment Number: NVCASG-14-0322-2
Comment Excerpt Text:
DEIS does adequately review and analyze certain threats as stated by USFWS. BLM made a dismal attempt to analyze the concern of predator control, although USFWS has acknowledged and stated predation has increased dramatically in the Great Basin. Reference (DEIS Table 4.2 pg. 604) to see that livestock grazing, wildfire, and others are listed as threats in this table and it is inexcusable that BLM does not include predators among the threats, or even to footnote the chart to explain that predators are not the responsibility of the land management agencies but rather the state and USFWS. Not showing predators among the threats leaves a critical void in the information that the publics deserve and need to be fully apprised of.

Comment Number: NVCASG-14-0342-32
Comment Excerpt Text:
The LUPA should recognize that the boundaries of the Preliminary Priority Management Areas (PPMA) and Preliminary General Management Areas (PGMA) represent a broad-scale evaluation of habitat and are intended to identify potential GRSG concerns at the landscape level and should not be used for making planning decisions at the project level. See, Nevada Department of Wildlife, Greater Sage-Grouse Habitat Categorization White Paper, p. 2 (March 2012). Accordingly, the LUPA should provide that any PPMA or PGMA designated area may be redesignated if the existing designation is shown, through verified on-
the-ground habitat and land-use conditions, to be unwarranted. The LUPA should allow the revision without requiring a plan amendment. Further, the LUPA must describe the procedure for redesignating habitat.

Comment Number: NVCASG-14-0344-48
Comment Excerpt Text:
2.8. Appendix G

In some cases, for example Noble’s work with the Elko District, there are data sets that have been collected over a period of years that refute the need for stipulations, NSOs, and timing limitations. There should be allowance in all restrictions (i.e., NSOs, COAs, CSUs, and TLs) to be waived, modified, or accepted based on project-specific data. Noble recommends that there be allowance for baseline studies or habitat assessments to be conducted and that any seasonal restrictions or disturbance restrictions be developed based on the project-specific data. NDOW and BLM have requested Noble be part of a wildlife working group in order to utilize adaptive management decision making based on this logic, with which we agree. This same concept will apply to determining exactly where winter, nesting, and brood rearing habitat occur based on field survey data not general GIS map shape files as a subset of PPH. At this time, NDOW and BLM cannot put into a decision record or a condition of approval exactly where timing limitations should be for these seasonal habitats due to the lack of understanding where they exactly occur. Prior to any project NEPA analysis, the proponent is required to conduct baseline studies and this may occur over one or more years.

Comment Number: NVCASG-14-0345-1
Comment Excerpt Text:
There is no clear mechanism for refining the programmatic-scale habitat maps presented in the DEIS. As more site-specific information becomes available, the use of such information is crucial in improving the accuracy and precision of the habitat determination and delineation. As such, there must be an agreed-to methodology for revision of habitat designation using site-specific scientific data and information. One way is to meet with state and local interested parties to refine the area in question. This could happen when land is converted from private to public, adjustments in land use.

and restoration projects, are some examples.

Comment Number: NVCASG-14-0346-14
Comment Excerpt Text:
Chapter: 3, Section: 3.2, Page Number: 410

Comment: Under the Sage-grouse Population section, there are lek status definitions. These are appropriate for Nevada; however, California Division of Fish and Wildlife may have a different categorization of lek status than Nevada.

Comment Number: NVCASG-14-0346-15
Comment Excerpt Text:
Chapter: 3, Section: 3.2, Page Number: 410

Comment: The most current breakdown of lek status in Nevada as of 2013 is as follows: 634 active, 323 inactive 275 pending, 522 unknown and 93 historic leks.

Comment Number: NVCASG-14-0346-19
Comment Excerpt Text:
Chapter: 3, Section: 3.2.3, Page Number: 419-420

Comment: A statement at the bottom of page 419, continuing on to page 420 states that "the persistence of the Clear Lake population is dependent upon the implementation of large-scale juniper removal by the Modoc National Forest." To a degree, this population is also dependent upon translocation as well. "Since 2005, 133 Greater Sage-Grouse from Oregon and Nevada have been translocated, radio-marked, and monitored in the Devil’s Garden PMU" (Lind and Richardson 2013).

Comment Number: NVCASG-14-0367-5
Comment Excerpt Text:
Pursuant to 40 CFR 1502.24, agencies must insure the professional integrity, including scientific integrity, of the discussions and analyses in an EIS. However, even though peer reviewer comments were highly
critical of the draft NTT report, BLM failed in its duty to adequately consider and incorporate those opposing scientific viewpoints. For instance, The NTT Report is not supported by the Western Association of Fish and Wildlife Agencies (WAFWA) as BLM’s sole source of Sage-grouse management direction. In a letter sent to the Interior Secretary on May 16, 2013, WAFWA member states made it clear that they never endorsed the sole use of the NTT or any other scientific publication to determine appropriate management of sage-grouse habitat. Rather, they believe that a variety of peer-reviewed publications which collectively provide the best available science for sage-grouse should have been used by BLM as the basis for conserving the sage-grouse, thereby avoiding a listing under the ESA. WAFWA went on to recommend that management and regulatory mechanisms be based upon the best available science which would provide the best strategy for near- and long-term management of sage-grouse and provides the best opportunity for precluding the need to list the species under the ESA.

**Comment Number: NVCASG-14-0388-1**
*Comment Excerpt Text:*
The draft LUPA/DEIS, section ES.3 Purpose and Need completely omits a major threat to the GESG habitat, and that is disease.

### 4.6 IMPACT ANALYSIS

**Comment Number: NVCASG-14-0015-17**
*Comment Excerpt Text:*
Alternative D imposes restrictions on mining operations to benefit the sage-grouse, the impacts to sage-grouse from locatable minerals under Alternative D should be less than, not the same as, those identified under Alternative A. The Final LUPA/EIS should quantify and acknowledge these reduced impacts.

**Comment Number: NVCASG-14-0083-46**
*Comment Excerpt Text:*
Ch: 4, Sec: 4.4.3, Pg. No.: 54

Text Referencing: Impacts Common to All Alternatives Vegetation and Soils - Livestock. Livestock grazing can affect soils, vegetation health, species composition, water, and nutrient availability by consuming vegetation, redistributing nutrients and seeds, trampling soils and vegetation, and disrupting microbial systems (Connelly et al. 2004; NTT 2011). Grazing may reduce herbaceous understory cover for nesting GRSG, but also may enhance rangeland health by limiting the growth of introduced annual plants.

Comment: Elko County would request that the BLM / USFS also evaluate and include positive impacts that livestock grazing provides in the FEIS / LUPA. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

**Comment Number: NVCASG-14-0087-1**
*Comment Excerpt Text:*
In the FEIS, include a section that identifies the most appropriate conservation measures to alleviate each threat for each identified GRSG population/subpopulations and discuss the likelihood of the success of each measure. For example, because each threat may impact each subpopulation differently and each conservation measure will have varying effectiveness in different geographic areas, we recommend a table clearly indicating each subpopulation, geographic area of occurrence, conservation measure to be applied, and likelihood of success.

**Comment Number: NVCASG-14-0091-3**
*Comment Excerpt Text:*
See great work by the USDA-ARS Research Station in Dubois, Idaho where active grazing management and prescribed burning to mimic the historic fire regime has created an increase in GRSG when neighboring BLM and USFS land has continued to see a decline in GRSG (“A Home on the Range”, Agricultural Research, November/December 2006).
Treatments that benefit livestock will most generally also benefit sage-grouse. This has been demonstrated again and again, i.e., fencing meadows for specific grazing treatments, fencing springs, specialized seedings, brush manipulation and other practices help to provide ideal sage-grouse habitat and also benefit livestock. Crested wheatgrass and other specialized species seedings for instance can slow or stop wildfire, keep livestock off native range during critical avoidance periods by providing alternative forage, and other benefits. These beneficial points need to be disclosed in this DEIS.

Impacts from Livestock Grazing Management – The DEIS states Nevada LUPs do not contain specific language in regards to GRSG conservation and livestock management. This statement is inaccurate as relates to the Winnemucca RMP/Final EIS completed in recent months. This document does in fact address sage-grouse habitat and also outlines strategies that will remove livestock from the public land by introducing new intolerable standards regarding key management areas (KMA).

It is well known that SG have very strong site fidelity, so once SG is displaced by resource extraction it is potentially a permanent loss to SG populations even with reclamation. Therefore, withdrawal from mineral development needs to be an option in the chosen management plan, which is essentially the first two conservation options stated in the COT report:

noted in the NTT report, “Impacts as measured by
the number of males attending leks are most severe
near the lek, remain discernable out to >4 miles, and
often result in lek expirations.”

**Comment Number: NVCASG-14-0116-9**
**Comment Excerpt Text:**
With respect to prescribed fire, Connelly et al.,
(2004) states: “Several investigators have suggested
that fire may benefit sage-grouse by enhancing nesting
and brood-rearing habits (Klebenow 1973, Sime

**Comment Number: NVCASG-14-0125-10**
**Comment Excerpt Text:**
Action D-LG 2 should be removed. As referenced in
the previous discussion, the objectives identified in
Table 2.6 and 2.7 are unattainable and contradictory
with other actions in the DEIS. The implementation
of herding may actually have a negative impact on
nesting sage-grouse.

**Comment Number: NVCASG-14-0132-26**
**Comment Excerpt Text:**
[Action D-WHB-1] it is clear that excess WHBs
already occupy GRSG habitat, throughout the state,
and the agencies have not exhibited the ability to
control them at the AMLs already established, let
alone at reduced AML. A possible scenario that the
agencies could accomplish is to remove WHB
entirely from an area (as the agencies have done in
“checkerboard lands”) in important GRSG habitat.
Therefore, the Action item should include the
sentence: “Consider ‘zeroing-out’ AMLs to
accomplish GRSG habitat goals.”

**Comment Number: NVCASG-14-0151-4**
**Comment Excerpt Text:**
the "threat" associated with wild horse and burro
grazing is vastly different than that associated with
permitted livestock grazing. The County recommends
that this distinction be made in the final document
and ROD.
livestock grazing per se is not a stressor threatening the sustainability of the [sage steppe] ecosystem (Davies et al. 2011). The DEIS states; "Livestock may also trample nests and disturb GRSG behavior." This is in contradiction to video evidence in Bell 2011 thesis in which approaching cattle neither trampled the nest nor did the cattle flush the nesting hen and the hen was still on the nest 24 hours later. This statement should be removed or the additional refuting information presented be added to the document.

Comment Number: NVCASG-14-0171-35
Comment Excerpt Text:
Section 4.3.7

The County understands the rationale behind having a basic policy of two years rest, however that should merely be a starting point for determining the rest needs on a site specific basis. Most science the County is familiar with regarding two years really says two growing seasons which from a livestock operator standpoint can be a substantial difference. Again however, this is a cookie cutter approach that should not be used when the DEIS covers the breadth of landscape that is covered by this document. References are Bunting et al, 1998; Bruce et al, 2007, 2009.

Treatments that would trigger the potential for rest must have site specific, clearly defined and measurable objectives developed for that location. Achieving those objectives should be what determines when grazing would return.

Comment Number: NVCASG-14-0171-7
Comment Excerpt Text:
The document does not differentiate between appropriate grazing and overgrazing. There is ample science to demonstrate that moderate grazing does not cause the multitude of ills attributed to grazing throughout the DEIS. Throughout the document wherever impacts from grazing are mentioned, it needs to state clearly whether the impacts are from overgrazing or grazing in compliance with the existing prescription. Davies et al. (2011) states that moderate grazing has no detrimental impact on the sagebrush ecosystem. Other references are Davies et al. 2009, 2010; Diamond et al. 2009; Merrill-Davies 2012.

The differentiation is vital because overgrazing simply requires appropriate permit administration by the agency and more intense oversight by the grazer to fix. No additional restrictions are necessary to address the issue. However, if unacceptable impacts are occurring while livestock are grazing to standards, then an examination of the prescribed grazing needs to happen and adjustments considered. This is a critical piece of the analysis.

Comment Number: NVCASG-14-0193-7
Comment Excerpt Text:
These horses occupy herd management areas on a year round basis and cause damage to all habitat types, particularly water effected areas such as streams, springs, and meadows. Agencies are at a loss in their ability to manage either the horse numbers, which are recognized as being far above appropriate management levels (AML) for the resource to sustain, or the condition of the range, which is deteriorating under this unprecedented grazing pressure. Instead, the BLM take the path of least resistance and reduce livestock animal unit months (AUM) from public lands to allow more space and forage for an out of control horse population, yet fail to outline the true impacts and concerns with feral horse use and lack of management. It is critical that this issue be adequately addressed in the final document, with respect to impacts to sage-grouse, vegetation, water resources, and other wildlife habitat, and that plans for funding these efforts be specifically outlined. Collectively, the wild horse population is exerting extensive impacts on important sagegrouse habitat throughout the herd management areas in the greater sage-grouse habitat areas.

One example of the lack of attention given to the impacts of wild horse and burro populations on sage-grouse habitat can be found in the list of major threats to greater sage-grouse habitat: "Grazing - loss of habitat components due to livestock and wild
horse and burro use" (Chapter 1.3, p. 8). This threat should be separated appropriately for wild horses and livestock. Though wild horse use is creating extensive damage to rangelands, in many instances the BLM is not managing the range or the horse numbers appropriately. Livestock on the other hand can be and are managed - grazing as a use is easily regulated by the agencies based on existing regulations.

Comment Number: NVCASG-14-0199-24
Comment Excerpt Text:
…because Alternative D imposes restrictions on mining operations to benefit the sage-grouse, the impacts to sage-grouse from locatable minerals under Alternative D should be less than, not the same as, those identified under Alternative A. The Final LUPA/EIS should quantify and acknowledge these reduced impacts.

Comment Number: NVCASG-14-0201-17
Comment Excerpt Text:
There is no analysis in the Draft LUPA/DEIS that demonstrates that even with all the restrictions on fluid mineral operations in the various alternatives in the Draft LUPA/DEIS that there is a reasonable expectation that sage-grouse populations would increase in spite of continued hunting.

Comment Number: NVCASG-14-0205-14
Comment Excerpt Text:
We recommend the federal land management agencies follow their own published range science instead of systematically reducing AUMs only to see a direct increase in cheatgrass.

BLM range scientist Mike Pellant (1996) stated that "If sufficient native plants are present and cheatgrass densities are not above an unacceptable threshold, livestock grazing management practices can be used to restore the native plant community. If the cheatgrass threshold is crossed, intervention through artificial reseeding may be the only recourse to obtain satisfactory native or introduced plant communities."

US Forest Service science from 2012 states “Cheatgrass does not compete well with established perennial grasses; therefore, proper grazing management and practices that encourage growth of perennial grasses will aid in cheatgrass suppression. Cheatgrass provides good quality forage for about 6 to 8 weeks early in the season, which is also the optimal time to graze. However, mature cheatgrass can have negative effects on livestock when consumed in late spring and summer due to the presence of the stiff awns on its seed. To reduce cheatgrass density and size, graze while the cheatgrass is green during the spring and again in the fall by using a high intensity, short duration approach. Proper timing and close management of livestock is required to minimize impact to nontarget desirable plant species.

Grazing newly emerged cheatgrass in the late summer or fall when it is less likely to regrow will reduce fuel levels during wildfire season. Although cheatgrass grazed in the spring may regenerate new culms and still produce seed, a reduction in seed production is possible if grazing is practiced twice per year for 2 consecutive years."

Comment Number: NVCASG-14-0205-36
Comment Excerpt Text:
Additionally, the CEQ regulation at 40 CFR § 1502.16(c) requires BLM and USFS to include discussion of “[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies, and controls for the area concerned.” Nye County contends that the surface use restrictions and land withdrawals proposed within sage-grouse habitat under Alternatives B, C, D, E and F described in the
EIS conflict with BLM’s own policy in Manual 6840, USFS’s policies in Manual 2670, the General Mining Law, and BLM’s multiple use mandates under FLPMA. The EIS contains fatal flaws which render the document both inadequate and inconsistent with existing laws and policies.

The conflict between sage-grouse conservation and the prohibition through administrative fiat against mineral, oil and gas, livestock grazing and other commodity development in the planning area must not be ignored. Unfortunately, the EIS fails to recognize and disclose this conflict. Detailed discussion of the impacts to each of the resources with respect to the proposed mitigation measures for sage-grouse found throughout the EIS must be thoroughly developed and analyzed before the Final LUP/EIS is published.

**Comment Number: NVCASG-14-0205-66**
**Comment Excerpt Text:**
this proposal does not analyze the negative effects that removal of grazing infrastructure may have on GRSG populations and habitat due to the exposure of riparian areas to wild horses and burros.

**Comment Number: NVCASG-14-0224-21**
**Comment Excerpt Text:**
4.3. Greater Sage-Grouse and Greater Sage-Grouse Habitat

4.3.1. Methods and Assumptions

Indicators of impacts on GRSG are as follows:

- Direct habitat loss
- Habitat fragmentation
- Disruption to species life history requirements
- Population loss
- Habitat degradation
- Habitat restoration/improvement

**COMMENT:** The impact assessments for all alternatives appear to analyze the proposed actions in the context of the COT and NTT reports; however, we reiterate the fact that the these reports provide no original data or quantitative analyses nor a comprehensive unbiased review of scientific literature on GRSG ecology, behavior, and management. Major points of criticism of these reports were addressed previously in these comments and we object to their use as a basis for management actions in the LUPA/DEIS.

**Comment Number: NVCASG-14-0238-24**
**Comment Excerpt Text:**
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)

**Comment Number: NVCASG-14-0278-19**
**Comment Excerpt Text:**
EIS Section: Table 2-4, Chapter & Page: p 195

Comment: Alt D states: Employ herd management techniques to minimize impacts of livestock on nesting habitat during the nesting season (March 1 - June 30).

What impacts is herding supposed to minimize? The EIS does not document any specific impacts by livestock to sage-grouse during the nesting period, at any location in the planning area. At best, the EIS lists a suite of impacts grazing may have, but most of those have been documented to occur under regular (repeated annually on the same areas) heavy and severe utilization levels, not managed grazing with periods of rest and/or growing season deferment, and moderate utilization levels. The EIS provides no data on whether or not these grazing levels occur in the...
planning area, and if they do, how widespread they are. This action does not fit any of the grazing data presented.

The other possible negative impact is nest trampling. The only documentation of nest trampling in the EIS is the following statement: "Livestock may also trample nests and disturb GRSG behavior (NIT 2011, p. 14)." The NTT reference actually cites Beck and Mitchell (2000), who identify only one study from 1938 that documents nest destruction by livestock (Rasmussen and Griner 1938). This paper identified the destruction of 41 sage-grouse nests: 23 from carnivores, 7 from ravens, 7 undetermined, 2 from livestock (one each from sheep and cattle) and 2 from humans.

Comment Number: NVCASG-14-0278-20
Comment Excerpt Text:
the EIS fails to include a recent analysis of nest trampling by Schultz 2010 that demonstrates that livestock density in the Great Basin is insufficient to result in significant nest trampling.

Comment Number: NVCASG-14-0278-25
Comment Excerpt Text:
Chapter 5, page 42 states that grazing is a press form of disturbance (Knick 2011), which equates any grazing as a disturbance and harmful to sage-grouse. Late brood rearing habitat, which is largely meadows, has been identified by many as a critical habitat type for sage-grouse (e.g., Oakleaf 1971, Fischer et al 1996); yet managed grazing on this habitat type has been demonstrated to benefit sage-grouse (Oakleaf 1971, Neel 1980, Evans 1986, Klebenow 1985). Sage-grouse, therefore, can benefit from some level of disturbance in meadow habitat types. Laycock (1967) provided data that showed sheep can graze sagebrush rangelands (tripartata in this case) with a depleted perennial herbaceous understory and increase the perennial herbaceous component through many years off all grazing on the sagebrush overstory. The latter study is important because the perennial herbaceous component of the community changed from a largely non-resilient to resilient state, while maintain sagebrush canopy cover that could be used for nesting or winter habitat.

Comment Number: NVCASG-14-0292-8
Comment Excerpt Text:
By the mid-1900s, Federal and State regulations were implemented and all of the grazing management practices discussed above were controlled and moderated. The greater sage-grouse population sizes moderated at about the same time. By the late 1960s, livestock numbers and grazing levels were significantly scaled back across the west, and predator control programs were largely curtailed. Fire fuel levels increased, and the incidence of large-scale wildfires rose exponentially. Greater sage-grouse population trends reversed and started to rapidly decline during the same period. Thus, intensive livestock management which diminished the frequency and size of wildfires, and concerted predator control which greatly reduced greater sage-grouse loses to these killers, are management actions in the Great Basin that seem to be highly relevant to the biology of the greater sage-grouse and help explain the trajectory of their populations over time. Returning to these practices would benefit greater sage-grouse.

Comment Number: NVCASG-14-0308-10
Comment Excerpt Text:
Nowhere does the LUPA/DEIS address how localized sage-grouse populations that are at serious risk of extirpation will be protected. The Likely-Tables population in the BLM Alturas Resource Area is reduced to a single lek. Without designation of an ACEC, the Likely-Tables sage-grouse population will never receive the management that is needed for it to recover.

Comment Number: NVCASG-14-0308-39
Comment Excerpt Text:
Livestock are well-known vectors for invasive, non-native, or noxious species colonization on public lands. There is clear evidence that livestock grazing promotes invasive weed infestations through a variety of mechanisms (Belsky and Gelbard, 2000)37. Livestock grazing has been found to be a factor in the proliferation of non-native plants by livestock.
transporting seeds on their coats, feet, and in their guts into uninfested sites (Belsky and Gelbard 2000; Jones, 200138) and livestock are much effective transporters of invasive weed seeds than native ungulates (Bartuszevige and Endress, 200839). livestock preferentially graze native plant taxa over non-native taxa (Fleischner, 199440; Belsky and Gelbard, 2000; Jones, 2001), livestock preferentially graze perennial plants over annuals (Van Dyne and Heady, 196541), livestock can change competitive relationships in ways that favor non-native taxa (Belsky and Gelbard, 2000; Jones, 2001), livestock create patches of bare, disturbed soils that act as non-native-plant seedbeds (Belsky and Gelbard, 2000; Jones, 2001), livestock destroy biological soil crusts that stabilize soils and inhibit non-native seed germination (Belsky and Gelbard, 2000; Belnap et al.200142), livestock create patches of nitrogen-rich soils, which favor nitrogen-loving non-native species (Belsky and Gelbard, 2000), livestock reduce concentrations of soil mycorrhizae required by most western native taxa (Belsky and Gelbard, 2000), and livestock accelerate soil erosion that buries non-native seeds and facilitates their germination (Belsky and Gelbard, 2000). Livestock promote the spread and colonization of alien plants, which can increase fire frequencies.

**Comment Number: NVCASG-14-0308-43**

*Comment Excerpt Text:*
Anderson and Inouye (2001)49 found that viable remnant populations of native grasses and forbs are able to take advantage of improved growing conditions when livestock are removed. They found further that despite depauperate and homogenous conditions of permanent plots in 1950, after 45 years of no livestock grazing, vegetation had been anything but static, clearly refuting claims of long-term stability under shrub dominance. Mean richness per plot of ALL growth forms increased steadily in the absence of domestic livestock grazing. Grasses and forbs increased significantly. This information should be integrated into the “No Grazing” or “Reduced Grazing” alternatives and, given these findings, the BLM should analyze the impacts of long-term authorized grazing and its impacts on sagebrush communities and obligates compared to the impacts of removing livestock and allowing these communities to recover naturally.

**Comment Number: NVCASG-14-0309-1**

*Comment Excerpt Text:*
BLM’s DEIS has failed to recognize the serious and detrimental impact of livestock grazing on Greater sage-grouse habitat in the planning area. A good example of the level of recognition that is necessary can be found in the BLM’s HiLine DRMP, released in Montana in June 2013. This document recognizes the impact of livestock grazing on naturalness, stating:

Livestock grazing has the potential to impact naturalness, the undeveloped character, and to create conflict with recreation users. Manipulation of vegetation, alteration of soils, and the presence of fecal matter would create unnatural conditions and would impact opportunities for solitude, particularly in areas where livestock congregate. Range facilities, such as fences, water troughs, and tanks have the potential to degrade wilderness characteristics by creating new developments, disturbing visual resources, and influencing wildlife migration, reproduction, and mortality (e.g., sage-grouse/fence collisions).

Here, the DEIS fails to recognize the basic realities that livestock grazing is ecologically deleterious, economically inefficient, and socially unnecessary. Instead, the preferred alternative maintains the status quo grazing management throughout the project area without a “hard look” at the reality of grazing impacts, including impacts to native vegetation communities, soil resources, microbial crusts, and wildlife habitat quality and quantity.

**Comment Number: NVCASG-14-0309-4**

*Comment Excerpt Text:*
Fences have now been found to be a major source of sage grouse mortality yet no analysis of current effects of this mortality on populations and habitat fragmentation has been provided in the DEIS.
Comment Number: NVCASG-14-0311-13
Comment Excerpt Text:
Contrary to this reality, BLM assumes that implementation of Alternative A would likely result in Sage-grouse becoming a federally-listed endangered species. Section 4.13.4. The FEIS should explain why, with the vast array of regulatory mechanisms for both BLM and Forest Service lands and the ability of the agencies to adapt use to existing habitat conditions, an assumption would be made that these mechanisms are inadequate so that a listing of the species would result.

Comment Number: NVCASG-14-0311-4
Comment Excerpt Text:
Specifically to the issue of ranching and Sage-grouse, scientists from the U.S. Department of Agriculture, the Service, and the University of Wyoming have studied effective ecosystem conservation of sagebrush plant communities. See Kirk W. Davies, et al., Saving the Sagebrush Sea: An Ecosystem Conservation Plan for Big Sagebrush Plant Communities, 144 Biological Conservation 2573-2584 (Nov. 2011), available at www.sciencedirect.com/science/article/pii/S0006320711002692. The scientists recognized that livestock grazing is "nearly ubiquitous" across the sagebrush ecosystem but that its impacts vary considerably by management. Id. at 2575. The scientists also determined that moderate levels of grazing and periods of rest and/or growing season deferment do not negatively impact sagebrush plant communities and can serve to decrease the risk, size, and severity of wildfires. Id. The scientists concluded that the sagebrush ecosystem can be conserved so as to protect sagebrush obligate species such as the Sage-grouse, sustain livestock production, maintain ecosystem functions, and decrease the risk of catastrophic wildfires. Like the paper published in the Rangeland Ecology and Management periodical, this study concludes that well-managed livestock grazing has either a limited negative impact or beneficial impacts to sagebrush communities. Id. at 2579. Reducing incentives for ranchers to sell their base ranch property "is critical to successfully protecting remaining sagebrush communities." Id.

Comment Number: NVCASG-14-0311-9
Comment Excerpt Text:
The DEIS contains very little discussion of the effects of disease and it is particularly noted that West Nile Virus is not even discussed in Appendix I comparing Service-identified threats to the species among the various alternatives. There is sporadic attention to West Nile Virus in Appendix A, Required Design Features, but again without any specific focus on this significant avian disease and its vectors for transmission. Where the agency lacks sufficient information to determine the impacts, as noted by the Service, it is incumbent upon BLM to obtain the missing information or to explain to the public why the information is either unavailable or exorbitantly expensive to obtain. See 42 U.S.C. § 4332(2) (c); 40 C.F.R. § 1503.l (a) (I). The FEIS should explain how BLM obtained sufficient information on the effects of West Nile Virus following publication of the DEIS to determine its impacts on the species or, in the alternative, why the information could not be obtained or was too expensive to obtain and how the lack of information affects the FEIS.

Comment Number: NVCASG-14-0330-3
Comment Excerpt Text:
On page 607, under Livestock Grazing Management, the impacts of grazing on GRSG are described. Properly managed grazing was considered to be potentially beneficial to GRSG because it results in reduced fuel loads thereby lowering the risk of wild fire. The Draft LUPA/EIS should include examples of grazing as a beneficial management tool for GRSG. Well supported assessments of the effects of livestock grazing on GRSG in light of its extensive use within the planning area are needed to evaluate the alternatives proposed. We recommend the Draft LUPA/EIS assess how grazing under each alternative may affect GRSG and its habitat and support those conclusions with the best science available.

Comment Number: NVCASG-14-0344-33
Comment Excerpt Text:
Page 17, Section 4.3.2. Nature and Type of Effects, Locatable, Leasable, and Salable Minerals Management:
This general treatment of effects is misleading. The lack of quantification in this section allows the BLM and Forest Service to list many negative impacts in such a way that the reader is lead to believe that minerals management is nothing but incompatible with sage-grouse and sage-grouse habitat.

**Comment Number: NVCASG-14-0344-34**

**Comment Excerpt Text:**

Page 17-18, Section 4.3.2. Nature and Type of Effects, Locatable, Leasable, and Salable Minerals Management:

The last paragraph on page 17 which continues onto page 18 includes a discussion of noise impacts. The Draft LUPA/EIS states that the "authors found that the low-frequency mining noise in the study area was continuous across days and seasons and did not diminish as it traveled from its source." Two points need to be made. First, the noise may be continuous at an operating mine or oil and gas well, but the level of noise is variable during the day depending on the level of activity, wind, weather, and topography. The sentence as written implies a continuous level as well as continuous noise production. This needs to be corrected or clarified.

The second point refers to the italicized text (added in this comment for emphasis). This statement is incorrect and scientifically impossible. Noise attenuates with distance; this is a law of physics. While it is correct to state that low frequency tones attenuate at a lower rate than high frequency tones, they do attenuate. Noise studies routinely include "contours" that indicate how noise from a source diminishes with distance from the source. If the statement in the Draft LUPA/DEIS were true, then the distance of these disturbance from a lek or other seasonal habitat would not matter because the statement indicates the noise level would be the same no matter what distance the lek or habitat is from the source. In addition, the work done by Patricelli and others indicates that the higher frequency noise is more likely to interfere with sage-grouse activities than low frequency noise. Therefore, the implications of the text in question are misleading.

**Comment Number: NVCASG-14-0344-36**

**Comment Excerpt Text:**

The beneficial impacts of this closure on sage-grouse and sage-grouse habitats is not quantified; the "Closure to leasable minerals would result in long-term beneficial impacts on GRSG habitats associated with all seasonal life history requirements." This is inadequate in terms of providing analysis of impacts. Without some indication of the magnitude of the benefit of this closure, the reader cannot determine how this compares to other elements of this Alternative; and therefore, comparison of elements cannot be made.

**Comment Number: NVCASG-14-0344-37**

**Comment Excerpt Text:**

The analysis of Alternatives B, C, D, E, and F are all quite similar. A comparison of the Tables in each section (i.e., Tables 4.10 (Alternative B), Table 4.71 (Alternative C), Table 4.21 (Alternative D), and Table 4.26 (Alternative E) [there is no table for Alternative F, it is the same as Alternative B for this analysis]) shows very minor changes in benefits to sage-grouse, and in each section the text has no quantitative information. The "long-term benefit" to sage-grouse is quite vague and the tables only address the percent of GRSG Sub-Populations Affected by Closure to Leasable Minerals. This does not relate back to the indicators that were listed in Section 4.3.1 (at Page II). A change in acres or percentage of the GRSG sub-population affected by closure must be related to how it will benefit one or more of the indicators, and in a quantitative manner to allow for comparison of alternatives.
The analysis currently shows that more acres are closed under Alternatives B, C, D, E, and F than under Alternative A, but there is nothing to indicate how the increased closure will translate into benefits for sage-grouse. If the areas were not closed and mitigation for disturbance was the preferred option, then there may actually be an improvement in habitat and benefit to sage-grouse by replacing degraded habitats or decadent sagebrush with healthier suitable habitats. There is no comparison of this loss of potential for increased habitat quantity or quality in this analysis.

**Comment Number: NVCASG-14-0344-38**

**Comment Excerpt Text:**
The analysis of acreage closed for mineral leasing basically concludes that for most resources there would be "little or no impact" from Leasable Minerals Management because there would be no new leases or reduced acreage of leases. However, there is no mention of how without closure, mitigation can be used to address habitat quality or quantity issues in the vicinity of the leases. The analysis is very biased and focused on reaching a desired decision, not on an objective analysis of the alternatives. There is recognition that with closure, "there may not be a resultant change in vegetation or soil conditions" (at Page 68 and elsewhere).

**Comment Number: NVCASG-14-0347-5**

**Comment Excerpt Text:**
Through the DEIS, BLM has been tasked with analyzing the management situation using the available inventory data and other information to respond to identified issues. However, the DEIS does adequately review and analyze certain threats as stated by USFWS. BLM made a dismal attempt to analyze the concern of predator control, although USFWS has acknowledged and stated predation has increased dramatically in the Great Basin. Reference (DEIS Table 4.2 pg. 604) to see that livestock grazing, wildfire, and others are listed as threats in this table and it is inexcusable that BLM does not include predators among the threats, or even to footnote the chart to explain that predators are not the responsibility of the land management agencies but rather the state and USFWS. Not showing predators among the threats leaves a critical void in the information that the publics deserve and need to be fully apprised of. We strongly recommend addressing this concern in the final document.

In addition, grazing by other herbivores in Nevada needs to be adequately reviewed such as ungulates and wild horse and burros. Grazing, as determined by the USFWS, refers to native wildlife, feral horses and livestock but BLM failed to address all species thoroughly. For example (see DEIS Section 4.3.2 pg. 608) this section failed to report that WH&B remain on the public lands on a year round basis and are not managed for the benefit of the rangeland resource that supports their very existence. Only their numbers are attempted to be controlled, but with minimal success. There typically are no rest periods for the range in HAs or HMAs, riparian areas nor wetland meadows. WH&B are territorial and tend to remain within their HMA, even when forage and water supplies are exhausted, while all the time continuing to reproduce at a >20% rate. Livestock on the other hand are regulated for numbers, season of use, utilization and trend of range condition and other. Numbers control is all that the BLM have available to them today to effectively manage horses, and even that is being heavily impacted through the budget process. In addition, any attempts to restore rangelands within HMA's would be most challenging due to the restrictions that would be applied when attempting to protect a new seeding or defer use from an area for a period of time to allow for natural regeneration. Fencing and other structural improvements would also become a real challenge. We request BLM readdress these concerns.

**Comment Number: NVCASG-14-0351-13**

**Comment Excerpt Text:**
Aldrich et al. (2008, page 990) did not find any relationship between GRSG persistence and livestock densities, but concluded that other aspects of livestock management (intensity, duration, and distribution) may be more influential on rangeland condition and livestock density.
Comment Number: NVCASG-14-0351-14
Comment Excerpt Text:
Studies suggest that grazing for maintaining residual grass cover may not influence populations, contrary to presumptions of the Draft EIS. See Kolada et al. 2009, pp. 1343-1344.

Comment Number: NVCASG-14-0351-15
Comment Excerpt Text:
as reported elsewhere, see Evans (1986, page 67), GRSG grazed meadows significantly more during late summer because grazing had stimulated growth of forbs. Or as Klebenow (1981, p.121) noted, GRSG used openings in meadows created by cattle.

Comment Number: NVCASG-14-0351-16
Comment Excerpt Text:
The Draft EIS also fails to recognize other studies that contradict the assumptions upon which the EIS is based, to wit: "Currently there is little direct evidence linking grazing effects and GRSG population responses. Analysis for grazing impacts at the landscape scales important to GRSG is confounded by the fact that almost all GRSG habitats have at one time been grazed and thus non-grazed control areas exist for comparison." (Knicketa1, 2011, p232).

Comment Number: NVCASG-14-0351-17
Comment Excerpt Text:
What is not considered in the Draft EIS is how horse and burro grazing patterns differ from livestock. Yet scientific evidence indicates that there is a distinct and major difference in grazing patterns. See http://www.extension.org/pages/10296/horse-feedintz-behaviorft.UullGfTTmDi; and http://www.horses-and-horse- information.com/artielesi1295grazini:shiml.
The BLM has even noted that, unlike horses, the highest level of diet overlap exists between elk and cattle.


Comment Number: NVCASG-14-0381-2
Comment Excerpt Text:
The BLM already has existing laws and regulations to provide the regulatory assurance necessary to avoid a listing, but failed to discuss and analyze this in the DEIS (No Action Alternative).

4.7 CUMULATIVE IMPACT ANALYSIS

Comment Number: NVCASG-14-0040-2
Comment Excerpt Text:
CCA and CFBF strongly support the exclusion of the Modoc National Forest from the project area of the DEIS as proposed but would request the final EIS fully outline the steps permittees have taken on the Modoc National Forest to improve sage steppe habitat and increase GSG populations.

Comment Number: NVCASG-14-0144-23
Comment Excerpt Text:
The cumulative analysis focuses largely on threats to the sage grouse rather than potential cumulative positive impacts both positive and negative. The cumulative impact analysis needs to talk about the past, present and reasonably foreseeable impacts on sage grouse both positive and negative.

Comment Number: NVCASG-14-0188-6
Comment Excerpt Text:
There are issues which are beyond the scope of what the BLM and Forest Service have authority to regulate on public lands, but these issues are not necessarily irrelevant to the Draft LUPA/DEIS analyses. All factors 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.

Comment Number: NVCASG-14-0199-27
Comment Excerpt Text:
the Agencies have failed to properly describe and evaluate the No-Action Alternative. This error extends to the cumulative impacts analysis where the Agencies have completely failed to identify and quantify past actions to conserve sage-grouse and sage-grouse habitat. The cumulative impacts analysis
should include an evaluation and quantification of all measures to date to conserve, protect, or mitigate sage-grouse impacts. That analysis should include those measures that have been taken as mitigation measures under existing FLPMA and/or NEPA authority to conserve or restore sage-grouse habitat.

**Comment Number: NVCASG-14-0201-10**

**Comment Excerpt Text:**
Based on this definition, NOGA concludes that the Cumulative Effects analysis in the Draft LUPA/DEIS is inadequate and not in compliance with 40 CFR 1508.7. Two major impacts to sage-grouse were eliminated from detailed analysis because the BLM and Forest Service do not have jurisdiction over hunting and predation. However, 40 CFR 1508.7 is clear that the federal agencies do not have to be "undertaking such other actions" to have them included in the cumulative effects analysis.

NOGA finds it very hard to comprehend why predation and hunting of sage grouse are not analyzed so that the relative impacts for each alternative can be put in context, especially with regard to cumulative effects.

And while hunting and predation were not included in the analysis because BLM and Forest Service do not have jurisdiction over these actions, Climate Change was included in the analysis and we are sure that BLM and Forest Service have no jurisdiction over this factor. This implies that BLM and Forest Service purposely avoided addressing hunting and predation. However, these two factors likely result in mortality of more sage-grouse than many of the BLM authorized actions that will be eliminated or restricted as a result of the Draft LUPA/DEIS. The public needs to know the impacts of hunting and predation in order to put all other impacts in perspective and to objectively evaluated the conservation measures being analyzed in the Draft LUPA/DEIS. Without such information, the conclusions in the Draft LUPA/DEIS are flawed.

**Comment Number: NVCASG-14-0205-43**

**Comment Excerpt Text:**
4.3.2 “Impacts on GRSG accrue over varying distances from origin depending on the type of development”

Comment:
Replace the list of distances cite in the EIS with the best science available including Taylor (2013): These stipulations should be implemented with further testing. a) It should be anticipated that multiple year-round drilling and completion activities within 2 miles of a lek will negatively impact lek attendance and associated nesting and brood rearing activity. b) Consider well density and removal of habitat, for example i) cluster 40 acre spaced wells (if geologically applicable) in marginal habitat, this is preferred over full scale 40 acre spacing that removes good quality habitat, ii) drilling multiple wells from a single location; iii) use the fewest number of surface well sites possible to extract the resource; c) Leave undisturbed patches of habitat scattered throughout the field development area; for example map the habitat, the resource and create habitat set aside areas; d) Application of management practices to reduce direct impacts to sagebrush habitats should assist in reducing the differential between impacted and non-impacted male-lek attendance and the likely displacement of grouse from development areas.

i) Avoid impacting lek buffers; ii) Avoid impacting high quality nesting and early brood rearing habitats; iii) Reestablish or enhance sagegrouse habitat as quickly as possible using locally selected forb and sagebrush species.

**Comment Number: NVCASG-14-0285-48**

**Comment Excerpt Text:**
Importantly, there will be a need for consistency between RMPs that share common ecosystems and sage grouse biology. Many of the scientifically demonstrated impacts of BLM-permitted activities to sage grouse, ranging from livestock grazing to impacts of tall structures or oil and gas development, would be expected to be similar across the range of the
species. There is no reason to expect, for example, that the impact of transmission towers on sage grouse habitat use would be any different in Nevada than it is in Montana. Thus, in order to avoid the appearance of an arbitrary and capricious approach to sage grouse conservation between states or other jurisdictional boundaries that have no biological or ecological basis, BLM should have some common minimum requirements across RMPs that ensure that conservation measures that cannot be shown to support the maintenance and recovery of sage grouse populations do not crop up in regional or local RMPs due to the whims of local politics. Northern Nevada, for example, shares an ecoregion and sage grouse Management Zone with Oregon, Idaho, and parts of Utah. At a minimum, this plan should incorporate common minimum standards to protect sage grouse with plans in Utah, Oregon, and Idaho that also govern lands in shared ecoregions.

Comment Number: NVCAG-14-0015-31  
Comment Excerpt Text:  
BMP: Construct road crossing at right angles to ephemeral drainages and stream crossings.

Comment: This BMP needs to recognize that there may be site-specific conditions (topography, ownership, or other resource considerations) that render this practice infeasible or impracticable.

Comment Number: NVCAG-14-0015-32  
Comment Excerpt Text:  
BMP: Restrict vehicle traffic to only authorized users on newly constructed routes (e.g., use signing, gates, etc.).

Comment: Once a road is established, it is logical to direct as many users as possible to existing roads. This will reduce the pressure for construction of alternate routes. As written, the BMP conflicts with the desire to minimize road construction.

Comment Number: NVCAG-14-0015-33  
Comment Excerpt Text:  
BMP: Use dust abatement practices on roads and pads.

Comment: This BMP needs additional language that allows for flexibility based on road use, road condition, season, and other considerations.

Comment Number: NVCAG-14-0015-34  
Comment Excerpt Text:  
BMP: Cluster disturbances associated with operations and facilities as close as possible.

Comment: This BMP needs allowance for other resource conflicts. For instance, concentrating some operations in clusters could result in concentration of air pollutants or could result in excess resource expenditure to transport workers or materials to one location when another location would relieve the resource pressure.

4.8 Mitigation Measures

Comment Number: NVCAG-14-0015-30  
Comment Excerpt Text:  
BMP: Locate roads to avoid important areas and habitats.

Comment: It would be helpful to define “important areas and important habitats.” Appendix A should recognize that the goal should be threat reduction, so greater habitat impacts from a shorter road may be preferable to fewer habitat impacts from a longer road that increases the total risk to sage-grouse (e.g., collision, additional disturbance of lower-quality habitat). Avoidance may not always be practicable. In such instances, mitigation should be allowed to address impacts on sage-grouse. Application of this BMP should also be subject to ground truthing of the importance of areas or habitats.
**Comment Number: NVCASG-14-0015-35**

**Comment Excerpt Text:**
BMP: Place infrastructure in already disturbed locations where the habitat has not been restored.

Comment: This BMP needs to allow for exceptions when site-specific considerations may make it impossible to implement. Mine pits must be located where the mineral is found, and features like waste rock dumps and leach pads must be located near enough to the resource that the resource can be economically developed.

**Comment Number: NVCASG-14-0015-36**

**Comment Excerpt Text:**
BMP: Cover (e.g., fine mesh netting or use other effective techniques) all pits and tanks regardless of size to reduce GRSG mortality.

Comment: Barrick is not aware of any incidence of sage-grouse mortality arising from uncovered pits or tanks. Furthermore, not all pits and tanks contain substances, or are constructed, such that they are detrimental to sage-grouse. Not all pits and tanks are in use during times when sage-grouse might be present. Also, existing bird netting practices have been successful in significantly reducing bird mortality. New netting requirements may add significant costs for little or no environmental gain. The term “pit” should be defined so as not to include the mining pit itself. Additionally, the phrase “regardless of size” should be deleted; there might be large pits or impoundments that economically or practically cannot be covered or for which alternative deterrence mechanisms, to the extent necessary at all, would be effective.

**Comment Number: NVCASG-14-0015-37**

**Comment Excerpt Text:**
BMP: Equip tanks and other above ground facilities with structures or devices that discourage nesting of raptors and corvids.

Comment: This BMP should specify whether it applies to buildings. It may not be practical to discourage nesting on a building’s roof.

**Comment Number: NVCASG-14-0015-38**

**Comment Excerpt Text:**
BMP: Control the spread and effects of non-native plant species (Gelbard and Belnap 2003, Bergquist et al. 2007).

Comment: Not all non-native species are deleterious to the habitat or the birds. Some may be useful in establishing vegetation communities that can progress toward suitable habitat while defending against aggressive non-native species. They may also be useful for establishing barriers to other threats to the habitat, such as fire. This blanket prohibition ignores evolving science on the use of non-natives to achieve long-term habitat improvements.

**Comment Number: NVCASG-14-0015-39**

**Comment Excerpt Text:**
BMP: Utilize mulching techniques to expedite reclamation.

Comment: This BMP should acknowledge that mulching techniques may not be appropriate in all reclamation circumstances.

**Comment Number: NVCASG-14-0015-7**

**Comment Excerpt Text:**
The Draft LUPA/EIS refers to “prescribed mitigation ratios,” (Ch. 2, at 14 (46)), it but does not indicate what those ratios will be, how they will be determined, whether they will vary by project, and whether they will vary by mitigation type.

**Comment Number: NVCASG-14-0050-5**

**Comment Excerpt Text:**
Implementing the “no unmitigated loss” principle to occupied sage-grouse habitats under the Preferred Alternative D will also inevitably lead to serious impacts to sage-grouse populations. Sagebrush grows slowly; it typically takes decades to restore degraded habitat to the point where it is useful to sage grouse. Despite tens of millions in mitigation funds spent, no grouse populations increases have yet resulted.
Comment Number: NVCASG-14-0052-8
Comment Excerpt Text:
PMA 3.4 Mitigation Bank Program: Who will be responsible for determining the value of the mitigation effort and whether or not it satisfies the requirements for mitigation? Will the "bank" have a cumulative balance in dollars or acres or projects? What is the unit of measurement?

Comment Number: NVCASG-14-0062-4
Comment Excerpt Text:
Mitigation for impacts to greater sage-grouse PPH and PGH habitat should be designed to be feasible. All projects, whether on BLM or USFS land, and between BLM or USFS district office, should be consistent in how mitigation for impacts to greater sage-grouse habitat are calculated and implemented. Mitigation ratios, mitigation cost per acre, buffer zones, seasonal restriction time periods, etc. should be consistent amongst all offices of the BLM and the USFS.

Comment Number: NVCASG-14-0103-1
Comment Excerpt Text:
Mitigation measures considered for adoption in the DEIS are not supported by data to verify their effectiveness, and are thus subjective. Several of the alternatives considered in the DEIS include subjective language when discussing whether mitigation measures would be required. Similarly, there is no standard for successful habitat improvement that could be required as offsite mitigation.

Comment Number: NVCASG-14-0120-14
Comment Excerpt Text:
"Cover (e.g., fine mesh netting or use other effective techniques) all pits and tanks regardless of size to reduce GRSG mortality." It is not clear what pits BLM is referring to with this BMP for locatable minerals. To the extent it believes covering open locatable mining pits, which can cover very large surface areas, is a best management practice, BLM is incorrect. It would be practically impossible to cover large mining pits with fine mesh netting and still operate.

Comment Number: NVCASG-14-0120-15
Comment Excerpt Text:
"Close and reclaim duplicate roads, by restoring original landform and establishing desired vegetation." Again, BLM fails to define what would be deemed "duplicate roads" and who would decide whether a road should be considered "duplicate." Some "duplicate" roads are used to allow mine equipment traffic to travel on a separate road from light vehicle and public traffic for the safety of personnel and the public.

Comment Number: NVCASG-14-0120-16
Comment Excerpt Text:
"Locate roads to avoid important areas and habitats" BLM fails to define what it considers "important areas and habitats." BLM also fails to acknowledge that some roads will be required to be located in habitat or "important areas," and thus this BMP, and many others, must recognize that BMPs should only be required when feasible and economically reasonable. When a project or activity cannot avoid "important areas," mitigation options must be available and should be practical and economical.

Comment Number: NVCASG-14-0120-17
Comment Excerpt Text:
"Place infrastructure in already disturbed locations where the habitat has not been restored." It is not clear how or when BLM will determine if this is required or practical. Often, infrastructure is needed in particular locations to minimize total disturbance or other activities. It is also unclear how locating infrastructure in habitat that has not been restored will be consistent with BLM’s attempt to encourage reclamation and restoration of already disturbed habitat.

Comment Number: NVCASG-14-0120-18
Comment Excerpt Text:
"Restore disturbed areas at final reclamation to pre-disturbance landform and desired plant community." This BMP may be nearly impossible in Nevada, or at the very least completely uneconomical. It appears to be based on practices in other regions where pits are back-filled. However, in Nevada, restoring disturbed
areas to pre-disturbance landform and desired plant community would be a significant and radical shift over current BLM reclamation practices implemented through the State of Nevada’s reclamation requirements.

**Comment Number: NVCASG-14-0120-19**  
**Comment Excerpt Text:**  
"Locate man camps outside of priority GRSG habitats." This fails to account for the fact that the location of some infrastructure, including man camps, may be limited by surface availability on existing claims. As noted above, BLM should acknowledge that BMPs can only be required when feasible and economically reasonable and should allow for mitigation when appropriate.

**Comment Number: NVCASG-14-0120-9**  
**Comment Excerpt Text:**  
Ch. 3 Table 3.49 (Table 63 in Interactive Document) presents inconsistent stipulations by region without any justification or scientific basis for why different stipulations are used for different areas. For example, leks in the Elko district are to be protected seasonally with no surface occupancy within 0.5 miles, but there is no definition of the season. Leks in the Winnemucca district are to have no surface occupancy within 2 miles all year round.

**Comment Number: NVCASG-14-0132-12**  
**Comment Excerpt Text:**  
Section 2.4.2. Alternative B. The DEIS states that “The BMPs proposed in the NTT report are included as required design features (RDFs) as part of Alternative B and are listed in Appendix A, Required Design Features of this document.” However, the DEIS is not clear as to why BMPs are elevated to RDFs, particularly since, as Appendix A states, not all of them will apply to all situations. These BMPs should remain as BMPs in the FEIS/LUPA, and should not be mandatory RDFs.

**Comment Number: NVCASG-14-0132-33**  
**Comment Excerpt Text:**  
The DEIS RDF would “Implement appropriate time-of-day and/or time-of-year restrictions for future construction and/or maintenance activities in known GRSG habitat to avoid adverse impacts.” However, the DEIS is entirely unclear as to which construction and/or maintenance activities are being referred to, and is entirely unclear as to any science on the subject.

**Comment Number: NVCASG-14-0132-44**  
**Comment Excerpt Text:**  
The DEIS RDF would “Ensure that any water developments do not remove more than 50% of water from any spring or other surface water source. Water developments should make water available on the ground for wildlife use.” This RDF should be removed from the final document, if for no other reason than it is the State of Nevada’s call on how much water may be diverted for a beneficial use, while still supplying water for wildlife. It is further unclear upon what science this is based.

**Comment Number: NVCASG-14-0132-45**  
**Comment Excerpt Text:**  
The DEIS RDF would “Use aircraft to check livestock in areas where consistent trespass has been noted and access/manpower is difficult to obtain.” However, it is entirely unclear what this has to do with sage-grouse and its habitat. As a practical matter, the agencies don’t need to have this provision in a LUPA document, because the agencies can use whatever means they see fit to pursue trespass, whether “consistent” or not. As a further practical matter, the DEIS is silent as to how livestock brands could be ascertained from an aircraft.

**Comment Number: NVCASG-14-0144-4**  
**Comment Excerpt Text:**  
BLM needs to strongly consider and incorporate adaptive management for all alternatives and as a tool for ongoing management of public lands. Providing flexibility and allowing adaptive management at the local and site specific levels is but one of the effective mechanisms for sage-grouse conservation.
Comment Number: NVCASG-14-0188-25
Comment Excerpt Text:
Table 2.5 - Action O-SSS-AM 3

Off-site mitigation projects should not be limited to PGMA. Off-site mitigation measures could include fire-prevention or fire-suppression activities that would be most beneficial in protecting PPMA.

Comment Number: NVCASG-14-0188-26
Comment Excerpt Text:
Table 2.5 - O-SSS-OPM 5

Please see comments related to Action O-SSS-AM 3. Off-site mitigation should not be limited to PPMA. Many mitigation efforts, applied to PPMA, would benefit GRSG in the short- and near-term, including fire suppression, fire breaks, fuels treatment, etc.

Comment Number: NVCASG-14-0192-4
Comment Excerpt Text:
2.4.4, p. 46 (p. 14) 5th bulleted item on page

"Prescribed mitigation ratio ..." NDOT believes the specification of ranges for each habitat type or a maximum upper limit on the extent of each range may be required to mitigate for. This would ensure consistent application of mitigation ratios between agencies and within their subdivisions. In addition, project proponent will be able to better quantify the potential effect of GRSG mitigation for a project and incorporate it into their planning documents.

Comment Number: NVCASG-14-0196-1
Comment Excerpt Text:
As you are aware, the State of Nevada is currently in the process of developing a mitigation banking system, the Conservation Credit System, which is identified in Alternatives D and E. Although Alternative D directs the BLM/USFS to coordinate with the Nevada Sagebrush Ecosystem Technical Team (SETT) - the entity working to develop and implement the Conservation Credit System - the DEIS should more directly include consultation with the SETT and implementation of the Conservation Credit System. For example, if approved, the proposed "WAFWA Management Zone Implementation Teams" identified in Appendix D should include members of the Nevada SETT.

Comment Number: NVCASG-14-0202-14
Comment Excerpt Text:
Required Design Features identified in Appendix A for Alternatives C, D, and F (page A-11) under the Wildlife/Greater Sage Grouse heading stipulate adherence to seasonal avoidance buffers, including avoidance of winter range from November 1 through March 31, avoidance of brood rearing habitat from May 15 through August 15, and a four-mile avoidance buffer around active leks from March 1 through June 15. It is understood that active greater Sage Grouse leks are not identified in the LUPA/DEIS because that information is sensitive and the document is readily available to the public. However, winter range and brood-rearing habitat also apply seasonal avoidance measures and such habitats are not identified in the LUPA/DEIS. NREA utility members recommend including mapping of greater Sage Grouse winter range and brood-rearing habitat in the LUPA/DEIS so all impacts to operations, maintenance, and new construction of their infrastructure would be clear.

Comment Number: NVCASG-14-0202-16
Comment Excerpt Text:
Alternative D, the agency preferred alternative, states that development projects within PGMA and PGMA must result in "no unmitigated loss" of greater Sage Grouse habitat. "No unmitigated loss" would be achieved through a regional mitigation strategy outlined in Appendix D. At this point, NREA utility members agree that there is not enough detail in how the regional mitigation strategy would be operated to support or oppose its implementation, or even a sufficient definition of what constitutes "no unmitigated loss". For instance, Appendix D does not specify a structure for determining appropriate mitigation, including impact and benefit calculation methods, mitigation ratios, mitigation currency, location, and performance standards options. Such methods must be more fully developed and made available for review and comment.
Comment Number: NVCASG-14-0202-17
Comment Excerpt Text:
30. The Regional Mitigation Strategy outlined in Appendix D will be further developed and implemented by Western Association of Fish and Wildlife Agencies (WAFWA) Management Zone Implementation Teams composed of BLM, USFS, USFWS, and state fish and game agency personnel. This is very troubling to NREA utility members because no private development representatives will be involved in the Management Zone Implementation Team. The Management Zone Implementation Team as currently staffed could potentially propose such costly and restrictive mitigation to make development within PPMA and PGMA unfeasible. NREA utility members feel that potential developers and private interests should have a voice in the development and implementation of the Regional Mitigation Strategy to ensure that credits and debits imposed on development remains fair.

Comment Number: NVCASG-14-0224-13
Comment Excerpt Text:
Prescribed mitigation ratios to offset the immediate and long-term effects of the disturbance.

COMMENT: The LUPA/DEIS indicates the agencies intend to impose mitigation ratios to offset the effects of disturbance. It is imperative that LUPA/DEIS provide well-defined information regarding the structure of such a mitigation system in order to allow stakeholders to provide comments on an effective metric for determining how best to minimize and mitigate any losses of resources. However, we have been unable to find any other reference to what this mitigation ratio would be in the LUPA/DEIS. Furthermore, we have found no reference to any scientific basis for determining an appropriate ratio or any scientific proof that such mitigation is needed and that it has, in fact, been proven effective in GRSG management. Absent clear and publically available documentation that confirms a mitigation ratio is an effective tool in conserving the GRSG, we question the agencies’ motivation and authority for utilizing a mitigation disturbance ratio as part of the management objectives in the planning documents.

Comment Number: NVCASG-14-0224-14
Comment Excerpt Text:
Conducting restoration in advance of disturbance (such as through the State of Nevada’s mitigation banking process)

COMMENT: This concept needs to be fully explained. The term “restoration” appears incorrect because restoration cannot occur on something that has not been disturbed. Restoration is defined as “restoring something to its former condition;” whereas reclamation is defined as “bringing something back to a suitable condition for use, as cultivation or habitation.” If the action is to take place before surface disturbance, we believe BLM/FS actually intends to require habitat “enhancement,” which is defined as “improving or adding to the strength or other desirable quality of something.” In general, if the primary objective is to bring sagebrush back to an acceptable trajectory to suitable habitat after surface disturbance, the term is “reclamation,” not “restoration.”

Comment Number: NVCASG-14-0238-17
Comment Excerpt Text:
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?

Comment Number: NVCASG-14-0259-15
Comment Excerpt Text:
Page 106; Action E-SSS-MIT 7: TMA-21.3: "Disturbances greater than or equal to five percent of 640 acres (32 acres) within Occupied Habitat will trigger evaluations and consultation with the Nevada Sagebrush Ecosystem Technical Team. This consultation will occur within the administrative framework established by the Nevada Sagebrush Ecosystem Council. New activities at any level of disturbance should minimize impacts on ORSO and their habitat (State of Nevada 2012).” This measure needs additional clarity. It is unclear if this means site-type disturbances of 32 acres, whether existing
ground disturbance count towards the 32 acres or only new disturbance; or what defines the 640 acres- a Township and Range, or a watershed?

**Comment Number: NVCASG-14-0267-3**
Comment Excerpt Text:
"Appendix C-Reclamation Plan" in the Wyoming Greater Sage-Grouse Draft EIS contained some very valuable ideas and direction for sage-grouse habitat restoration and may be worthwhile to incorporate a version of it in this EIS.

**Comment Number: NVCASG-14-0330-6**
Comment Excerpt Text:
The Department is concerned with the discussion on page 905 of the Draft LUPAIEIS which states that the BLM and USFS have identified lands for disposal that include GRSG PPH and Preliminary General Habitat (PGH). If such lands are disposed, it is not clear how the loss of GRSG habitat would be effectively mitigated. Considering the status of this species, disposing of such lands for energy development is likely to adversely affect GRSG populations in California.

**Comment Number: NVCASG-14-0339-2**
Comment Excerpt Text:
Table 2.5- Action D-SSS-MIT 1
Since the section is titled “Mitigation,” please consider adding the following action within the section: - Within greater sage-grouse habitat, offset all habitat loss through mitigation to ensure no net unmitigated loss of habitat.

**Comment Number: NVCASG-14-0344-14**
Comment Excerpt Text:
When initially published, the maps of PPH and PGH included the disclaimer that the habitat categories were drawn at a broad gross scale. The publication also said that this information would not to be used at the project level scale. However, areas of non-habitat (e.g., pinyon juniper encroachment) have been mapped as PPH and PGH and these areas provide no habitat value for sage-grouse. Nonetheless the BLM is suggesting that proposed disturbance in these areas must be mitigated at the ratio of 3 acres of mitigation for every 1 acre of disturbance in PPH habitat, regardless of whether or not the acreage is actually sage-grouse habitat.

**Comment Number: NVCASG-14-0346-7**
Comment Excerpt Text:
Chapter: 2, Section: Table 2.4, Page Number: 93
Comment: We support the Alternative B objective of treating areas of PGMA adjacent to PPMA areas where large-scale disturbance has occurred as PPMA. We believe the EIS needs to provide a method of determination for "large-scale disturbance" and what constitutes a qualifying area of PGMA adjacent to PPMA i.e. is there a size threshold for such adjacent areas of PGMA?)

5. **ACECs**

5.1 **Range of Alternatives**

**Comment Number: NVCASG-14-0188-31**
Comment Excerpt Text:
[ACEC’s and Appendix L] there is limited discussion of the ACEEs with regards to GRSG populations and the critical need to protect these specific areas is not discussed in detail. Further, there is no discussion relative scale at which that data used to make the ACEC determinations is useful.
Comment Number: NVCASG-14-0199-52
Comment Excerpt Text:
[Table 2.5 (Page 263) - ACECs and Appendix L] Importantly, there is limited discussion of the ACECs with regards to GRSG populations and the critical need to protect these specific areas is not discussed in detail. Further, there is no discussion relative scale at which that data used to make the ACEC determinations is useful.

Comment Number: NVCASG-14-0297-5
Comment Excerpt Text:
Even if these priority areas are not designated as ACECs, BLM can identify them as other administrative designations, which will still provide for areas of more protective management. For example, the HiLine RMP in Montana incorporated 2 designation approaches that are used to protect sage-grouse and minimize habitat fragmentation: Grassland Bird/Greater Sage-Grouse Priority Areas, and Greater Sage-Grouse Protection Priority Areas. In the HiLine RMP, these areas had low potential for oil and gas development and were given a high level of protection in the RMP.

Comment Number: NVCASG-14-0308-9
Comment Excerpt Text:
Although habitat loss is a major factor in sage-grouse declines and FLPMA provides clear direction for the BLM to give priority to designation of ACEC, the BLM has not considered a reasonable range of ACEC alternatives. In fact four of the alternatives, including the agency preferred alternative D, establish no new ACECs at all. Even the few ACECs that were actually nominated by the BLM Surprise and Eagle Lake Field Offices were not included in the preferred alternative. This is a significant omission that smacks of the doctrinaire politics of business as usual and amounts to a clear failure to consider a reasonable range of alternatives.

5.2 BEST AVAILABLE INFO BASELINE DATA

Comment Number: NVCASG-14-0297-6
Comment Excerpt Text:
The BLM has determined that preliminary priority habitat meets the relevance and importance criteria for ACEC designation, and has carried forward the proposal that a substantial amount of PPH be designated as ACECs to protect sage-grouse under alternative C and a reduced percentage be designated as ACECs in Alternative F. We are recommending that BLM designate a proportion of the preliminary priority habitat as greater-sage-grouse priority areas, and that these areas be selected based on high biological priority and lower potential for energy development and other damaging uses. Since these areas will be made up of a subset of the PPH, they clearly meet the relevance and importance criteria. Further, their special worth is increased in comparison with the PPH as a whole because they are selected in part to protect leks within the PPH that support the highest densities of birds within the PPH. Thus, these areas meet the relevance and importance criteria, and we suggest that they be considered for designation as Areas of Critical Environmental Concern in the final plan.

6. CLIMATE CHANGE

6.1 RANGE OF ALTERNATIVES

Comment Number: NVCASG-14-0132-18
Comment Excerpt Text:
Action D-Veg D 3. This Action item should be eliminated from the final document. If “drought” is defined as any precipitation less than the long term average, and “post drought” management is to ensue after a year of less-than-average precipitation, then BLM and FS would be managing the landscape as being in an emergency situation nearly all the time. Further, “drought” is not adequately defined in the DEIS.
6.2 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCASG-14-0091-66
Comment Excerpt Text:
Page 613, 4.3.3

Impacts from Climate Change – We recognize that climate change is already having an impact on vegetation in some areas, which will only accelerate if the trend continues. It is important that BLM and USFS coordinate with USDA ARS Great Basin Rangeland Research Unit and UNR Range Scientists, Soil scientists, hydrologists, economists and others to work on approaches to address change as it is documented. There is a need to explore alternative management scenarios, which allow for smooth transitioning over time, including appropriate grazing practices that avoid the abrupt agency decision process experienced in some areas. Efforts should also focus on the serious water source issues that will only grow if the trend continues in this driest area of the nation. What then are appropriate water conservation measures to assure adequate supplies of quality water for livestock, wildlife, etc.? What measures are needed to benefit sage-grouse during these dry periods while maintaining viable economic use?

Comment Number: NVCASG-14-0130-1
Comment Excerpt Text:
Section 4.16.1 Assumptions – This section assumes “Climate change forecasts will generally result in less water availability throughout the planning area.” Data and scientific evidence to support this critical assumption must be provided in the FEIS. In fact, climate change forecasts for the Humboldt River Basin do not necessarily posit less water availability.

Comment Number: NVCASG-14-0144-13
Comment Excerpt Text:
It is inappropriate to incorporate climate forecasts into the baseline conditions. BLM has very little certainty about the accuracy of climate change forecasting. When uncertainty is high, the lead agency is required to use a boundary conditions. Did BLM bound the climate conditions?

Comment Number: NVCASG-14-0144-2
Comment Excerpt Text:
Not all baseline conditions in chapter 3 incorporate future projections to establish baseline conditions. BLM uses current conditions and infuses future projections for weather/ climate change to forecast the baseline. Forecasting the baseline is often associated with manipulation of outcomes and impacts to skew decisions in a predetermined direction. Projections about climate change and weather are at best unreliable. Such projections are more properly utilized and discussed in the cumulative impact analysis.

Comment Number: NVCASG-14-0199-9
Comment Excerpt Text:
The Cagney document only uses the word "drought" five times in the document and does not appear to discuss or support the drought management actions presented in the DEIS.

Comment Number: NVCASG-14-0205-30
Comment Excerpt Text:
3.2.3 “Of increasing importance is the role of climate change. Live fuel moistures are reaching lower values earlier than in recorded history thus greatly increasing the flammability of larger fuels such as sagebrush. This increases fire size and also intensifies fire behavior.”

Comment:
We suggest that language about the importance of climate change be taken out. Instead the EIS should state that climate change is a theory and too little is known to accurately predict the future. Present knowledge of climate change is not at the stage (i.e. accurate enough) to interpret the limited data we have and predict fire behavior.

Instead, live fuel moistures are reaching lower values earlier than in recent history because of the vegetative composition – the increase in cheatgrass,
not climate change, has increased fire size and intensified fire behavior.

**Comment Number: NVCASG-14-0205-31**

**Comment Excerpt Text:**
3.2.3

“Summarizing the effects of climate change on GRSG habitats indicates a strong predicted influence with increased temperature regimes shifting lower elevation sagebrush habitats into mixed salt desert scrub on a significant scale and sagebrush habitat expansion occurring at higher elevations, retaining significant habitat as potential projected climate change focal areas for GRSG and other species (Comer et al. 2012).”

Comment:

The data is too speculative to be used to manage sage-grouse habitat. If used, it must be qualified.

A working understanding of climate processes is still lacking, resulting in the use of various assumptions during model construction. Comer 2012 is not a peer reviewed document. Comer 2012 is based on speculative modeling paid for by BLM that has not been tested or proven. The models presented by Comer are just that — models. Like all scientific data, they need to be tested. At this time in history,

the agencies need to manage habitat based on the facts, not untested climate models that could be flawed and provide incorrect conclusions.

**Comment Number: NVCASG-14-0393-2**

**Comment Excerpt Text:**
Section 4.16.1 Assumptions — This section assumes "Climate change forecasts will generally result in less water availability throughout the planning area." Data and scientific evidence to support this critical assumption must be provided in the FEIS. In fact, climate change forecasts for the Humboldt River Basin do not necessarily posit less water availability. The area may see increased precipitation but with less falling as snow and more as rain. This change may affect seasonal surface runoff patterns, soil moisture content and groundwater recharge and related alterations in spring flow. The FEIS must ensure that any climate change related impacts and related mitigation strategies are based upon altered forms and timing of precipitation in total amounts which may exceed those currently being experienced in the Humboldt River Basin.

6.3 **IMPACT ANALYSIS**

**Comment Number: NVCASG-14-0238-30**

**Comment Excerpt Text:**
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.

6.4 **CUMULATIVE IMPACT ANALYSIS**

**Comment Number: NVCASG-14-0308-53**

**Comment Excerpt Text:**
The LUPA/DEIS does not adequately address the significant cumulative stress of climate change and incorporate recent science suggesting that a reduction in ungulate grazing would improve ecological resilience in the face of temperature and precipitation changes (See Beschta et al., 2012; Meyer, 201182). Globally, cattle contribute 9.4% of all greenhouse gas emissions from anthropogenic sources; cattle grazing across large pastoral systems have a carbon footprint that is 2 to 3 times larger than feedlot cattle (Ripple et al., 201483). The LUPA/DEIS does not discuss the impacts of livestock grazing on the climate resilience or the contributions of GHGs in the planning area.

**Comment Number: NVCASG-14-0308-54**

**Comment Excerpt Text:**
The agencies have also overlooked an analysis of how sage-grouse habitats and threat risks are likely to shift and change under various climate change scenarios (Schrag et al., 2010) and to evaluate how the current PPH and PGH classification schemes match the
predictions for an altered biogeography in the interior west. Without a hard look at the viability of current provisions to protect and enhance sage-grouse habitat and populations under the foreseeable future climate paradigm, the DEIS is inadequate.

7. **FIRE AND FUELS**

*Comment Number: NVCASG-14-0083-33*

*Comment Excerpt Text:*

Ch: 2, Sec: 2.8.2, Pg. No.: 195

Text Referencing: Table 2.5; Action D-LG 2

Comment: Why do these management actions only apply to nesting habitat? What will the BLM do for brood rearing and winter habitat?

*Comment Number: NVCASG-14-0109-8*

*Comment Excerpt Text:*

21, D, Objective, FFM 7, 110

Add training, equipping, and use of volunteer firefighters under Alternative D as first responders, particularly in remote settings that are time sensitive to muster agency resources for suppression needs.

*Comment Number: NVCASG-14-0169-24*

*Comment Excerpt Text:*

Alternatives Band C in the Utah DEIS, and Alternatives B and F in the Idaho and Nevada EIS's propose fire and fuels management within a key/core habitat with an emphasis on protecting existing sagebrush ecosystems, but do not take into account the quality, suitability or relative importance of the habitat to GRSG. It may not be appropriate to maintain 15% sagebrush canopy in all key/core habitat in an area where removal and creation of a fuel break would have net beneficial effects on GRSG.

*Comment Number: NVCASG-14-0171-38*

*Comment Excerpt Text:*

Fire Management

Action FFM 12

Suppression resources are a combination of many levels of government with different responsibilities. In Surprise Valley (Surprise Field Office), BLM fire has a mutual aid agreement with CalFire to provide the fire suppression services of all Fire as CalFire has no presence in the valley. In addition, there are four volunteer fire departments. Any readjustment of resources to provide suppression for Sage Grouse habitat requires coordination with the local fire departments to prevent the increased risk to safety and private property. This should be clearly defined.

*Comment Number: NVCASG-14-0202-1*

*Comment Excerpt Text:*

1. Flexibility to address and respond to wildfire.

NREA utility members do not feel the potential impacts of wildfire and the flexibility to fight those wildfires is sufficiently addressed in the LUPA/DEIS. NREA utility members believe that unchecked wildfire is the largest threat to greater Sage Grouse habitat. In an effort to reduce the potential for large wildfires in greater Sage Grouse habitat and to protect critical infrastructure serving rural Nevada, NREA utility members request the flexibility to reduce flammable materials within prescribed right-of-ways (ROW) which support their utility's infrastructure.

Alternative E (Chapter 2, page 78) calls for resource agencies to, "Increase initial attack capability by training and equipping volunteer firefighters, as well as agricultural and other industry work forces for assignment during periods of high fire activity. Trained volunteers who are remotely located will serve as first responders when necessary and appropriate." NREA utility members feel that this approach, which is similar to the Rangeland Fire Protection Associations already developed in Southeastern Oregon, is optimal for fighting wildfire within greater Sage Grouse habitat. Further development of this statement would allow NREA utility members to quickly fight wildfires which threaten their infrastructure, thus preventing power outages to critical firefighting needs (such as electricity to wells or base camps).
NREA utility members request the flexibility to reduce potential ignition sources within authorized ROW and application of the Rangeland Fire Protection Association model to be applied to all LUPA/DEIS alternatives.

**Comment Number: NVCASG-14-0238-12**

*Comment Excerpt Text:*

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?

**Comment Number: NVCASG-14-0278-16**

*Comment Excerpt Text:*

EIS Section: Table 4-2, Chapter & Page: p 171

Comment: "Design post fuels management projects to ensure long term persistence of seeded or pre-treatment native plants, including sagebrush."

It makes no sense to seed sagebrush on a fuels management project since sagebrush is the heavy fuel that carries many fires, provides the largest embers for airborne transport across fire lines and roads, and has the greatest potential to burn all night and reignite the following day. This action defeats the intended purpose of fuel breaks.

**Comment Number: NVCASG-14-0278-17**

*Comment Excerpt Text:*

EIS Section: Table 4-2, Chapter & Page: p 182

Comment: "Action E-FFM-HFM 29: Protect, maintain and improve sagebrush habitat statewide over time by treating, rehabilitating and restoring at least as many acres of Occupied/Suitable and Potential Habitat as are lost to wildfire."

This language is confusing habitat lost with a change in habitat quality. If a fire occurs and the site transitions to an alternative stable state (e.g., cheatgrass, noxious weeds) then the habitat has been lost because it does not have the potential to provide the structural and compositional characteristics needed by sage-grouse. If the site has a resilient perennial herbaceous community (of desired species) and the perennial herbaceous species are the ecological dominants on the site after the disturbance, the site has the ability through normal successional processes to move from low quality or uninhabited habitat to high quality habitat. The habitat was not lost but it did change in quality.

**Comment Number: NVCASG-14-0285-86**

*Comment Excerpt Text:*

We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of
existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment). 69

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12%
cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment).

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient
supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12”, except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

Comment Number: NVCASG-14-0382-3
Comment Excerpt Text:
Train and increase/update rural volunteer firefighting equipment so as to allow local residents living close to sage-grouse habitat to suppress fires more quickly before they burn into large conflagrations of tens of thousands of acres of ruined sagebrush environments and sage-grouse habitat.

Comment Number: NVCASG-14-0385-1
Comment Excerpt Text:
Alternative E (Chapter 2, page 78) calls for resource agencies to, "Increase initial attack capability by training and equipping volunteer firefighters, as well as agricultural and other industry work forces for assignment during periods of high fire activity. Trained volunteers who are remotely located will serve as first responders when necessary and appropriate." NREA utility members feel that this approach, which is similar to the Rangeland Fire Protection Associations already developed in Southeastern Oregon, is optimal for fighting wildfire within greater Sage Grouse habitat. Further development of this statement would allow NREA utility members to quickly fight wildfires which threaten their infrastructure, thus preventing power outages to critical firefighting needs (such as electricity to wells or base camps).

7.1 Range of Alternatives

Comment Number: NVCASG-14-0050-14
Comment Excerpt Text:
At lower elevations and in the more arid portions of the sage grouse range, the catastrophic spread of cheatgrass, aided and abetted by the impacts from over-grazing and changes in fire frequency and intensity has led to a lasting, if not permanent changes in ecosystem states. Repeat fires that eliminate or reduce shrubs, natives, and forbs; disturb soils and biological crusts; and release nutrients have allowed cheatgrass and other introduced annuals to replace the native shrub and herb layers. The resultant landscape is largely composed of introduced annuals, and is more susceptible to annual weather patterns and varies greatly from year to year, depending on moisture availability. Long term changes in climate that facilitate or enhance invasion and establishment by invasive annual grasses further exacerbate the fire regime and accelerate loss of sagebrush habitats.122 [Miller, R. F., S. T. Knick, D. A. Pyke, C. W. Meinke, S. E. Hanser, M. J. Wisdom, and A. L. Hild. 2011. Characteristics of sagebrush habitats and limitations to long-term conservation. Pp. 145–184 in S. T. Knick and J.W. Connelly (editors). Greater Sage-Grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.]

Comment Number: NVCASG-14-0050-15
Comment Excerpt Text:
At higher and cooler elevations, changes in fire frequency and intensity have come at the expense of sagebrush ecosystems in a different manner. Under pre-European settlement conditions, wildfires and indigenous planned fires kept pinyon pine and western junipers (“PJ”) confined to areas where fires would not typically reach – mainly rocky terrain where the fuels needed to carry the fire were patchy and disjunct. Once modern settlers arrived in the mid-1880s this pattern changed. Heavy livestock grazing initially greatly reduced the fine fuels needed to carry fires, and later active human intervention suppressed fires to prevent their spread. As a result, PJ species were able to establish seedlings in grass and shrubland areas where formerly fires would have eliminated them. This then was the beginning of the woodland expansion into sage grouse habitat that continues today.123 124 Prior to 1860 two-thirds of the landscape was treeless and occupied by sagebrush-steppe communities. Today, less than one-third of the landscape remains treeless and more than 90 percent of the trees have established since the 1860s. These data support the need for active


Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.

122 Ibid.

Management Prescriptions:

i. Management inside of SGCAs in sage grouse habitat

Restoring sage grouse habitat that is degraded or fragmented might be useful tool for the benefitting the species. However, these programs are likely to be both difficult and expensive, and may take centuries to achieve a complete restoration of a functioning system of sagebrush habitats within a landscape mosaic.126 The obvious and best way to provide for the species at least in the short to intermediate term is to protect the remaining existing habitat, which is the intent of the Center’s proposed conservation reserve system outlined in Section 2.

- Where it will achieve sage grouse habitat objectives, passive restoration approaches should be favored over active methods.
- Any vegetation treatment plan must include pretreatment data on wildlife and habitat condition, establish non-grazing exclosures, and include long-term monitoring of treated areas.
- Ensure that vegetation treatments create landscape patterns which most benefit sage-grouse. Only allow treatments that are demonstrated to benefit sage-grouse and retain sagebrush height and cover consistent with sage-grouse habitat objectives (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve sage-grouse habitat).
- Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.127
- Restrict activities in SGCAs that facilitate the spread of invasive species, including recreational and commercial use by off-road vehicles.

Prioritize restoration in seasonal habitats that are thought to be limiting sage-grouse distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

- Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.
- Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage-grouse habitat and conserve habitat quality for the species.
• Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.

• In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed “fire condition class”, where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types, but are places where trees have been an important stand component for several hundred years.128

• In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

• Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.

ii. Management outside SGCAs in sage grouse habitat

• Where it will achieve sage grouse habitat objectives, passive restoration approaches should be favored over active methods.

• Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.129

• Restrict activities in SGCAs that facilitate the spread of invasive species. Prioritize restoration in seasonal habitats that are thought to be limiting sage-grouse distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

• Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.

• Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage-grouse habitat and conserve habitat quality for the species.

• Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.

• In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed “fire condition class”, where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types, but are places where trees have been an important stand component for several hundred years.130

• In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

• Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.

Comment Number: NV-CAG-14-0052-1

Comment Excerpt Text:
The alternative that is to become the preferred alternative must include provisions for habitat restoration and methods to procure the funding to complete the projects. It is no longer sufficient to expend funds for wildfire suppression without funds for restoration. The document recognizes that without sufficient rehabilitation efforts, large burned areas are prone to even more cheatgrass invasion. It then becomes a never-ending circle with no success.
7.2 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCASG-14-0051-3
Comment Excerpt Text:
DR. PAUL TUELLER, professor of range ecology at UNR for 42 years: “The extreme fire years in the recent past must be due, in part, to the noted reduction in grazing the forage base, resulting in significant fuel buildup. The lower and sometimes upper reaches of the mountain ranges have turned yellow as a result of post-fire cheatgrass establishment…Development of intensive grazing strategies is needed to allow utilization of cheatgrass and reduce future fuel loads. Grazing animals will be the tools that must be used to make desirable changes in vegetation.”

Comment Number: NVCASG-14-0051-7
Comment Excerpt Text:
All of the alternatives in (Section 4.3.2 pg. 607) of the DEIS states that “fire is the primary threat to GRSG populations and habitat … in the western half etc. (per Baker2011)”, and later in that section states “fire is a primary threat to GRSG populations and habitat…etc. (USFWS 2010a)”. We agree with “the” or “a” primary threat, as stated above, correct? It is interesting to note that James A. Younger and Charles Clements, USDA ARS Range Scientists, are not cited in this section as relates to cheatgrass, as they are widely recognized by many as possibly the most knowledgeable and experienced authorities on this issue as relates to cheatgrass and other invasive species in Nevada and the Great Basin, and have recently published a book entitled Cheatgrass. We strongly recommend citing their work as part of this DEIS effort.

Comment Number: NVCASG-14-0091-11
Comment Excerpt Text:
Davies et al. (2009 and 2010) also found that long-term rest increases the likelihood of fire-induced 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.

Comment Number: NVCASG-14-0091-27
Comment Excerpt Text:
Objective FFM 7
Add training, equipping, and use of volunteer firefighters, including local ranches, under Alternative D as first responders, particularly in remote settings that are time sensitive to muster agency resources for suppression needs.

Comment Number: NVCASG-14-0171-39
Comment Excerpt Text:
Section 4.3.2

The County agrees that the primary threat to Sage Grouse habitat in much of the Great Basin is wildfire. It is a particular challenge as the replacement grass can increasingly become cheat grass or medusa head which then fuels the increased intensity of the next fire. Where is the research from the recognized experts in this area: James Younger or Charles Clements? Their cutting edge information regarding cheat grass is essential for this DEIS.

Comment Number: NVCASG-14-0171-40
Comment Excerpt Text:
We completely disagree that there are no answers that can alter the trend mentioned above. It is time to put the industry on the front line of fire prevention and cheat grass encroachment. If the BLM has given up as the statement on page 608 indicates and the prediction is that wild fire will reduce Sage Grouse habitat in the Great Basin by over half in the next 30 years, what is there to lose by ramping up the use of grazing. UNR Range specialists have documented improvements in vegetation and reduced fuel loads with late season grazing. We strongly encourage the BLM to cooperate with UNR and begin to demonstrate these positive effects throughout the DEIS planning area. At the very least, large scale demonstration programs should begin. It is essential that nothing in this document prevent this
sort of innovative management from being allowed where it is appropriate.

**Comment Number: NVCASG-14-0193-2**

**Comment Excerpt Text:**
Throughout the Executive Summary chapter (Chapter 1) of the DEIS, the data given the most credibility is Western Association of Fish and Wildlife Agencies (W AFW A) data developed by wildlife biologists. W AFW A biologists are not specifically trained in rangeland management nor the management of livestock on ranges. The expertise of Rangeland Specialists should be integrated into this data. One specific example of this is the citation of Manier et al. 2013 in Chapter 4.3.2, p. 606, a source that does not recognize the potential for wildfire to degrade habitat. This section also suggests that seeding native species is the means of successful restoration - which has not been the case where cheatgrass and medusahead are present and affectively outcompete natives. Introduced species capable of competing with the invasive weeds should be included in all seed mixes in order to insure establishment of at least some perennial plants that can compete with invasive species. Further citations in this section (p. 607) cite Connelly while others with expertise on rangelands that have published on sagebrush habitat and represent new science and approaches to sagebrush restoration such as (Davies et al.) are absent.

**Comment Number: NVCASG-14-0226-5**

**Comment Excerpt Text:**
The Executive Summary of the DEIS states that the USFWS has found that wildfire is a major threat to GSRG habitat (ES.3 Purpose and Need). Despite that finding, minimal consideration is given to scientific studies confirming that properly managed moderate livestock grazing has a measurable effect in reducing all factors in promoting rate and extent of fire spread. The DEIS should consider the following pertinent scientific studies:


Dalldorf, K. et al. (2013). Influence of Livestock Grazing Strategies on Riparian Response to Wildfire in Northern Nevada. Rangeland Ecology & Management 66(1):34-42. 2013 Quinn River Crossing Ranch has been directly affected by wildfire on multiple occasions, and our mountain pastures which contain the PPMA and PGMA habitat on the ranch were burned in the 2012 Holloway Fire. Suppression of wildfires by properly managed grazing would be mutually beneficial to GSRG, wildlife, and livestock grazing.

The Executive Summary also states that Invasive Species and the conversion of GRSG habitat to cheatgrass dominated plant communities is also a major threat to GRSG. Properly managed moderate livestock grazing has also been shown to be an effective tool in the suppression of cheatgrass. The DEIS should consider the following pertinent scientific studies:


Evers, L.B. et al. (2013.) Simulating Current Successional Trajectories in Sagebrush Ecosystems With Multiple Disturbances Using a State-and-

Comment Number: NVCASG-14-0234-1
Comment Excerpt Text:
Chapter 2, Section 2.8.2 Table 2.5: Action C-FFM-HFM 10, Page 173: It is not clear what will be used for baseline as to what good/better ecological condition will consist.

Comment Number: NVCASG-14-0285-78
Comment Excerpt Text:
Alternatives B, D, and E involve the widespread creation of fire breaks. These fire breaks would be allowed to reduce sagebrush canopy cover below 15% (DEIS at 653), thereby negatively impacting sage grouse use of these habitats. Creating firebreaks in sagebrush steppe is a practice unsupported by science. BLM states, “Establishing and maintaining fuel breaks identified under Alternative D would reduce fire threat and large-scale fires.” DEIS at 714. Please provide peer reviewed scientific literature that demonstrates that such fuel breaks in sagebrush steppe habitat have been demonstrated to reduce fire. Our review of the literature uncovered only unpublished white papers and “fact sheets” that cited no actual scientific studies to support the assertion that “green strips” slow or halt the spread of fire. If no such evidence can be provided, such “green strips” should be explicitly forbidden in the RMP amendment. It is obvious that “green strips” will only be green in the spring, when precipitation occurs and the risk of fire is negligible. During the dry periods when fire ignitions occur and spread most readily, “green strips” will be brown and represent a concentrated source of fine fuels that will do nothing to slow the advance of a flame front, and may indeed accelerate it. Anecdotally, according to Vollmer (2005), fuel breaks that are left untended can become hazards in their own right:

By the spring of 2003, annual weedy species (cheatgrass, mustards, filaree) dominated [the] fuel break resulting in shrub fuel being replaced by a highly flammable, continues [sic] fuel. Stands or mats of cheatgrass act as a hazardous fuel that can carry very hot fires, quickly. When cheatgrass dominates a fuel break, it acts as a wick, able to bring fire in to the subdivision or take fire from the subdivision to the wildland. In addition, fire fighter safety is jeopardized due to the fast fire spread and difficulty of getting in front of the fire because blowing embers quickly spread the fire to new areas.

Meanwhile, the negative impacts of “green strips” on sage grouse are proven, as they fragment habitat, create edge environments where increased predation rates occur, and result in direct loss of valuable sagebrush stands that are key to grouse survival in terms of providing food and cover. We are concerned that the widespread implementation of green strips across Priority Habitats will significantly fragment degrade sage grouse habitats, further exacerbating population declines, and in the process will have no net effect on fire frequency or extent.

Comment Number: NVCASG-14-0302-1
Comment Excerpt Text:
Planned grazing should be used following fire. Research shows it speeds recovery, controls invasive weeds, helps timber stands and improves wildlife habitat. Requiring two full growing seasons of rest was agreed upon by ranchers years ago but only when improved grasses were mechanically planted. Now grazing is needed to help distribute native grass seed.

Comment Number: NVCASG-14-0308-38
Comment Excerpt Text:
Action D-FFM 14: In PPMAs and PGMAs, use native plant seeds for post-fire restoration, based on availability, adaptation (site potential), and probability of success.

Where probability of success or native seed availability is low, nonnative seeds may be used as long as they meet GRSG habitat objectives (see Table 2-6). In all cases, seed must be certified weed-free.

Comment: All post-fire restoration seedings have limited success (Pyke et al., 201336). The LUPA/DEIS needs to provide guidance as to what is means by low
probability of success. The LUPA/DEIS does not explain why non-natives are even being considered if the objective is to restore sage-grouse habitat nor does it disclose what nonnatives the agencies are considering. Much greater sage-grouse habitat has already been degraded by wheatgrass plantings and plantings with other undesirable invasive species that are difficult if not impossible to eradicate. The DEIS fails to take any look at all at the history of agency seeding of non-native species and the predictable but unmitigated outcomes when those species become invasive or out of control. The use of nonnatives also appears to contravene the existing MOU with California Department of Fish and Wildlife.

Comment Number: NVCASG-14-0308-49
Comment Excerpt Text:
Connelly et al. (2000) documented a significant decline for a sage-grouse breeding population following a prescribed fire and Byrn (200273) reported that greater sage-grouse avoided burns that were less than 20 years old. Connelly et al. (2004) state (emphasis added):

Comment Number: NVCASG-14-0308-50
Comment Excerpt Text:
The fire return intervals cited in the affected environment section do not reflect recent science and are too short. For example, Bukowski and Baker (201381) estimated historical fire rotations were 171-342 years for Wyoming big sagebrush (Atriplex tridentata ssp. wyomingensis) and 137-217 years for mountain big sagebrush (A. tridentata ssp. vaseyana). The DEIS cites much shorter intervals - “10 to 110 years or more” for Wyoming big sagebrush. DEIS Chapter 3 at 41. Fire return intervals are important factors in habitat condition class modelling which is based on departure from historical frequencies. DEIS Chapter 3 at 70 Table 3.21. Fire Regime Condition Classes. Use of incorrect shorter fire return intervals in the Fire Regime Condition Class modeling process will result in perceived “ecological departures” that are simply modeling errors.

Comment Number: NVCASG-14-0328-5
Comment Excerpt Text:
In addition to the supplementary actions listed above under "Fire", Alternative D should:

1. Reference Chambers et al. (2013) and specifically incorporate the management strategies identified in Table 2 of that manuscript.

DR. PAUL TUELLER, professor of range ecology at UNR for 42 years: "The extreme fire years in the recent past must be due, in part, to the noted reduction in grazing the forage base, resulting in significant fuel buildup. The lower and sometimes upper reaches of the mountain ranges have turned yellow as a result of post-fire cheatgrass establishment...Development of intensive grazing strategies is needed to allow utilization of cheatgrass and reduce future fuel loads. Grazing animals will be the tools that must be used to make desirable changes in vegetation."

DR. LYNN JAMES, director of the USDA ARS plant research laboratory at Logan, Utah for 35 years: "Fires depend on adequate fuels-grasses and certain shrubs. The larger the fuel load, the hotter the fire will burn and the more damaging it will be...An economical and efficient way to remove excess grass is with an on-off grazing system. Fuel loads are reduced; while producers benefit from forage consumed by their livestock Other grazing strategies can aid in preventing or managing wildfires and controlled burns. Fires that do occur burn with reduced intensity and a general upward trend in rangeland condition is sustained"

DR. KEN SANDERS, professor of rangeland ecology at the University of Idaho for 32 years: "The third biggest threat is the reduction in grazing on public rangelands. If the proposed sage grouse habitat guideline that recommends leaving a grass stubble height of 18 centimeters is applied, it will not only result in an adverse economic impact on livestock
producers, but it will also result in increased, higher intensity wildfire due to a larger fuel load."

DR. WAYNE BURHILLARDT, UNR professor of range management, emeritus: "For the past 40 years, the management strategy, at least on public lands, has been to reduce or modern livestock grazing on these annual grasses, presumably to allow the re-establishment of native bunchgrasses. This has proven to be disastrous. Pre-adopted annual grasses [such as cheatgrass] can out-compete native bunchgrasses for early spring moisture on arid range sites. Reductions in grazing on these rangelands have not promoted the establishment of native flora, but rather have allowed flammable fuel buildup and increased fire frequency, intensity and spread. These unnatural fires remove the sagebrush overstory, prevent shrub re-establishment and create the conditions for the establishment of monotypic annual grasslands on what should be a shrub/grassland vegetation community."

All of the alternatives in (Section 4.3.2 pg. 607) of the DEIS states that "fire is the primary threat to GRSG populations and habitat ... in the western half etc. (per Baker 2011)", and later in that section states "fire is a primary threat to GRSG populations and habitat...etc. (USFWS 2010a)". We agree with "the" or "a" primary threat, as stated above, correct? It is interesting to note that James A. Young and Charles Clements, USDA ARS Range Scientists, are not cited in this section as relates to cheatgrass, as they are widely recognized by many as possibly the most knowledgeable and experienced authorities on this issue as relates to cheatgrass and other invasive species in Nevada and the Great Basin, and have recently published a book entitled Cheatgrass. We strongly recommend citing their work as part of this DEIS effort.

Given the findings of Hubert, Pyke, Mack, Pellant and others regarding fires and their impacts, it seems only prudent and advisable to strongly support grazing as a means of reducing this threat and helping to protect sage grouse habitat and biodiversity. The choices as outlined appears to be to allow cheatgrass, wildfires, and draconian and unnecessary grazing restrictions to dominate the public lands going forward, or to enlist a strong commitment to AMP development to help to maintain and/or improve the sagebrush ecosystem and critical sage grouse habitat without impacting or eliminating grazing as a tool. Industry can commit to work with this kind of approach in so far as it does not threaten the economic viability of ranching or the local economy

7.3 IMPACT ANALYSIS

Comment Number: NVcASG-14-0003-19
Comment Excerpt Text:
BLM claims that between the years 1992 and 2011 human-caused-fires resulted in the loss of 305,076 acres (Ch.4 at 109); however BLM fails to put this number into context of total acres burned within the same timeframe. However, this claim is inconsistent with the acreage BLM reports in Chapter 3, which indicates that just 198,691 acres burned as a result of human caused ignitions between the years 1992-2011, and resulted in just 0.09% of all acres burned (See Ch.3 at 75). BLM must resolve this discrepancy.

Comment Number: NVcASG-14-0051-3
Comment Excerpt Text:
DR. PAUL TUELLER, professor of range ecology at UNR for 42 years: "The extreme fire years in the recent past must be due, in part, to the noted reduction in grazing the forage base, resulting in significant fuel buildup. The lower and sometimes upper reaches of the mountain ranges have turned yellow as a result of post-fire cheatgrass establishment...Development of intensive grazing strategies is needed to allow utilization of cheatgrass and reduce future fuel loads. Grazing animals will be the tools that must be used to make desirable changes in vegetation."

Comment Number: NVcASG-14-0051-4
Comment Excerpt Text:
DR. LYNN JAMES, director of the USDA ARS plant research laboratory at Logan, Utah for 35 years: "Fires depend on adequate fuels-grasses and certain shrubs. The larger the fuel load, the hotter the fire
will burn and the more damaging it will be...An economical and efficient way to remove excess grass is with an on-off grazing system. Fuel loads are reduced, while producers benefit from forage consumed by their livestock. Other grazing strategies can aid in preventing or managing wildfires and controlled burns. Fires that do occur burn with reduced intensity and a general upward trend in rangeland condition is sustained.”

**Comment Number: NVCASG-14-0051-5**

Comment Excerpt Text:

DR. KEN SANDERS, professor of rangeland ecology at the University of Idaho for 32 years: “The third biggest threat is the reduction in grazing on public rangelands. If the proposed sage grouse habitat guideline that recommends leaving a grass stubble height of 18 centimeters is applied, it will not only result in an adverse economic impact on livestock producers, but it will also result in increased, higher intensity wildfire due to a larger fuel load.”

**Comment Number: NVCASG-14-0051-6**

Comment Excerpt Text:

DR. WAYNE BURHHARDT, UNR professor of range management, emeritus: “For the past 40 years, the management strategy, at least on public lands, has been to reduce or modify livestock grazing on these annual grasses, presumably to allow the reestablishment of native bunchgrasses. This has proven to be disastrous. Pre-adopted annual grasses [such as cheatgrass] can out-compete native bunchgrasses for early spring moisture on arid range sites. Reductions in grazing on these rangelands have not promoted the establishment of native flora, but rather have allowed flammable fuel buildup and increased fire frequency, intensity and spread. These unnatural fires remove the sagebrush overstory, prevent shrub re-establishment and create the conditions for the establishment of monotypic annual grasslands on what should be a shrub/grassland vegetation community.”

**Comment Number: NVCASG-14-0083-32**

Comment Excerpt Text:

Text Referencing: Table 2.5; Action F-FFM-HFM 25

Comment: This action proposes constructing livestock enclosures (i.e. fencing) around 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. This is impractical for actual implementation.

**Comment Number: NVCASG-14-0083-42**

Comment Excerpt Text:

Text Referencing: Greater Sage-Grouse and Greater Sage-Grouse Habitat Alternative C - Impacts from Livestock Grazing Management Under Alternative C, livestock use would be closed on about 17,589,700 acres of PPMA (portions of PPMA are unallotted). About 94 percent of the modeled GRSG population in the sub-region would be affected, and anywhere from 88 to 100 percent of each sub-population.

Comment: Removal of livestock grazing would not fulfill the Multiple Use mandate of FLPMA 1976. Removal of livestock grazing would expand fire fuels and promote larger and more costly wildland fires. This proposal is excessive and will serve to devastate local and regional economies. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) This proposal would have negative nationwide repercussion concerning the consumer cost of beef and beef products.
Comment Number: NVCASG-14-0083-53
Comment Excerpt Text:
Ch: 4, Sec: 4.8.5, Pg. No.: 119

Text Referencing: Wildland Fire and Fire Management Alternative B - Impacts from Livestock Grazing Management, Under Alternative B, the BLM would open the same acres (49,155,000 in the planning area) to grazing as Alternative A; however, Alternative B would limit grazing in PPMAs unless the treatment conserves, enhances, or restores GRSG habitat.

Comment: The BLM / USFS has failed to identify that grazing in PPMAs is detrimental to GRSG populations and habitat. Available data and science proves that proper Livestock grazing is beneficial to GRSG habitat by helping to eliminate fine fuels that have cause recent wildland fires that have diminished the sage steppe habitat. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0083-54
Comment Excerpt Text:
Ch: 4, Sec: 4.8.6, Pg. No.: 120

Text Referencing: Wildland Fire and Fire Management Alternative C - Impacts from Greater Sage-Grouse Management. Protect remaining occupied GRSG habitats from chronic grazing disturbance and new development. Management under Alternative C would have broader restrictions on resource use and highest level of protection for all occupied GRSG habitat than Alternative A.

Comment: Alternative proposes to remove all grazing within GRSG habitat areas. The county would suggest that the term “chronic grazing” be changed to reflect the true intent of Alternative C. Available data and science proves that proper Livestock grazing is beneficial to GRSG habitat by helping to eliminate fine fuels that have cause recent wildland fires that have diminished the sage steppe habitat. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0083-55
Comment Excerpt Text:
Ch: 4, Sec: 4.8.7, Pg. No.: 124

Text Referencing: Wildland Fire and Fire Management Alternative D - Impacts from Locatable and Salable Minerals Management. The BLM and Forest Service would place more limitations on mineral development in this alternative, which would indirectly decrease the risk of fire due to locatable and salable mineral development, vehicle traffic, and construction equipment.

Comment: How will more limitation placed on mineral development indirectly decrease risk of fire. This is an assumptive unsubstantiated statement and should not be include in the FEIS / LUPA document. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)

Comment Number: NVCASG-14-0083-57
Comment Excerpt Text:
Ch: 4, Sec: 4.8.7, Pg. No.: 125

Text Referencing: Wildland Fire and Fire Management Alternative D - Impacts from Comprehensive Travel and Transportation Management. Under Alternative D, potential for human caused ignition and an increase in invasive annual grasses would be reduced. This is because there are no areas open to cross-country use. This is a reduction of 12,745,100 acres open to cross-country traffic compared with Alternative A.

Comment: Elko County does not believe that elimination of cross country travel will show significant changes in human caused ignition or a reduction of invasive grasses. The County asks for clarification and quantification of this statement. This appears to be a method of Travel Management and should be considered during the LUPA process and not included in the FEIS /LUPA.
**Comment Number: NVCASG-14-0083-58**

**Comment Excerpt Text:**
Ch: 4, Sec: 4.8.8, Pg. No.: 126

Text Referencing: Wildland Fire and Fire Management Alternative E - Impacts from Livestock Grazing Management subsection. Impacts from Alternative E would be less than that of Alternative A because not more than five percent of the occupied and suitable and 20 percent in potential habitat would undergo habitat disturbance. This in turn will cause a shift in Condition Class to a more historical regime.

Comment: The County disagrees that Alternate E would be the same as Alternate 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.

**Comment Number: NVCASG-14-0083-59**

**Comment Excerpt Text:**
Ch: 4, Sec: 4.8.9, Pg. No.: 

Text Referencing: Wildland Fire and Fire Management Alternative F - Impacts from Greater Sage-Grouse Management. Under Alternative F, sagebrush cover will be maintained or increased to cover at least 70 percent of the land.

Comment: What is meant by sagebrush cover will be maintained to cover at least a 70% of the land? What is the current percentage of cover? Elko County request clarification of this statement and assessment. Elko County agrees that this would cause a substantial increase in fire severity and size.

**Comment Number: NVCASG-14-0091-73**

**Comment Excerpt Text:**
Page 704, 4.8.3

This section does not acknowledge the potential for mine and ranch operations and facilities to assist with active suppression of wildland fires (equipment readiness, contribution, and proximity) or passive suppression by creating fire breaks with roads and/or mining facilities. Many mines and ranches have large equipment readily available that could be useful for active suppression.

**Comment Number: NVCASG-14-0091-86**

**Comment Excerpt Text:**
Page 851, 4.20

Please detail why "development of mineral resources" is singled out as introducing additional ignition sources into the planning area. Please review comments above and provide citations/information detailing how this represents factual information.

**Comment Number: NVCASG-14-0201-11**

**Comment Excerpt Text:**
3.6. Wildfire Impacts:

We agree that wildfires have consumed vast acreages of rangelands in the last decade and a half. Much of this acreage was converted to cheatgrass as a result of the high intensity and severity of these fires. However, there have also been fires that have resulted in release of native grasses and forbs. These areas burned more erratically, leaving islands of sagebrush to serve as seed sources for reestablishment of sagebrush. These fires also moved quickly due to high wind conditions at the time of the burn and heat at the ground level was not so excessive as to cause mortality of existing perennial grasses and the seed bank of these species. In these instances, the size of the fire was more of an impact on sage-grouse than the actual aftermath of the fire.

The Draft LUPA/DEIS focuses many pages of text, tables, and figures on fire, but totally misses the point. The Draft LUPA/DEIS calls for protecting large intact areas of sagebrush, and these are exactly the areas that are prone to large, intense, and severe fires. The conservation measures included in the Draft LUPA/DEIS do adequately address fuel loading conditions on public lands. Preventing the spread of the wildfire once it is starts and maintaining wildfires to less than about 600 acres is critical in the establishment of natural fuel breaks (as opposed to fire breaks, green strips, and other artificial breaks).
Substantive Comments on the Nevada and Northeastern California Greater Sage-Grouse Draft LUPA/EIS

Comment Number: NVCASG-14-0308-39  
Comment Excerpt Text:  
Livestock are well-known vectors for invasive, non-native, or noxious species colonization on public lands. There is clear evidence that livestock grazing promotes invasive weed infestations through a variety of mechanisms (Belsky and Gelbard, 2000). Livestock grazing has been found to be a factor in the proliferation of non-native plants by livestock transporting seeds on their coats, feet, and in their guts into uninfested sites (Belsky and Gelbard 2000; Jones, 2001), and livestock are much effective transporters of invasive weed seeds than native ungulates (Bartuszevige and Endress, 2008). Livestock preferentially graze native plant taxa over non-native taxa (Fleischner, 1994; Belsky and Gelbard, 2000; Jones, 2001), livestock preferentially graze perennial plants over annuals (Van Dyne and Heady, 1965), livestock can change competitive relationships in ways that favor non-native taxa (Belsky and Gelbard, 2000; Jones, 2001), livestock create patches of bare, disturbed soils that act as non-native-plant seedbeds (Belsky and Gelbard, 2000; Jones, 2001), livestock destroy biological soil crusts that stabilize soils and inhibit non-native seed germination (Belsky and Gelbard, 2000; Belnap et al., 2001), livestock create patches of nitrogen-rich soils, which favor nitrogen-loving non-native species (Belsky and Gelbard, 2000), livestock reduce concentrations of soil mycorrhizae required by most western native taxa (Belsky and Gelbard, 2000), and livestock accelerate soil erosion that buries non-native seeds and facilitates their germination (Belsky and Gelbard, 2000). Livestock promote the spread and colonization of alien plants, which can increase fire frequencies.

7.4 Mitigation Measures

Comment Number: NVCASG-14-0382-1  
Comment Excerpt Text:  
Strategically locate several Single Engine Air Tanker (SEATs) crews near critical sage-grouse (PPMA) areas so they are ready to attack any reported ignitions as promptly as possible. Even paying for standby if no rangeland/wildfires are ignited is more cost effective than if one fire spreads to become large, destructive, and multi-million dollar expense to suppress.

Comment Number: NVCASG-14-0385-2  
Comment Excerpt Text:  
NREA utility members request the flexibility to reduce potential ignition sources within authorized ROW and application of the Rangeland Fire Protection Association model to be applied to all LUPA/DEIS alternatives.

8. Fish and Wildlife

Comment Number: NVCASG-14-0199-7  
Comment Excerpt Text:  
A plan that solely focuses on GRSG may prove ineffective at managing the sagebrush ecosystem as whole. Single species management is inappropriate for a DEIS that covers millions of acres. GRSG have been identified as an umbrella species; thus, what is good for GRSG must be good for the multitude of species (and the ecological systems and processes) that depend on or serve sagebrush communities, right? What if this assumption is incorrect, or just slightly incorrect? Is the BLM/FS confident enough in the aforementioned assumption to base 100 percent of its management goals, objectives, and actions on the perceived needs of a single species? Please consider addressing this assumption as a risk in the DEIS. This will inform and provide full disclosure to the public and the USFWS. The DEIS may not adequately consider and disclose the potential negative impacts GRSG Management could have on other species (i.e. the risk to other species from single-species management focus).

9. Other Special Status Species

Comment Number: NVCASG-14-0015-18  
Comment Excerpt Text:  
Likewise, Appendix J, the biological evaluation, does not evaluate any management indicator species in detail that do not have habitat in PPH or PGH. This ignores the likelihood that, as public-land uses are moved out of sage-grouse habitat onto adjacent lands,
those uses will put greater pressure on other types of habitats, many of which are occupied by special-status species. The Final LUPA/EIS should acknowledge that the intensive focus on sage-grouse conservation may have detrimental impacts to other species.

Comment Number: NVCASG-14-0199-25
Comment Excerpt Text:
Appendix J, the biological evaluation, does not evaluate any management indicator species in detail that do not have habitat in PPH or PGH. This ignores the likelihood that, as public-land uses are moved out of sage-grouse habitat onto adjacent lands, those uses will put greater pressure on other types of habitats, many of which are occupied by special-status species. The Final LUPA/EIS should acknowledge that the intensive focus on sage-grouse conservation may have detrimental impacts to other species.

Comment Number: NVCASG-14-0311-21
Comment Excerpt Text:
Consideration of federal, state, and local plans is required by 40 C.F.R. § 1502.16(c). While some statement is made to the effect that these plans are considered (Section ES.7 and 1.7), there is no discussion of how the proposed alternatives may conflict with BLM Manual 6840 Special Status Species Management. Nor, as noted above, is there any clear discussion of the conflict with most of the action alternatives and the Secretary’s designation of these BLM lands as chiefly valuable for grazing.

Comment Number: NVCASG-14-0224-18
Comment Excerpt Text:
Page 101- Action D-SSS-DIS 1: When developing or modifying water developments on public lands in PPMAs and PGMAs; use RDFs to mitigate potential impacts from West Nile virus.

COMMENT: According to data from the Centers for Disease Control (CDC) the risk to avian species from West Nile virus (WNV) has declined to virtually nothing since 2003. This is an example of where only a portion of the available information is presented to justify onerous and unfounded mitigation requirements. Rather than focusing on the minimal threat of WNV, BLM/FS must more appropriately focus their attention on widespread predation of GRSG.

In an effort to avoid Cx. Tarsalis breeding, the requirements recommended by the NTT report could actually increase larval habitat for Culicoides sonorensis, a vector of blue tongue disease. The proposal to trade one viral vector habitat for another can hardly be construed as beneficial to GRSG populations within the planning area. Without question, the mortality impact of Culicoides sonorensis on wild ruminants’ populations would be far more devastating than WNV in Nevada’s semi-arid region. In fact, not only are food sources such as white-tail and mule deer populations currently under attack in Montana by epizootic hemorrhagic disease virus (EHDV), cattle infections have also been reported resulting in economic loss due to EHDV elsewhere (Ruder, M.G., Parasites and Vectors 201, 5:236). Therefore, these management approaches on produced waters clearly are not in the best interests of the Nevada mammalian food sources or mammalian related economics.

9.1 Impact Analysis

Comment Number: NVCASG-14-0205-16
Comment Excerpt Text:
The concept of no unmitigated loss includes destruction of pinyon-juniper habitat in favor of sagebrush habitat. The agencies are taking a single species approach that can harm ferruginous hawks (BLM sensitive species), pinyon jay, dusky and sooty grouse, several bat species, and other species that depend on pinyon-juniper forest habitat.

The EIS does not adequately address the trade-offs of their single-species management plan. What will happen in 10 or 20 years to the pinyon-juniper dependent species? Will they become threatened or endangered? The single species approach violates BLM Manual 6840 and FSM 2670 by jeopardizing special status and sensitive species.
Comment Number: NVCASG-14-0205-35
Comment Excerpt Text:
The assumptions used in the Special Status Species analysis are flawed, partly due to the way in which the NTT Report mischaracterizes other studies in order to support arbitrary habitat and disturbance thresholds. The analysis also contains broad generalization that the level of disturbance directly correlates to the level of adverse impact to species generally, but does not provide data to support that assertion. Based on the above mentioned flaws, the EIS precludes meaningful analysis” (40 CFR §1502.9(a)); and therefore the BLM and USFS must prepare and re-issue a revised draft which provides the analysis necessary.

Comment Number: NVCASG-14-0199-44
Comment Excerpt Text:
Table 2.4 (Page 61) - Goal-D-SSS-AM 1:
Please provide quantitative definitions for "large scale disturbance" and "adjoining PGMA." It is impossible to accurately analyze impacts and provide useful comments when a potentially significant measure such as this goes undefined.

10. LANDS AND REALTY

10.1 RANGE OF ALTERNATIVES

Comment Number: NVCASG-14-0050-11
Comment Excerpt Text:
We recommend the following strengthened management approaches to minimize further degradation of sage grouse habitats from energy-related development. Management Prescriptions:

i. Management Inside SGCAs in sage grouse habitat
   • Exclude these areas from new energy leasing and rights-of-way.
   • Whenever possible, bury existing transmission lines within 10 km from active leks.
   • Institute seasonal restrictions on surface occupancy within 10 km from leks during courtship and early brood-rearing periods.
   • No new road construction within 7.6 km of active leks.
   • If existing disturbed area in the SGRA exceeds 3% of the surface area, institute measures to provide additional mitigation to offset the impacts on the grouse.
   • Institute seasonal restrictions on surface occupancy within 5 km from leks during courtship and early brood-rearing periods.

Comment Number: NVCASG-14-0084-2
Comment Excerpt Text:
It is unclear why BLM would propose excluding all wind and solar development. The ECACD is concerned that this would include eliminating the installation of solar/wind energy systems to power pumps located at watering facilities. This alternative needs clarification as to what exactly is considered an "energy development" site.

Comment Number: NVCASG-14-0125-11
Comment Excerpt Text:
Action D-LR-LUA 15 requires the elimination of existing raven nesting opportunities by removing infrastructure "no longer in service." Again, no indication or explanation is provided regarding "no longer in service."

Comment Number: NVCASG-14-0132-42
Comment Excerpt Text:
Relative to D-LR LT-1, there exists no science-based information in the DEIS that demonstrates the Federal government is any better at managing sage-grouse habitat than are State and Private entities. Acquisition of private and state lands is not a rational action. This is especially true since the DEIS calls for cooperation across agency, governmental, and private ownerships.
Comment Number: NVCASG-14-0166-3
Comment Excerpt Text:
Underground power lines require a continuous excavation through all habitat types. In sagebrush habitat, this would result in ground disturbance for the entire line route. This is in contrast to overhead lines, which result in a disturbance only at the structure locations. Underground lines would also require excavation for repairs or maintenance, which would result in ground disturbance occurring temporally over the life of the line, not just during initial construction.

Comment Number: NVCASG-14-0188-2
Comment Excerpt Text:
The designation of PPMAs and PGMAs that include the "checkerboard" land adjacent to the railroad is questionable. The railroad corridor also includes the Interstate-80 corridor as well as areas of private lands with ranchettes, rural communities, and some industrial development. These lands are already fragmented by land status, and imposing restrictions to a PPMA or PGMA with this land status configuration would be difficult at best. The designations as PPMA and PGMA should be modified, especially with respect to the statement in the Draft LUPA/DEIS that "Lands addressed in the LUPAs will be BLM- and Forest Service-administered land in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs will apply only to BLM- and Forest Service-administered lands. “The designation of private lands in the PPMAs and PGMAs implies that private lands are subject to the selected alternative of the LUPA/EIS. Provisions should be included to protect private land rights.

Comment Number: NVCASG-14-0192-2
Comment Excerpt Text:
NDOT has extensive Intelligent Transportation System (ITS) and communications system throughout the state, both inside and outside of the right-of-way. We place traffic and ITS devices (signals, luminaires, traffic sensors, dynamic message signs CCTV cameras, static signs etc.) as well as communication infrastructure for various systems (80 MHz, microwave, fiber optic, etc.) These devices and systems provide critical information to the driving public; in addition the radio other communication systems provide life-safety services to emergency responders, including NHP, statewide. Would existing facilities be expected to be modified by proposed actions if located near priority/general habitat? Would new facilitates of these type be prohibited?

Many of our mountain top communication sites are not within the right-of-way and could be affected by these changes. Our existing radio system is at its end of life and will be replaced within 5-10 years, and we will need to modify and upgrade most of the sites, and possibly install new sites to insure adequate coverage for the new system. How will these be accommodated?

Comment Number: NVCASG-14-0192-5
Comment Excerpt Text:
2.5, p. 48 (p. 16), last bulleted item on page.

NDOT asks that existing NDOT material sources be added to the state and federal road easements exemption language, This will encourage NDOT to maximize each site's use thereby reducing the need to procure additional sources.

Comment Number: NVCASG-14-0202-12
Comment Excerpt Text:
Alternative D (Chapter 2, page 226) states, “In PPMAs and PGMAs co-locate new utility (power, telephone, etc.) lines with other existing linear surface ROWs, such as roads and pipelines.” Power lines are often purposefully not co-located with other power lines to reduce redundancy within an electrical system and protect against outages cause by isolated events (such as wildfire or ice storms). NREA utility members recommend changing the wording of this statement in Chapter 2, page 226, to include "where appropriate."

Comment Number: NVCASG-14-0202-7
Comment Excerpt Text:
[Alternative B] Due to required separation distances between energized power lines, it would not be
possible to construct a new transmission or distribution power line entirely within the footprint of a previously authorized ROW. This would effectively make all PPMAs exclusion areas for new transmission and distribution lines.

**Comment Number: NVCASG-14-0202-8**

Comment Excerpt Text:
9. Alternative B (Chapter 2, page 222) calls for management agencies to "evaluate and take advantage of opportunities to remove, bury, or modify existing power lines within PPMAs." The entity required to fund the removal, burial, or modification of power lines is not described in the LUPA/DEIS. Burial of power lines is typically very expensive and would not likely be supported by the owner of that line. Burial of transmission lines of higher voltage over large distances, as typical throughout the NREA utility members' service territory, is not technically feasible in some instances, such as rugged terrain. Additionally, burial of transmission and distribution lines is often cost prohibitive. Additional detail is needed regarding this statement under Alternative B.

**Comment Number: NVCASG-14-0208-2**

Comment Excerpt Text:
Alternatives B and D note the consideration to bury power lines. This is an expensive process and the costs would have an impact on the rate payers served by such power lines. Also, ground disturbance from burying a line is typically greater than the impact from overhead line construction.

**Comment Number: NVCASG-14-0259-12**

Comment Excerpt Text:
(Chapter 2, page 16). Additionally, SNW A proposes that the BLM and USFS extend the exemption to include utility corridors. As argued for other resources in the Draft LUPA/EIS, there may be a short-term loss, but the long-term gains would be far greater. As seen in Section 503 of FLPMA, the purpose of utility corridors is “... to minimize adverse environmental impacts and the proliferation of separate rights-of-way ...” and to promote “... the utilization of rights-of-way in common ...”. Further, BLM encourages "prospective applicants to locate their proposals within corridors" (BLM Ely District RMP 2008, USFS 2012).

**Comment Number: NVCASG-14-0285-59**

Comment Excerpt Text:
The Nevada – Northeastern California planning area is targeted for several new major transmission lines. Nonne et al. (2011) found that raven abundance increased along the Falcon- Gondor powerline corridor in Nevada both during the construction period, and long-term after powerline construction activities had ceased. Braun et al. (2002) reported that 40 leks with a power line within 0.25 mile of the lek site had significantly slower population growth rates than unaffected leks, which was attributed to increased raptor predation. Simply requiring perch inhibitors to be installed on powerlines is not an adequate regulatory mechanism; such perch deterrents reduce, but do not eliminate, raptor perching (Slater and Smith 2010). Notably, it was golden eagles and ravens, two of the most important sage grouse predators and nest predators, respectively, that most effectively circumvented powerline perch inhibitors in this study. Priority Habitats need to be designated based on the habitats that sage grouse populations need to survive, not on the routing preferences of transmission line operators, and these Priority Habitats must include sufficient protections to keep such transmission lines at least 0.25 miles away from occupied sage grouse habitats.

**Comment Number: NVCASG-14-0285-86**

Comment Excerpt Text:
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet
developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns 68 within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).
Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment). 69

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12% cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment). Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment). 70

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner
which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12”, except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

Comment Number: NVCASG-14-0297-9
Comment Excerpt Text:
Burying transmission lines, while eliminating perching opportunities for avian predators, may well be more detrimental in regards to volume of surface disturbance occurring in such proximity to leks. We request additional analyses compare the impacts to sage-grouse from burying versus vertical structures. We remain concerned at the amount of habitat lost or fragmented, resulting in direct and indirect impacts, resulting from a uniform stipulation of burying transmission lines within 1 mile of leks.

Comment Number: NVCASG-14-0328-4
Comment Excerpt Text:
It is our understanding the conversion of lands to agriculture is not allowed on BLM and USFS lands within the Plan Area. The Final LUPA/EIS should clarify this point and cite the policies or regulatory mechanisms that prevent such conversions.

Comment Number: NVCASG-14-0385-3
Comment Excerpt Text:
NREA utility members request that a clause be placed into all alternatives that would allow closed roads to be accessed in an emergency situation, such as a transmission or distribution line failure, or a wildfire threatening a power line.

10.2 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCASG-14-0050-10
Comment Excerpt Text:
The infrastructure associated with energy development within sagebrush ecosystems threatens the contiguous habitats remaining in the western United States. The linear right-of-ways associated with wind and other energy developments likely provide anthropogenic nesting subsidies and fragmented landscapes, both of which increase nesting opportunities for ravens. Preventing fragmentation by transmission lines, roads, and other human interventions is integral to stemming the increase and range expansion of raven populations.111 [Howe. Et al. 2014]

Comment Number: NVCASG-14-0050-17
Comment Excerpt Text:
Energy development can cause radical changes to sagebrush ecosystems. Analysis of oil and gas developments found cases where such lands contained twice as many roads and power lines and the density of development far exceeded the grouse’s threshold of tolerance. 138

Energy development and its related infrastructure impacts grouse in many ways, both direct and indirect, cumulatively and synergistically.
Males and females may abandon leks if repeatedly disturbed by raptors perching on power lines near leks, by vehicle traffic on nearby roads, or by noise and human activity associated with energy development. Collisions with power lines and vehicles and increased predation by raptors may increase mortality of birds at leks. Roads and power lines may also indirectly affect lek persistence by altering productivity of local populations or survival at other times of the year. Sage-grouse mortality associated with roads and power lines occurs year-round, and artificial ponds created by development that support breeding mosquitoes known to vector West Nile virus elevate risk of mortality from disease in late summer. Sage-grouse may also avoid otherwise suitable habitat as development. Impacts from well sites to leks were still evident out to 6.4 km from the well.139

136 Connelly et al. 2011a
137 Naugle et al. 2011.
138 Ibid.
139 Ibid.

Comment Number: NVCASG-14-0083-72
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.: 248

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts, Impacts from Management Actions Affecting Land and Realty and Travel Management - Management actions that affect development of infrastructure could have important hindering effects on the growth of economic activity in the area. Limitations on new ROWs for power lines, pipelines, and access routes or restrictions to route construction and to travel on existing roads could increase the cost of new economic investments or make them no longer economically viable.

Comment: Elko County has provided several documents concerning the economic components to the regional economy for the BLM / USFS consideration in the development of the DEIS / LUPA. A study prepared by Dr. George Leaming in 2011 entitled “The Impact of Federal Land Policies on the Economy of Elko County, Nevada. This study directly relates to lands and realty actions of the federally managed public lands. Elko County asks that the BLM / USFS revisit the study prior to the development of the FEIS / LUPA.

Comment Number: NVCASG-14-0166-1
Comment Excerpt Text:
NV Energy funded a ten year study which researched the effects of a 345-kV transmission line (Falcon to Gonder) on sage-grouse in central Nevada. The study (Nonne et al. 2013) revealed no negative effects on sage-grouse populations. Effects that were noted during the study were attributed to wildfires (habitat degradation) and climatic fluctuations (droughts).

In addition to Nonne et al. (2013), another recent study, (LeBeau 2012) used radio-telemetry to assess impacts of energy infrastructure on sage-grouse. LeBeau (2012) investigated the impacts of wind facilities and an associated transmission line in Wyoming. The LeBeau study indicated that habitat quality is a significant influencer of sage-grouse occupancy, regardless of the presence of a transmission line.

Comment Number: NVCASG-14-0166-4
Comment Excerpt Text:
MidAmerican’s experience is that there will be 5 acres of excavated disturbance associated with underground to every one acre of excavated disturbance associated with overhead. Likewise, a University of California study (Bumby et al. 2009) found that underground power lines have more environmental impacts than overhead power lines for all categories and most scenarios in southern California. For more detailed discussion of environmental and engineering constraints associated with underground power lines, see Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC 2012), pages 62-63
Comment Number: NVCASG-14-0202-18
Comment Excerpt Text:
PERCH DISCOURAGER SPECIFIC COMMENT

31. Several Alternatives described in the LUPA/DEIS call for the implementation of perch discouragers on power line support structures. However, there are conflicting stipulations regarding the location of their placement on the landscape. Chapter 2 simply calls for resource agencies to work with utilities to apply perch discouragers but does not specify where, while Appendix A calls for their application within three miles of active leks.

Numerous researchers have documented golden eagle predation on Sage Grouse (Ellis 1985; Schroeder et al. 1999). Ellis (1985) observed lekking greater Sage Grouse flushing and ceasing lek activities in the presence of a golden eagle perched two kilometers (one mile) away. Ellis (1985) also found that golden eagle predation on greater Sage Grouse on leks increased from 26 to 73 percent of the total predation after completion of a transmission line within 200 meters (656.7 feet).

The use of power line support structures as perches and nesting substrate for greater Sage Grouse predators is well documented. Steenhof et al. (1993) noted that within one year of construction of a 373 mile transmission line in southern Idaho and Oregon, raptors and ravens began nesting on support structures. Within ten years of construction, 133 pairs of raptors and ravens were nesting along the line. The increased abundance of perches and nesting substrate can potentially have negative impacts on local greater Sage Grouse populations. Greater Sage Grouse nest success has been shown to be inversely related to the density of common ravens, which may increase in the presence of a transmission line (Schroeder et al. 1999). However, an increase in common raven density does not necessarily result in a decrease in greater Sage Grouse populations. Blomberg and Sedinger (2008) noted in the Falcon - Gondor transmission line study eight year review that common ravens observed at Sage Grouse leks near a new transmission line in Nevada increased from 14 to 75 during the first four years post construction. Despite the increase in common raven occurrences at leks, lek attendance by greater Sage Grouse did not decrease.

Despite the potential for predators utilizing the support structures for the Falcon-Gondor transmission line as predatory perches (as noted by Blomberg and Sedinger (2008) above). the final results of the ten-year study indicate that greater Sage Grouse did not react negatively to the presence of the transmission line (Nonne et al. 2013). After the ten year results were calculated, the distance to the transmission line was not a significant negative influence on nest survival, pre-fledgling survival or female survival. Nest, pre-fledgling, and female survival would be expected to be negatively influenced if the transmission line caused an unfavorable advantage for predators. Male lek attendance and male movement between leks was also not negatively influenced by the presence of the transmission line.

Comment Number: NVCASG-14-0202-20
Comment Excerpt Text:
After completion of the Falcon - Gondor transmission line, NV Energy, the BLM, and the University of Nevada - Reno completed a 10-year post construction survey of the line's impacts on local greater Sage Grouse populations. Final results of the ten-year study indicate that greater Sage Grouse did not react negatively to the presence of the transmission line (Nonne et al. 2013). After the ten year results were calculated, the distance to the transmission line was not a significant negative influence on nest survival, pre-fledgling survival, or female survival. Nest, pre-fledgling, and female survival would be expected to be negatively influenced if the transmission line caused an unfavorable advantage for predators. Male lek attendance and male movement between leks was also not negatively influenced by the presence of the transmission line.
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?

Locating solar facilities in non-habitat “wherever possible” (see DEIS at Figure 2-35) or considering sage grouse habitats as “avoidance” areas for solar development (DEIS at 619) are dodges that create uncertainty. BLM admits that ROW applications can be filed (and presumably approved) in avoidance areas. DEIS at 767. It is always possible to locate facilities in non-habitat, and therefore, to gain regulatory certainty, BLM must require that solar facilities be sited in non-habitat, period. We are concerned that the DEIS does not evaluate either the potential for solar development in terms of baseline information, nor the potential impact of commercial solar development on sage grouse habitats and populations. See, e.g., DEIS at 618. Sage grouse Priority and General Habitats should be exclusion areas without exception for solar energy development under the plan amendment as under Alternatives C, D, and F.

The 4-mile No Surface Occupancy proposed in the NIT Report is arbitrary and is not based on sound science. Additional sound science needs to be presented in the EIS before any no-surface occupancy radius is mandated. These restriction distances and radius need to take into consideration other site-specific factors such as line of site between the lek and project and if a project is even visible from the lek, topographical relief, quality of site-specific habitat, current Sage-Grouse activity and probability of sage-grouse nesting within the entire radius area, duration of the project and project intensity

Furthermore, a new Avian Power Line Interaction Committee guideline manual was released in 2012 and should be referenced.

The Renewable Energy Map Figure 3-13 fails to show all the Ely BLM and other areas where wind ROWs have been issued. These at the time of the Spring Valley wind project included large areas of South Snake and northern Hamlin and extending in Utah in this region. Also the Cherry Creek range north of Ely (also site of massive fire, Tebuthiuron and other treatments by BLM, many of which have resulted in cheatgrass to the degree that BLM now is herbiciding them). These and other areas must be examined for all potential direct, indirect and cumulative effects of wind development unless BLM zones them off-limits to industrial wind ROWs in this DEIS. What areas have potential or foreseeable industrial wind development? What PMUs and populations would be impacted? Will a larger perforation open up in the range on the Utah border if wind ROWs result in development?

10.3 IMPACT ANALYSIS

Text Referencing: Lands and realty actions may indirectly result in increased fire risk potential. For example, issuance of ROWs can result in indirect impacts by increasing the risk of human caused ignition should construction of transmission lines, renewable energy projects, or other development occur. Limiting ROW grants may reduce roads and in turn reduce potential fire suppression control lines.

Comment: This statement is conjecture and speculation. Elko County request clarification and
quantification of the statement or request that it not be included in FEIS / LUPA.

Comment Number: NVCASG-14-0083-52
Comment Excerpt Text:
Ch: 4, Sec: 4.8.3, Pg. No.: 111

Text Referencing: Impacts from Renewable Energy Management - Associated facilities, infrastructure and transmission lines from renewable energy activities can increase fire and fuels program costs while decreasing fire management flexibility with regards to suppression options.

Comment: How can associated facilities, infrastructure and transmission lines increase fire and fuels program cost? How will it decrease fire management flexibility?

Comment Number: NVCASG-14-0083-56
Comment Excerpt Text:
Ch: 4, Sec: 4.8.7, Pg. No.: 124

Text Referencing: Wildland Fire and Fire Management Alternative D - Impacts from Land Uses and Realty Management. Under Alternative D, lands in PPMAs and PGMAs would be retained as public lands to conserve GRSG habitat in federal ownership. Manage land uses in PPMAs and PGMAs to reduce habitat fragmentation and maintain or enhance connectivity between habitats. Under Alternate D, ROW/SUA exclusion incorporates the same acreage as that of Alternate A; however, 17,456,300 acres would be managed as ROW/SUA avoidance, a 99 percent increase from 114,200 acres identified under Alternative A. Under

Comment: Elko County does not believe that the statement “Federal Ownership” to be correct. Public Lands are federally managed and ownership of the public domain. Elko County would also state that federal management has led to the loss of much of the sage steppe habitat in the western states. Elko County does not believe that the exclusion of ROW / SUA will eliminate wildland fires. The County believes that without disturbance and fire breaks that ROW / SUA’s provide it will enhance the effects of the fires and limit fire suppression efforts.

Comment Number: NVCASG-14-0144-17
Comment Excerpt Text:
What impacts will solar variance zones have on sage grouse? The entire analysis is confusing. At first, the analysis states that solar lands do not overlap with Sage Grouse lands. It appears that solar energy zones do not overlap, but solar variance zones do, please clarify.

Comment Number: NVCASG-14-0166-5
Comment Excerpt Text:
MidAmerican is concerned that the relocation of existing lines could require significant permitting and mitigation requirements. It should be noted that maintenance roads along some of MidAmerican’s existing lines have reverted back to sagebrush communities and new roads would need to be constructed in order to relocate the existing power line.

Comment Number: NVCASG-14-0202-22
Comment Excerpt Text:
Distinction between transmission power lines and distribution power lines.

At no point does the LUPA/DEIS make the distinction between distribution power lines and transmission power lines. Distribution power lines are a lower voltage line which typically supplies residential and commercial entities. Transmission lines are a high voltage line which carries electricity across the electrical grid before it is stepped down into distribution lines to service consumers. Distribution lines are much more numerous across the landscape than transmission lines, require more support poles per mile than transmission lines, and are shorter in height than transmission lines. Impacts from all power lines are analyzed in the LUPA/DEIS the same regardless of whether they are distribution or transmission lines.
Comment Number: NVCAG-14-0285-60
Comment Excerpt Text:
The federal agencies should under no circumstances incentivize the creation or facilitation of a biofuels industry as recommended under Alternative D; biofuels is an environmentally unsustainable industry, and the creation of such an industry would wreak devastation on piñon-juniper woodlands far beyond those encroaching on sage grouse habitats, with major impacts on obligate songbirds (including BLM Sensitive Species) and other wildlife. The agencies have failed to analyze the direct and cumulative impact of creating such an industry, which in any case is beyond the scope and Purpose and Need of this EIS, and therefore do not have the ‘hard look’ analysis at impacts to support such a provision in the RMP amendment under NEPA.

Comment Number: NVCAG-14-0285-70
Comment Excerpt Text:
Locating solar facilities in non-habitat “wherever possible” (see DEIS at Figure 2-35) or considering sage grouse habitats as “avoidance” areas for solar development (DEIS at 619) are dodges that create uncertainty. BLM admits that ROW applications can be filed (and presumably approved) in avoidance areas. DEIS at 767. It is always possible to locate facilities in non-habitat, and therefore, to gain regulatory certainty, BLM must require that solar facilities be sited in non-habitat, period. We are concerned that the DEIS does not evaluate either the potential for solar development in terms of baseline information, nor the potential impact of commercial solar development on sage grouse habitats and populations. See, e.g., DEIS at 618. Sage grouse Priority and General Habitats should be exclusion areas without exception for solar energy development under the plan amendment as under Alternatives C, D, and F.

Comment Number: NVCAG-14-0372-3
Comment Excerpt Text:
The DEIS makes recommendations for burying power lines without any mention of who will bear that cost nor does it make any distinction for different types of power lines and different types of structures. As a consumer, I do not believe that I should bear a disproportionate share of the cost of mitigation. Regardless of the funding source, such mitigation measures should not be required in every instance. Perch deterrents and devices to reduce predator nesting sites may be warranted in some areas but certainly should not be required in areas that have not proven to be sage grouse habitat by on-ground evaluations. The DEIS identifies loss of habitat to invasive species as one of the top threats to the sage grouse. The proposal to require the burial of existing above ground utilities does not take into account the loss of habitat that such mitigation would inflict nor the opportunity for the introduction of invasive species that may occur from such massive disturbance. Leaving existing distribution and transmission power lines and other utilities in their current configurations and locations may be less damaging to sage grouse habitat than the proposed mitigation measures.

Comment Number: NVCAG-14-0385-10
Comment Excerpt Text:
Required Design Features identified in Appendix A for Alternative B (page A-4) states, "...fit transmission towers with anti-perch devices." NREA utility members do not disagree with the application of anti-perch devices on their infrastructure. However, this statement on page A-4 implies the wholesale application of anti-perch devices across all NREA utility members’ infrastructure. NREA utility members would support the application of anti-perch devices where appropriate, but not in locations which would not effectively benefit greater Sage Grouse. NREA utility members recommend altering this statement on page A-4 to reflect that perch discouragers will be applied where location specific evidence supports their application.

Comment Number: NVCAG-14-0385-4
Comment Excerpt Text:
Impacts from all power lines are analyzed in the LUPA/DEIS the same regardless of whether they are distribution or transmission lines. Mitigation to power lines is also not differentiated between distribution and transmission lines in the LUPA/DEIS. NREA
utility members recommend the LUPA/DEIS differentiates the impacts and potential mitigation actions between distribution and transmission lines throughout the LUPA/DEIS.

10.4 **Cumulative Impact Analysis**

**Comment Number: NVCASG-14-0003-42**

Comment Excerpt Text:
This DLUPA/DEIS is part of multiple NEPA documents, including revisions for Wyoming, Idaho, Montana, and Utah. AEMA maintains that the cumulative impact to locatable minerals from the combined land withdrawals, segregations, and de facto withdrawals currently in place, as well as the future land withdrawals proposed in dozens of RMP revisions will have an inadequately defined and significant adverse effect on the hard rock mining industry nationwide. The nationwide impacts must be thoroughly analyzed; otherwise BLM’s analysis is significantly flawed and incomplete. AEMA further contends that the direct, indirect, and cumulative impact analysis is inadequate and lacks convincing data as well as rationale, as described above. BLM must resolve the above issues and re-issue a draft of this LUPA to allow for public comment. BLM must also expand the analysis to look at the cumulative impacts nationwide on such important economic factors as increased unemployment, decreased domestic mineral and energy production, and increased reliance on foreign sources of minerals and energy.

**Comment Number: NVCASG-14-0091-60**

Comment Excerpt Text:
Page 582, 3.23

There is no discussion about the wind project on the Diamond Range and its possibility. According the very recent Mt. Hope Project EIS published by the BLM, this is over 21,000 acres. Please include the impacts on and from this project.

**Comment Number: NVCASG-14-0311-23**

Comment Excerpt Text:
Similarly, of particular interest and importance to Y-3 II is the cryptic note that the China Mountain Wind Project is temporarily deferred pending the outcome of this EIS process. BLM should fully explain the status of the China Mountain Project and confirm whether it may or may not be a reasonably foreseeable future action. This wind project, as set forth in right-of-way applications to BLM, could impact several of the allotments used by Y-3 II including Player Canyon and Player Butte. BLM should provide more information on the status of China Mountain as a reasonably foreseeable future action.

10.5 **Mitigation Measures**

**Comment Number: NVCASG-14-0099-3**

Comment Excerpt Text:
The agencies should incorporate relevant information from the updated APLIC guideline manual.

**Comment Number: NVCASG-14-0166-6**

Comment Excerpt Text:
Perch discourager research has shown limited effectiveness in preventing perching, potential for increased nesting on discouragers, and increased electrocution risk associated with perch discouragers. In areas where raven predation on sage-grouse nests is a concern, perch discouragers may aid in the accumulation of nest material (APLIC 2006), and could potentially increase raven predation pressure due to nest construction on discouragers in sensitive areas.

**Comment Number: NVCASG-14-0188-29**

Comment Excerpt Text:
Table 2.5 - O-LR-LUA 16

Use of some perch deterrents can increase raptor fatalities, including other Federally-protected species such as Golden eagles. USFWS has recommended avoiding use of current perch deterrent designs for retro-fitting power lines due to increased fatality rates of Golden eagles.
Comment Number: NVCASG-14-0199-50
Comment Excerpt Text:
Table 2.5 (Page 230) - D-LR-LUA 16:

Use of some perch deterrents can increase raptor fatalities, including other Federally-protected species such as Golden eagles. USFWS has recommended avoiding use of current perch deterrent designs for retro-fitting power lines due to increased fatality rates of Golden eagles.

Comment Number: NVCASG-14-0202-13
Comment Excerpt Text:
23. Required Design Features identified in Appendix A for Alternative B (page A-3) states "bury distribution power lines." This statement is repeated multiple times throughout the Alternative B Required Design Features. Similar to the text from Chapter 2 (see comment 7); the entity required to fund the burial of the distribution power lines is not identified. Additional detail is needed regarding this statement in Appendix A.

Comment Number: NVCASG-14-0202-19
Comment Excerpt Text:
Several alternatives and Required Design Features identified in Appendix A stipulate resource agencies to assess the impacts of ongoing use of ROW to greater Sage Grouse when renewing or amending ROW grants. Much of NREA utility members’ infrastructure has been in place for many years and NREA utility members believe that any such impacts to greater Sage Grouse from this infrastructure would have occurred long ago, if any impacts occurred at all.

Comment Number: NVCASG-14-0202-3
Comment Excerpt Text:
Mitigation to power lines is also not differentiated between distribution and transmission lines in the LUPA/DEIS. NREA utility members recommend the LUPA/DEIS differentiates the impacts and potential mitigation actions between distribution and transmission lines throughout the LUPA/DEIS.

Comment Number: NVCASG-14-0202-5
Comment Excerpt Text:
5. Clarification on mitigation funding sources.

NREA utility members do not feel that the funding sources for required mitigation called for under all alternatives is sufficiently described in the LUPA/DEIS. The alternatives described in the LUPA/DEIS call for various minimization and mitigation measures to be applied to existing transmission and distribution power lines. These minimization and mitigation measures potentially include the removal, burial, or modification of power lines within specified management areas, the application of perch discouragers on NREA utility members’ infrastructure, and unspecified requirements at ROW renewal. However, at no point does the LUPA/DEIS identify the entity required to fund such minimization and mitigation measures.

Comment Number: NVCASG-14-0283-1
Comment Excerpt Text:
2.

2.5

34-37

Required Design Features (RDF) – Washoe County is very concerned about the practicality and cost of meeting the RDF’s as proposed. The RDF’s should be implemented as BMP’s and not as development standards since specific site conditions can vary widely from one project area to the next (and because priority habitat (PPH) and general habitat (PGH) mapping is very coarse and should not be used for site specific habitat decisions – biological surveys in the field should be the basis). Suggest re-wording to allow more flexibility. The National Technical Team (NTT) created these design features as BMP’s and they should be implemented as such.

3.

2.5

34-37
Required Design Features (RDF) – Requiring ALL projects to meet the RDF’s proposed in Alternatives B, C, D, and F may ultimately result in very little additional land / energy development or utilization in the planning area, which is perhaps the goal of these requirements. If they are to be retained as written, more detail is necessary (for example, for how much distance does the project have to underground power lines, and for what transmission capacity?) and there should be some means for flexibility or waivers (or appeals).

Comment Number: NVCASG-14-0297-4
Comment Excerpt Text:
High voltage transmission lines should be prohibited within 1 mile of a lek to minimize grouse avoidance behavior and increased predation pressure. Anti-perching devices should be required for on all new overhead transmission lines in greater sage-grouse habitats, and the agencies should work with right-of-way holders to identify conflict areas and have anti-perching devices installed on existing overhead transmission lines in these same habitats. The agencies should incorporate relevant information from the updated APLIC guideline manual.

11. Leasable Minerals

11.1 Range of Alternatives

Comment Number: NVCASG-14-0169-26
Comment Excerpt Text:
There is no analysis of why the proposed withdrawal from mineral entry based on risk to GRSG and its habitat is necessary where the same objective can be achieved through avoidance, minimization of impacts, and mitigation of impacts within the designated areas. Further, because mineral exploration and development are recognized and acceptable uses of public lands, the multiple use mandate requires BLM and USFS to work diligently to find ways to remain flexible and ensure that resources can be developed in a manner that has minimal impact to GRSG.

Comment Number: NVCASG-14-0199-5
Comment Excerpt Text:
Under EPCA BLM is required to identify impediments to oil and gas development. It was the intent of Congress that access to energy resources be improved as indicated in EPCA and EP Act. BLM recognized the intent of the both Phases I and II of the EPCA review when it issued Instruction Memorandum 2003-233, Integration of the Energy Policy and Conservation Act (EPCA) Inventory Results, into the Land Use Planning Process. Consequently, BLM Field Offices are now required to review all current oil and gas lease stipulations to make sure their intent is clearly stated and that stipulations utilized are the least restrictive necessary to accomplish the desired protection goals. Moreover, the IM directs that stipulations not necessary to accomplish the desired resource protection goals be modified or dropped using the planning process.

Comment Number: NVCASG-14-0199-6
Comment Excerpt Text:
Throughout the DEIS, there is an assumption that NSO do not have an impact on oil and gas extraction because of the use of horizontal drilling. This technology does not apply to all geologic formations for fluid extraction including unconventional resource extraction. It is incorrect to state (in numerous locations in the DEIS) that unconventional resources will utilize horizontal drilling technology.

Comment Number: NVCASG-14-0208-4
Comment Excerpt Text:
Regarding Stipulations for Leasable Minerals – Appendix G:

We agree with the approach on SSUS-3, but recognize that there will be considerable variability from district to district, on what the Authorized Officer will allow. Therefore, for this an all other stipulations, we recommend an appeal process to the Nevada State Office should the Authorized Officer’s decision appear arbitrary, ill-informed, or inconsistent.
Comment Number: NVCASG-14-0224-12
Comment Excerpt Text:
Rejecting use applications or nominations that cannot be adequately mitigated and where the agencies have discretion to do so

COMMENT: There are certain criteria that must be met before an agency can reject an application to develop a lease. Permitted actions on a lease are subject to valid existing rights, which must be acknowledged in the LUPA/EIS. Furthermore, the term “adequately mitigated” is vague and unacceptable. Specific criteria are needed to avoid confusion. Additionally, nomination of a lease does not constitute a mitigatable action because it does not involve any type of surface disturbance. Moreover, there is no leaseholder associated with a mere nomination that could be held accountable for any mitigation actions. Only after a lease has actually issued will a responsible party be available. This item must be revised to acknowledge valid rights cannot be denied and to remove the term “nominations.”

Comment Number: NVCASG-14-0224-19
Comment Excerpt Text:
Page 249 - Action B-FFME 7: Require unitization when deemed necessary for proper development and operation of an area (with strong oversight and monitoring) to minimize adverse impacts on GRSG according to the Federal Lease Form, 3100-11, Sections 4 and 6.

COMMENT: This action item misinterprets the legal purpose of unitization as established by law. According to BLM’s own draft Handbook on Unitization and findings by the Interior Board of Land Appeals, the principal purpose of establishing a unit is to facilitate exploration in undeveloped areas and to maximize the production of oil and gas and revenue for the federal government. Units are not established for the protection of resources; rather, they are based on economics and reservoir engineering designed to provide technical benefits to all unit participants.

Comment Number: NVCASG-14-0224-20
Comment Excerpt Text:
Pg. 253 - Action D-FM 3: Allow geophysical exploration within PPMAs and PGMAs that does not result in crushing of sagebrush vegetation or create new or additional surface disturbance. Heliportable drilling methods, articulated rubber-tired vehicles that “leave no trace,” and vibroseis geophysical operations conducted on existing roads and bladed shoulders would be allowed. Geophysical operations would be subject to TLs and CSU stipulations established for GRSG in PPMAs and PGMAs.

COMMENT: It is clearly inappropriate for the LUPA/DEIS to dictate specific techniques for conducting geophysical operations. While heliportable drilling for seismic operations can be a useful tool in certain, limited situations, there are abundant and equally effective measures that allow for the same or similar impact mitigation in GRSG habitats which the LUPA/DEIS fails to even mention, much less analyze. The following is an abbreviated list of Best Management Practices that is recommended and applied by both BLM and the geophysical industry. These techniques have proven highly effective in minimizing or in many cases eliminating impacts to sage brush/GRSG:

- Off-set tracking for all wheeled vehicles
- Smooth or non-aggressive tires (vibrators)
- Limited or no “back-tracking” on the same route(s)
- Elimination of ATVs/UHVs off-road
- Vibrating on existing roads
- On-snow or frozen ground buggy drilling/vibrating
- Hand raking of buggy/vibrator tracks visible from traveled roads

Application of a reasonable mix of the above techniques has been shown to successfully avoid impacts to sage brush. Of particular importance is that extensive monitoring has shown that balloon tired four wheelers and foot traffic have diminutive

June 2015 Nevada and Northeastern California Greater Sage-Grouse LUPA/EIS 231
impacts, indeed much less effect on the environment than wild horse traffic on public lands. Moreover, we question whether BLM/FS have fully considered the safety, noise or economic ramifications of this proposal. We also question the reasoning for requiring helicopter-portable seismic exploration when seasonal restrictions will be in effect.

**Comment Number: NVCASG-14-0224-25**  
**Comment Excerpt Text:**  
APPENDIX A - REQUIRED DESIGN FEATURES

COMMENT: Appendix A largely consists of design features enumerated in the NTT report which are ostensibly needed to protect GRSG in both PPH and PGH. However, no scientific data or documentation have been provided or even cited that substantiate any of these RDFs have ever been proven effective. Absent sufficient scientific evidence, these measures simply represent matters of opinion rather than scientific facts.

**Comment Number: NVCASG-14-0224-26**  
**Comment Excerpt Text:**  
We recommend that BLM/FS reexamine the RDFs and mitigation measures to ensure they are technically feasible, appropriate and retain an adequate level of flexibility when their use is contemplated for use on a site-specific basis. Prior assessment of RDFs on a “site-specific basis” is also vital and applying them only when “reasonable” makes sense and is appropriate. Since some of these design features may prove effective only in certain instances, we recommend they be incorporated as “preferred” or “suggested”, rather than “required.” BLM/FS must acknowledge that site-specific circumstances will typically dictate whether certain design features are technically feasible, economic, or appropriate. They must not be assumed to be universally effective or applicable. Therefore, instead of utilizing a list of rigid RDFs, we recommend the agencies keep a list of practical best management practices (BMP) that can be applied based upon site-specific circumstances as appropriate.

**Comment Number: NVCASG-14-0224-27**  
**Comment Excerpt Text:**  
“Locate roads to avoid important areas and habitats.”

COMMENT: This requirement is vague and ambiguous. Clarification of what is meant by “important areas” and “habitats” is necessary. Further, preferences of landowners must be major factors in any such decisions.

**Comment Number: NVCASG-14-0224-28**  
**Comment Excerpt Text:**  
Coordinate road construction and use among ROW or SUA holders.

COMMENT: Not all users may be able to coordinate activities on roads. Some authorization holders may pre-date others and activities may not coincide among users. We recommend modifying this RDF as follows: “Coordinate road construction and use among right-of-way or special use authorization holders consistent with rights granted.”

**Comment Number: NVCASG-14-0224-29**  
**Comment Excerpt Text:**  
Construct road crossings at right angles to ephemeral drainages and stream crossings.

COMMENT: Any crossings of ephemeral drainages or streams will likely be subject to Sections 404 and 401 of the Clean Water Act. Therefore, this requirement must be reworded as follows to include these sections: “Construct road crossings at right angles to ephemeral drainages and stream crossings subject to the requirements of Section 404 and 401 of the Clean Water Act.”

**Comment Number: NVCASG-14-0224-30**  
**Comment Excerpt Text:**  
Establish trip restrictions or minimization through use of telemetry and remote well control (e.g., Supervisory Control and Data Acquisition).

COMMENT: We understand why BLM/FS believe this is a good practice; however, this technology is not always feasible due to the limited economic conditions associated with lower performing wells.
The economics associated with some leases may also be a factor that would not allow telemetry to be installed. Consequently, this requirement must be subject to operational considerations and economic viability. The agencies must also consider the fact that remotely monitoring a site does not always adequately identify all operational considerations. In order to conduct safe and effective oil and gas operations, certain on-site inspection and maintenance activities are crucial and must be regularly conducted. We recognize that it may be warranted to place limitations on access to well locations during critical seasons for certain activities, such as construction activities (e.g. well pads, roads, pits) or limiting the number of trips allowed. However, basic maintenance and operation activities are vital to maintaining safe, effective, and environmentally sound operations.

**Comment Number: NVCASG-14-0224-31**
**Comment Excerpt Text:**
“Do not issue rights-of-way or special use authorizations to counties on newly constructed energy development roads, unless for a temporary use consistent with all other terms and conditions included in this document.”

**COMMENT:** These special use authorizations are typically written to the user of the roads. The county may take authority for the road later, but not typically at issuance. Requiring “all other terms and conditions be included” is too broad. We recommend modifying this measure to read “Ensure rights-of-way or special use authorizations on newly constructed roads are issued using only appropriate terms and conditions included in this document.”

**Comment Number: NVCASG-14-0224-32**
**Comment Excerpt Text:**
“Use dust abatement on roads and pads.”

**COMMENT:** This RDF needs to be rewritten to specify what type of dust abatement will be required, i.e., chemical applicants or water.

**Comment Number: NVCASG-14-0224-33**
**Comment Excerpt Text:**
“Close and rehabilitate duplicate roads.”

**COMMENT:** Careful consideration of what constitutes “duplicate roads” is essential. An agency may believe a road to be a duplicate when actually it may not be the case for other land users or landowners in the vicinity. We recommend revising this RDF as follows: “Close and rehabilitate duplicate roads only after careful consideration of current and future use of the road by permit holders and landowners in the vicinity.”

**Comment Number: NVCASG-14-0224-34**
**Comment Excerpt Text:**
Cluster disturbances, operations (fracture stimulation, liquids gathering, etc.), and facilities.

**COMMENT:** Clustering disturbances is not always feasible due to surface limitations, landowner preferences, and safety considerations. While clustering may make sense in certain situations, it is simply not achievable in every case. We recommend inserting “to the extent possible” at the beginning of this RDF

**Comment Number: NVCASG-14-0224-35**
**Comment Excerpt Text:**
Apply a phased development approach with concurrent reclamation.

**COMMENT:** The term “phased development” is vague and requires clarification because it is subject to a variety of interpretations.

**Comment Number: NVCASG-14-0224-36**
**Comment Excerpt Text:**
Place liquid gathering facilities outside of priority areas. Have no tanks at well locations within priority areas (minimizes perching and nesting opportunities for ravens and raptors and truck traffic). Pipelines must be under or immediately adjacent to the road (Bui et al. 2010).

**COMMENT:** This requirement is unclear and will lead to operational confusion. Placing liquid gathering
facilities inside priority areas would reduce truck traffic, which would be more advantageous to the GRSG. Further, if liquid gathering or trucking is not allowed inside priority areas, there would be no way to remove liquid production from the lease. This RDF conflicts with standard operational practices, is not feasible and must be eliminated.

Comment Number: NVCASG-14-0224-37
Comment Excerpt Text:
Design or site permanent structures which create movement (e.g., a pump jack) to minimize impacts to Greater Sage-Grouse.

COMMENT: This requirement lacks scientific justification. Since neither the NTT nor COT reports have identified any scientific data that correlate movement and distances relative to GRSG response, we recommend this RDF be eliminated.

Comment Number: NVCASG-14-0224-38
Comment Excerpt Text:
Control the spread and effects of non-native plant species (Evangelista et al. 2011) (e.g., by washing vehicles and equipment).

COMMENT: This RDF does not explain how this objective would be implemented. Where would wash areas be located and how would the runoff associated with them be managed? Can the fluid and associated substances be hauled off, injected or disposed of at a facility onsite and are special permits required? This RDF attempts to address concerns regarding a perceived problem but fails to fully consider the ramifications of such a requirement.

Comment Number: NVCASG-14-0224-39
Comment Excerpt Text:
Use only closed-loop systems for drilling operations and no reserve pits.

COMMENT: Closed loop systems for drilling operations are utilized in sensitive areas where they are technically feasible and economically viable for the operator. However, many drilling rigs are not equipped for closed loop drilling. Also, even if a closed system were available on a drilling rig, some type of pit will be needed for drilling cuttings. This RDF must be revised to provide the flexibility to allow this as an option where feasible. We also note that this requirement conflicts with the previous RDF which calls for netting pits.

It is unclear whether BLM/FS have considered the impact that additional truck traffic hauling fluids out of the area could have on GRSG habitat. It must also be recognized that additional truck traffic may require road upgrades, which could defeat the purpose of the RDF. It may be more reasonable to install GRSG-safe fences in the majority of instances.

Comment Number: NVCASG-14-0224-40
Comment Excerpt Text:
Limit noise to less than 10 decibels above ambient measures (20-24 dBA) at sunrise at the perimeter of a lek during active lek season (Patricelli et al. 2010, Blickley et al. In preparation).

COMMENT: We strongly object to ambient noise levels being set at a range of 20 to 24 dBA. This ambient noise range was determined from average noise readings of studies conducted in national parks and wilderness areas, as well as minimum noise readings taken in the Pinedale area in Wyoming. Importantly, this noise level has not been proven to be representative of average ambient noise on multiple-use lands outside of wilderness and national parks and is not scientifically supported anywhere, much less NV.

Comment Number: NVCASG-14-0224-41
Comment Excerpt Text:
Restore disturbed areas at final reclamation to the pre-disturbance landforms and desired plant community.

COMMENT: If the disturbance is on private land, this RDF must be subject to the preference of the landowner.

Comment Number: NVCASG-14-0285-57
Comment Excerpt Text:
We are concerned that future development of coal resources could have a significant impact on
remaining sage grouse populations. All priority habitats should be found unsuitable for coal leasing under the RMP amendment in order to prevent direct destruction of sage grouse habitats through strip mining and indirect impacts from grouse being driven away from otherwise suitable habitats adjacent to mine sites and associated access roads and facilities by increased industrial activity. BLM acknowledges that there is little potential for coal mining in the planning area (DEIS at 44); the agencies should therefore find Priority Habitats unsuitable for surface mining for coal in order to provide regulatory certainty. This costs the agency nothing. Commercally significant coal deposits could be identified in the future. We are concerned that BLM’s approach of sidestepping this potential impact creates uncertainty and also undermines the BLM’s ability to describe the magnitude of impacts under the various alternatives, rendering the legally required ‘hard look’ impossible.

Comment Number: NVCASG-14-0285-86
Comment Excerpt Text:
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns 68 within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).
Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12% cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).
Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment). 70

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site's capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

Comment Number: NVCASG-14-0290-1
Comment Excerpt Text:
Seasonal restrictions could be imposed on mining activities which may be the same as prohibiting mining in these areas. Significant or seasonal restrictions that have excessive costs or are economically prohibitive to mining companies is considered the same as withdrawing an area from mining.

Comment Number: NVCASG-14-0344-21
Comment Excerpt Text:
2.2. Chapter 2
Page 19, 2.5.3 Adaptive Management:
The adaptive management section needs to explain how new field data will be utilized and how often it will be needed to be updated. For example, field studies that show no winter use of "winter habitat" for 5 years should be sufficient to remove winter NSOs, etc.

Comment Number: NVCASG-14-0344-28
Comment Excerpt Text:
Page 248, Alternative B, Action B-FFME 6:
This action should be written without the 3% disturbance cap and include the mitigation outline in the bullets as part of the action, not as "exceptions."

For the exception listed in the Action, mitigation prior to issuing the lease is required, with demonstrated long-term population increases. This amounts to mitigating prior to impacts, and perhaps prior to the determination of impacts. Such a pre-disturbance stipulation requires that the proponent initiate mitigation well in advance of any project related disturbance and prior to issuing the lease. The lease must be issued before any funds or effort can be expended on mitigation. Mitigation requirements prior to disturbance are not within BLM's jurisdiction since BLM cannot require mitigation as terms of a lease or permit without consent of the proponent. This concept can result in making oil and gas leasing and exploration uneconomic prior to validating if the fluid resource can be extracted in economic quantities.

**Comment Number: NVCASG-14-0344-30**

*Comment Excerpt Text:*
Page 251, Alternative D, Action D-FFME 15:

This action element calls for reclamation bonds sufficient for costs that "would result in full restoration" in PPMAs. Within the "ecological world" the term "restoration" is a much more rigorous standard to meet than "reclamation." In practical terms, it would be difficult, if not impossible; to "restore" the pre-disturbance plant community after a well pad is closed. The pre-disturbance plant community may be the result of 50 or more years of community development with or without grazing, making this requirement uneconomic to Noble. These types of plant communities cannot be "restored" in the very short-term periods in which reclamation is conducted and evaluated. Therefore, the term "restoration" should be replaced with "reclamation" and the target plant community should be specified at the time the bond is developed.

Comment Number: NVCASG-14-0346-1

*Comment Excerpt Text:*
Chapter: ES, Section: ES.10.4

Comment: Also within the list of bullets at the top of the page under Alternative D, it states that "no surface occupancy stipulations" would be applied to fluid mineral development in PPMAs. It is important to identify and be clear on what that NSO buffer distance will be. It appears that the current NSO distance is 0.6 miles, which is not based on the best available science (see Coates et al. 2013 which suggests a buffer distance of 5.0 kilometers).

11.2 BEST AVAILABLE INFORMATION BASELINE DATA

**Comment Number: NVCASG-14-0050-18**

*Comment Excerpt Text:*
Blickley found in a treatment-control paired study that there was an immediate and sustained decline in male grouse attendance on leks subjected to human noise associated with well sites (29% decline on drilling noise leks and 73% decline on traffic noise leks relative to paired no noise leks) and evidence of similar declines in female attendance.141

As reported in the Sage-Grouse Recovery Alternative,

“"A new study commissioned by the Bureau of Land Management has exposed major difficulties with the agency's current approach to sage-grouse conservation in the Powder River Basin, a region that is heavily developed for gas and oil. The study indicates that an increasing density of coalbed methane wells and conventional oil and gas wells coupled with an outbreak of West Nile virus could cause "functional extinction" of sage-grouse in the Powder River Basin. Under such a scenario, modeling predicts that 370 active leks known today in the Basin would be reduced to only six (Taylor et al. 2012). The authors estimate that 27 percent of the predevelopment sage grouse population has already been lost as a result of heavy coalbed methane and conventional drilling in the Powder River Basin, and
predicts that only 39 percent of the original population will remain when coalbed methane is fully developed (with up to eight wells per section) in the Basin, even in the absence of a West Nile virus outbreak (Taylor et al. 2012). The study also found that sage-grouse censused at large leks would be expected to decline by 70 percent from pre-development numbers as well spacing reaches 4 wells per square mile. Finally, effects of drilling on sage-grouse were noticeable out to 12.4 miles from leks, indicating that current core areas may not be large enough to conserve and recover the species (Taylor et al. 2012)."142

Management Prescriptions:

i. Management inside SGCAs in sage grouse habitat

- Close/find unsuitable/withdraw all unleased or available areas to fluid, solid, locatable or salable mineral leasing.143
- Upon expiration or termination of existing leases, do not re-lease the area.
- Only allow geophysical exploration activities by helicopter portable drilling methods in accordance with appropriate seasonal and timing restrictions.
- Ensure that with any new leasing do not contribute to a total human disturbance exceeding 3% per section of that area.
- In existing leased and permitted areas, apply a 10 km non-surface occupancy around active leks and limit permitted disturbance to 1 per section and no more than 3% surface disturbance per section.
- Apply best management practices to minimize surface disturbing activities.
- Implement courtship, nesting, early-brood rearing and winter seasonal and timing restrictions for all human activities.
- Avoid the surface disposal of produced water unless it can be proven to be beneficial to sage grouse and includes measures to preclude the spread of West Nile virus.

ii. Management outside SGCAs in sage grouse habitat

- Apply a 10 km non-surface occupancy around active leks and limit permitted disturbance to 1 per section and no more than 3% surface disturbance per section.
- Apply practices to minimize surface disturbing activities.
- Implement courtship, nesting, early-brood rearing and winter seasonal and timing restrictions for all human activities, including exploration.
- Avoid the surface disposal of produced water unless it can be proven to be beneficial to sage grouse and includes measures to preclude the spread of West Nile virus.

140 Doherty et al. 2008.
141 Blickley et al. 2012.
143 Here after, “leasing” or “leases”
existing leases without any underlying authority to insist on those modifications.

**Comment Number: NVCASG-14-0191-3**  
**Comment Excerpt Text:**
3. The Reasonably Foreseeable Development Scenario Should Acknowledge the Impacts of New Completion Technologies Such as Hydraulic Fracturing.

The Reasonably Foreseeable Development (RFD) scenario estimates the development that will occur due to leasing of federal oil and gas resources in the Project area. DEIS H-1. However, it estimates future development based on rates of past development, despite also acknowledging that "new completion technologies" will make wells more successful than they were in the past. DEIS H-3. The RFD should be adjusted to account for increased rates of exploration and development that are likely as companies seek to take advantage of new technologies.

**Comment Number: NVCASG-14-0199-4**  
**Comment Excerpt Text:**
The use of the NTT report is extremely problematic as it contains overly burdensome recommendations that are not based on local conditions in Nevada. The NTT report asserts that oil and natural gas "impacts are universally negative and typically severe," but provides no scientific data to support that assertion. The report selectively presents "scientific" information to support overly burdensome conservation measures that are not based on local conditions. The Amendments rely too heavily upon a select few studies utilized by the NTT report, but also ignores other data and studies that clearly demonstrate impacts from oil and natural gas are not universally negative and typically severe. BLM should refrain from directly incorporating any of the NTT report recommendations into the proposed or final EIS.

**Comment Number: NVCASG-14-0205-48**  
**Comment Excerpt Text:**
17-18, 4.3.2

“All studies which assess impacts of energy development on GRSG have found negative effects on populations and habitats (Naugle et al. 2011).”

Comment: Delete the sentence. The EIS and NTT selectively presented information in support of certain preconceived conclusions, while ignoring contrary information. Key assertions in the EIS and the NTT report are both biased and in error, especially the frequently repeated, but erroneous assumption, that a temporary decrease in lek counts immediately adjacent to active wells is equivalent to a population decline.

The EIS and NTT report rely on older research that focuses on areas with full-field development, like the Jonah gas field in Wyoming, where currently-used sophisticated mitigation or restoration technologies were either unavailable or still being developed. The EIS and NTT report fail to acknowledge that this situation has substantially changed due to the advent of advanced reclamation, methods to limit surface disturbance, and other protective measures that are now mainstream in development that takes place in habitat areas.

**Comment Number: NVCASG-14-0224-42**  
**Comment Excerpt Text:**
APPENDIX H - OIL AND GAS REASONABLY FORESEEABLE DEVELOPMENT SCENARIO  

This reasonably foreseeable development (RFD) scenario serves as a basis for analyzing environmental impacts resulting from future leasing and development of federal oil and gas resources within the decision area over the next 20 years.

**COMMENT:** It is our understanding that Noble Energy has publicly announced plans for future development within the planning area and that the disturbance associated with this development is projected to be a mere 500 acres of total disturbance, including roads. This information does
not appear to be included in the RFD, which is an oversight that needs to be corrected.

Comment Number: NVCASG-14-0285-74
Comment Excerpt Text:
Based on the current trends in fluid minerals leasing and development, it is reasonable to expect BLM to forecast the number of wells expected to be drilled in PPMA and PGMA under each alternative. This analysis was in fact performed in the Idaho – Southwest Montana Sage-grouse RMP Amendment DEIS. BLM has in its possession acreage of leases on BLM lands and minerals, and the rate at which wells are being developed today. The same is true for geothermal development. However, this analysis is missing from the Nevada – Northeastern California DEIS. See, e.g., DEIS at 616. It is not possible to take the legally required ‘hard look’ at the impacts of fluid minerals development under each alternative without estimating the number of wells, mileage of attendant roads, pipelines and powerlines, and acreage of habitat disturbed under each alternative. This comparison is necessary for BLM to make a well-informed choice among competing alternatives.

11.3 IMPACT ANALYSIS

Comment Number: NVCASG-14-0091-63
Comment Excerpt Text:
The current surface disturbance association with oil and gas wells in PPH and PGH is only 0.022% of the total PPH and PGH in the Planning Area. Even tripling this amount to account for noise, infrastructure along with other associated disturbances is still less than 0.1% of the PPH and PGH in the Planning Area. The BLM and Forest Service need to provide this context so that the reader can clearly determine the magnitude of one impact relative to other impacts identified in the DEIS.

Comment Number: NVCASG-14-0198-8
Comment Excerpt Text:
The Alternatives in the Draft EIS will cause significant socioeconomic harm to the mineral exploration industry, as well as to the communities within which we work, the Nevada counties which contain both the largest concentrations of sage-grouse and the largest concentrations of mineral potential, the state of Nevada, and the federal government itself. However, an analysis of these potential economic impacts is largely missing from the documents, or if mentioned at all, downright misleading. For example, Alternatives Band C would withdraw between 12 and 17 million acres from mineral entry yet the economic impacts of this action are identified as "the same as" the other alternatives or as "impossible to analyze". This approach is unacceptable. Mineral exploration and development are the key economic drivers in the Nevada counties which contain much of the sage-grouse habitat in Nevada. The BLM must do better.

Comment Number: NVCASG-14-0199-61
Comment Excerpt Text:
The beneficial impacts of this closure on sage-grouse and sage-grouse habitats is not quantified; the
"Closure to leasable minerals would result in long-term beneficial impacts on GRSG habitats associated with all seasonal life history requirements." This is inadequate in terms of providing analysis of impacts. Without some indication of the magnitude of the benefit of this closure, the reader cannot determine how this compares to other elements of this Alternative; and therefore, comparison of elements cannot be made.

**Comment Number: NVCASG-14-0199-63**  
**Comment Excerpt Text:**  
Page 84, Section 4.5.5. Alternative B, Impacts from Leasable Minerals Management:

The conclusion that "Management under Alternative B would result in fewer impacts on riparian habitats than Alternative A" is not supported in the analysis. Nowhere in the document is there discloser of the acres of riparian habitat that are to be impacted under any of the alternatives.

**Comment Number: NVCASG-14-0199-64**  
**Comment Excerpt Text:**  
Page 87, Section 4.5.6. Alternative C, Impacts from Leasable Minerals Management:

The total analysis consists of one sentence: "Impacts on riparian areas and wetlands from leasable minerals management would be reduced under Alternative C in comparison to Alternative A." There are no basis or tables for comparison of impacted acres under each alternative or discussion of how mitigation would be used to offset impacts in the DEIS.

**Comment Number: NVCASG-14-0199-65**  
**Comment Excerpt Text:**  
Page 89, Section 4.5.7. Alternative D, Impacts from Leasable Minerals Management:

There is no quantification of impacts, no discussion of acres of riparian areas that would be impacted under each alternative, and no quantification of "fewer impacts". The reader cannot compare alternatives based on terms such as "more", "fewer", "less", etc.

**Comment Number: NVCASG-14-0208-3**  
**Comment Excerpt Text:**  
In Alternative D, with 11,348,800 acres are open to fluid mineral leasing, within PGH, PPMA, or SGMA. With 11,240,500 of those acres bearing a NSO stipulation without modification, waivers, and exceptions, the 11,240,500 are effectively undevelopable. Only 98,300 acres or less than one percent (0.87%) of acres open to leasing remain undevelopable. We object to this drastic curtailment in the ability to develop fluid minerals in Nevada and fear that this these restrictions will have long-lasting, negative implications on geothermal development in the State. We recommend that the NSO stipulation on all acres open to fluid mineral leasing be subject to modification, waivers, and exceptions, with consideration of mitigation and required project design features (RDF) that result in no net loss to habitat.

**11.4 CUMULATIVE IMPACT ANALYSIS**

**Comment Number: NVCASG-14-0091-87**  
**Comment Excerpt Text:**  
The cumulative impacts section does not include the NSO on PPMA and PGMA, which certainly would change the cumulative impacts. Similarly the NSO for winter habitat is not included nor is the inclusion of the checkerboard area as PPMA. The analysis needs to be consistent once clear direction and final decisions are made in the FEIS.

**Comment Number: NVCASG-14-0344-44**  
**Comment Excerpt Text:**  
The cumulative impacts section for fluid minerals does not include the NSO on PPMA and PGMA, which certainly would change the cumulative impacts. Similarly the NSO for winter habitat is not included nor is the inclusion of the checkerboard area as PPMA.

**Comment Number: NVCASG-14-0344-45**  
**Comment Excerpt Text:**  
Cumulative Impact Chapter states oil and gas is not a factor; however; Noble's proposed actions and RFD
should be considered in the FEIS since the RFD in Appendix H is not accurate.

11.5 Mitigation Measures

Comment Number: NVCASG-14-0091-39
Comment Excerpt Text:
Action B-FM 1

This action precludes the entry into PPMAs for fluid mineral leasing, and as indicated above, there are areas of non-habitat and a variety of seasonal habitats within PPMAs. To exclude fluid mineral exploration and/or development of these non-habitat areas or within seasonal habitats during the season of non-use allows for single use only.

For the exception listed in the Action, mitigation prior to issuing the lease is required, with demonstrated long-term population increases. This amounts to mitigating prior to impacts, and perhaps prior to the determination of impacts. Such a pre-disturbance stipulation requires that the proponent initiate mitigation well in advance of any project related disturbance and prior to issuing the lease. The lease must be issued before any funds or effort can be expended on mitigation. Mitigation requirements prior to disturbance is not with in BLM’s jurisdiction since BLM cannot require mitigation as terms of a lease or permit without consent of the proponent. This concept can result in making oil and gas leasing and exploration uneconomic prior to validating if the fluid resource can be extracted in economic quantities.

Comment Number: NVCASG-14-0199-3
Comment Excerpt Text:

While the agencies claim that the DE IS and LUP amendments will recognize valid existing mineral rights, the management restrictions for sage-grouse could wholly or partially deny industry their mineral rights. “With respect to oil and gas leases, ‘valid existing rights’ vary from case to case, but generally involve rights to explore, develop, and produce within the constraints of the lease terms, laws and regulations.” (1) The disturbance cap concept proposed in Alternatives B, C, and F in the DE IS could result in the denial of projects simply because other disturbances have decreased available cap space, ultimately denying valid existing mineral rights.

(1) Available at http://www.blm.gov/co/st/en/nm/canm/01.html

Comment Number: NVCASG-14-0224-6
Comment Excerpt Text:

the LUPA/DEIS offers no explanation of what constitutes valid existing rights and how they relate to the new land use management options considered in the planning document. We advise that it be clearly stated in the Final LUPA/EIS that the new stipulations proposed in the Preferred Alternative will not apply to lands already under valid, existing oil and gas lease.

Comment Number: NVCASG-14-0285-84
Comment Excerpt Text:

The Preferred Alternative applies NSO stipulations to existing leases only (DEIS at 306), leaving already leased sage grouse habitats – the areas at most immediate risk for oil and gas development – exposed to the threats posed by energy production with no protections applied as Conditions of Approval. The “no net unmitigated loss” standard that applies in PPMA has so many qualifiers attached that its certainty of application and science-based effectiveness can never be demonstrated. The idea of “net unmitigated loss” relies on the idea that known loss of habitat effectiveness can somehow be compensated somewhere else, through mitigation efforts. In the Upper Green River Valley of western Wyoming, oil and gas companies have funneled more than $60 million through offsite mitigation funds supervised by government collaboratives, funding dozens of habitat projects. Not one of these projects has resulted in a documented increase in sage grouse populations. Thus, the evidence regarding the efficacy of offsite mitigation to achieve no net loss, or even any compensatory gain in populations, supports the assertion that off-site mitigation is thus far an empty gesture, not a viable conservation strategy.
12. **Livestock Grazing**

**Comment Number: NVCASG-14-0051-2**

*Comment Excerpt Text:*
Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act (TGA) and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. …Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbitt, 167 F.3d 1287, 1308 10th Cir. 1999).

**Comment Number: NVCASG-14-0109-1**

*Comment Excerpt Text:*
Grazing Permit Retirement: There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated permanently (see DEIS Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

"BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbitt, 167 F.3d 1287, 1308 10th Cir. 1999)."

**Comment Number: NVCASG-14-0171-3**

*Comment Excerpt Text:*
This DEIS should not portray proposed strategies that it does not have the legal authority to implement. There is analysis of retiring grazing permits which would require legislation to accomplish. The Record of Decision does not have that power. Permits, even those voluntarily waived back to the agency are required to be re-issued.

**Comment Number: NVCASG-14-0195-2**

*Comment Excerpt Text:*
There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated permanently. Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

"BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbitt, 167 F.3d 1287, 1308 10th Cir. 1999)."

**Comment Number: NVCASG-14-0278-18**

*Comment Excerpt Text:*
EIS Section: Table 4-2

Chapter & Page: p 194

Comment: "Action C-LG 1: No grazing will be allowed in PPMAs. Livestock grazing will be phased out over a period of three years, in accordance with grazing regulations 4110.4-2."

This action is not consistent with the level of the threat. There is no record of sage-grouse ever being
extirpated from any area due to livestock grazing. Yes, poorly managed grazing can alter habitat characteristics and these changes could result in depressed populations, but there is no evidence that any population, sub-population or other classification unit has been lost due to the effects of grazing. Numerous studies have shown the direct and indirect benefits that managed grazing can have for sage-grouse (e.g., Neel 1980; Klebenow 1982, 1985; Evans 1986) or their habitat (e.g., Laycock 1967; Davies 2009, 2010). Furthermore, numerous studies have found very small or no increases in the perennial herbaceous component of sagebrush rangelands after the removal of livestock and at times found greater increases in the perennial herbaceous plants on adjacent moderately grazed sites (Sneva et al. 1980, Holechek & Stephenson 1983, West et al. 1984). Finally the proposal is not consistent with the provisions and legal requirements in the Taylor Grazing Act, the Federal Land Management and Policy Act, the Forest Management Act.

Comment Number: NVCASG-14-0311-15
Comment Excerpt Text:
Under the NTT Report, retirement of grazing privileges is also an option. Section 4.9.5. The opinions of the Solicitor (M-3700S, as clarified) provide a legal evaluation of when BLM may and may not retire grazing permits and the transitory nature of retirement such that a retired permit is not permanent absent some congressional action and is subject to reconsideration and reversal during subsequent land use planning decisions. Id., Clarification of M-3700S, at 6. Alternative B references, and other Alternative references, to retirement of grazing privileges should comport with the Solicitor’s opinions.

Comment Number: NVCASG-14-0312-4
Comment Excerpt Text:
Alternatives B, D, and F.

Comment: All these include the action to maintain or retire grazing preferences on all allotments with priority sage grouse habitat when the grazing permit has been relinquished-----this is not in accord with the Taylor Grazing Act which protects grazing rights. If an owner of a grazing permit wants to sell his permit to another rancher for continued grazing he may do so. Any retirement of a grazing permit is also not in accord with the Taylor Grazing Act and would ultimately result in further buildup of decadent fuel and increased loss of habitat due to fire.

Comment Number: NVCASG-14-0347-1
Comment Excerpt Text:
It is evident in the DEIS, and in the preferred alternative specifically, BLM did not recognize specific valid and existing rights including but not limited to grazing preference and stock water rights.

Specific to stock water rights. Nevada Water Law is based on two principles: prior appropriation and beneficial use. Prior appropriation refers to "first in time, first in right." To obtain a water permit in Nevada, a person must prove beneficial use such as stock watering, mining, irrigation, etc. The preferred alternatives (B) and (F) (see DEIS Action LG 15, pg.234) poses a threat to permittees existing water rights by threatening their ability to make beneficial use thereof. Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

An example of how valid existing rights will be compromised in the preferred alternative (D) is explained below:

- Appendix A, "Required Design Features," states that in priority habitat (PPMA), agency action would be to "remove livestock ponds built in perennial channels that are negatively impacting riparian habitat, either directly or indirectly, and do not permit new ones to be built in these areas."

- Appendix A, "Required Design Features," would also "remove or modify existing water developments that are having a net negative impact on GRSG habitats."
Grazing Permit Retirement: Retirement of a grazing permit as an option should NEVER be a consideration. There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated permanently (see DEIS Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act (TGA) and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. ...Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbitt, 167 F.3d 1287, 1308 10th Cir. 1999).

By allowing for permit retirements in the planning area, BLM would not only be in danger of violating the law; it would be opening the floodgates to harassment of ranchers by radical special interest groups bent on eliminating grazing. This has proven to be the case in past instances where Congress acted to make permit retirement legal in specific areas, such as the Owyhee Wilderness Area in Idaho.

12.1 RANGE OF ALTERNATIVES

Comment Number: NVCASG-14-0040-10

Comment Excerpt Text:
BLM Proposed Action (Alternative D): No similar proposed objective at this time.

CCA & CFBF Recommended Alternative: Proposed Objective LG 3: In cooperation with permittees, develop grazing strategies and range improvements in PPMAs, PGMAs and non-habitat that maintain grazing and help achieve habitat objectives as part of an overall conservation element in Allotment Management Plans

Comments: The following research documented that moderate levels of grazing can increase the resiliency of sagebrush habitat, reduce the risk and severity of wildfire, and decrease the risk of invasion by exotic vegetation:


It has been clearly stated that the two biggest threats to GRSG in the planning area are fire and invasive species. Therefore, it is imperative to maintain resiliency of rangelands as a means of managing for sage-grouse habitat through a coordinated ecosystem conservation plan that focuses on applying successful practices as described in the following peer-reviewed document:


There are mechanisms already in place by which the federal agencies can work in cooperation with the permittee with appropriate technical support to develop grazing strategies and range improvements that benefit the operator and enhance GRSG habitat at the same time. A holistic allotment approach seems the most appropriate mechanism for achieving this concept and is parallel to the approach of developing Ranch Conservation Plans as part of the NRCS Sage-grouse Initiative (SGI).
Comment Number: NVCASG-14-0040-11
Comment Excerpt Text:
BLM Proposed Action (Alternative D): No similar proposed objective at this time.

CCA & CFBF Recommended Alternative: Proposed Objective LG 4: In PPMAs and PGMAs where habitat objectives are not being met, and where grazing is not currently authorized, allow development of a grazing management or targeted grazing plan based on best available science to help achieve habitat objectives.

Comment Number: NVCASG-14-0040-12
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 2: Within PPMAs and PGMAs containing GRSG nesting habitat, implement the following management actions, if not meeting GRSG habitat objectives:

- Provide periods of rest or deferment during critical herbaceous growth period
- Limit grazing duration to allow plant growth sufficient to meet GRSG habitat objectives (see Table 2-6)
- Employ herd management techniques to minimize impacts of livestock on nesting habitat during the nesting season (March 1 - June 30)

CCA & CFBF Recommended Alternative: Proposed Action LG 2: In nesting habitat within PPMAs and PGMAs, when the appropriate analyses by an interdisciplinary team that includes the permittee, sage-grouse biologists, and range ecologists has identified that changes in livestock management such as practices described in NRCS Conservation Practice Standard 528 for Prescribed Grazing (NRCS 2011) can be used to influence vegetation changes in a desired direction to achieve desired habitat conditions consistent with ecological site potential, incorporate changes agreed to by the permittee into a conservation element of the Allotment Management Plan. Monitor and adjust management as indicated through adaptive management.

Comments: The habitat objectives listed in Table 2-6 are not management criteria. Without limiting management to the three listed actions, an interdisciplinary team should be assembled to develop a approach to achieving desired nesting conditions based on site-specific ecological potential and current conditions.

The recommendation incorporates elements from Action B-LG 2, D-LG 2, and E-LG 2.

Comment Number: NVCASG-14-0040-13
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 4: Continue land health assessments on BLM public lands or other monitoring methods on Forest Service-administered lands in PPMAs and PGMAs to evaluate current conditions as compared to GRSG habitat objectives described in Table 2-6. Incorporate the results of BLM and Forest Service monitoring and land health assessments into future management applications to ensure progress toward meeting GRSG habitat objectives.

CCA & CFBF Recommended Alternative: Proposed Action LG 4: Prioritize completion of land health assessments on BLM allotments or other monitoring methods on Forest Service-administered lands, which can help identify the best opportunities for conserving, enhancing, or restoring GRSG habitat in PPMAs and PGMAs. Interpret the results of BLM and Forest Service monitoring and land health assessments with state and transition models. Incorporate findings into the conservation element of the Allotment Management Plan to identify desired conditions based on ecological site potential.

Comments: Monitoring and adaptive management should consider ecological site potential and state and transition models to ensure that site-specific considerations are taken into account when establishing management actions that result in the highest probability of success rather than managing for a blanket set of objectives. The recommendation incorporates elements from Action B-LG 4.
Comment Number: NVCASG-14-0040-14
Comment Excerpt Text:
[Reference to Action D-LG 10] Comments: If an area is not at PFC for reasons other than grazing (i.e. flash flood, fire, etc.) then an ID Team should be utilized to identify actions to achieve PFC or set an upward trend.

Comment Number: NVCASG-14-0040-16
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 14: Authorize new water development for diversion from spring or seep source when PPMAs and PGMAss would benefit from the development.

CCA & CFBF Recommended Alternative: Proposed Action LG 14: Authorize new water development for diversion from spring, seep and underground sources when PPMAs and PGMAss would benefit from the development. Any new water developments shall comply with state water law, and shall be closely coordinated with existing permittees.

Comments: New water developments, including wells, can be used as a tool to better distribute grazing away from key sage-grouse areas and achieve better livestock distribution and timing. Any water development will need to conform with State Water Law, and be closely coordinated with the permittee or water right holder.

Comment Number: NVCASG-14-0040-17
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 16: Unless targeted grazing is the preferred treatment, livestock grazing would not be authorized within treatment areas during implementation of each treatment. Any livestock grazing closure for the purpose of a vegetation treatment would be done through the grazing decision prior to treatment. Livestock grazing would be authorized to resume within a treatment project area after resource monitoring data verifies the treatment objectives are being met and an appropriate grazing regime has been developed.

CCA & CFBF Recommended Alternative: Proposed Action LG 16: Coordinate the design and implementation schedules for vegetation treatments with livestock permittees through allotment management plans to avoid or minimize the need for grazing closures while vegetation treatments are initiated. Use the adaptive management process if additional adjustments to grazing are found to be necessary after resource monitoring verifies that additional rest from grazing would further the achievement of the treatment objectives.

Comments: Vegetative treatments for sage-grouse should not be punitive to the grazing operator. The action of excluding grazing from treatments for an unspecific timeframe is punitive. Treatment plans can be designed to maintain current levels of grazing during the anticipated project timeframe. Treatment plans should include a grazing management component, so that everyone clearly understands how grazing will be integrated into the overall project.

Comment Number: NVCASG-14-0040-18
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 18: In PPMAs and PGMAss assess and modify as needed existing structural range developments to make sure they conserve, enhance, or restore GRSG habitat.

CCA & CFBF Recommended Alternative: Proposed Action LG 18: In PPMAs and PGMAss assess and modify as needed existing structural range improvements located on public lands to make sure they conserve, enhance, or restore GRSG habitat. Any changes shall be closely coordinated with existing permittees.

Comments: All decisions that affect the livestock operation must be made in close coordination with the Permittee.

Comment Number: NVCASG-14-0040-20
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 20: Salting and supplemental feeding locations,
livestock watering and handling facilities (corrals, chutes, etc.) would be located at least 112-mile from riparian zones, springs, and meadows, or active leks in PPMAs and PGMAs. The distance can be greater based on local conditions.

CCA & CFBF Recommended Alternative: Proposed Action LG 20: In PPMAs and PGMAs, evaluate existing locations of supplements (salt or protein blocks) for consistency with conserving, maintaining, or restoring GRSG habitat.

Comments: Recommendation includes elements from Action B-LG20. Actions regarding existing watering facilities and structural range improvements are already included in actions LG 18 and LG 19, so this item should be specific to supplements

Comment Number: NVCASG-14-0040-21
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 21: Remove, modify, or mark permanent and/or temporary fences in areas of high risk for bird strikes within PPMAs and PGMAs. Permanent and/or temporary fences would not be located on or across active GRSG leks. Remove and re-locate existing fences that are located on or across GRSG active leks.

CCA & CFBF Recommended Alternative: Proposed Action LG 21: Remove, modify, or mark permanent and/or temporary fences in areas of high risk for bird strikes within PPMAs and PGMAs. Permanent and/or temporary fences would not be located on or across active GRSG leks. Any recommended changes in fence locations shall be closely coordinated with the Permittee to ensure consistency with livestock management requirements, terms and conditions.

Comments: This sort of action must be closely coordinated with permittees to ensure integrity of fencing as it relates to livestock management, compliance with permit terms and conditions, and access to leks.

Comment Number: NVCASG-14-0040-22
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 23: Consider retirement of grazing privileges on all voluntary relinquishments in PPMAs and PGMAs where removal of livestock grazing would enhance the ability to achieve GRSG habitat objectives (see Table 2-6).

CCA & CFBF Recommended Alternative: Delete Action D-LG 23.

Comments: Allotments should remain active, even if vacant. This allows greater flexibility for future adaptive management, particularly in cases where grazing can help to achieve desired sage-grouse goals and objectives or in the cases when grazing adjustments are needed in response to drought or wildfire.

There should be a process for re-entry of a permittee into an allotment if a clear management plan is developed and can demonstrate consistency with sage-grouse management objectives

Comment Number: NVCASG-14-0040-23
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 24: Establish vegetation treatment project monitoring sites prior to project implementation. Measure project monitoring sites annually during the livestock grazing closure period.

CCA & CFBF Recommended Alternative: Proposed Action LG 24: Establish a complete monitoring and data analysis plan prior to vegetation treatment including identified monitoring sites. Monitor sites annually during the appropriate plant phenological stage for a minimum of 5 years or until treatment objectives are met.

Comments: This is standard protocol for monitoring and data management
Comment Number: NVCASG-14-0040-24
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 25: Within PPMAs and PGMAs, incorporate terms and conditions into grazing permits to meet GRSG habitat objectives (see Table 2-6).

CCA & CFBF Recommended Alternative: Delete Action LG 2S

Comments: Table 2-6 should not be used as management criteria. An ID Team consisting of at least one range specialist and one wildlife specialist, in collaboration with the Permittee, should develop terms and conditions. This will ensure that site specific information is considered in developing objectives that are based on site potential and existing condition

Comment Number: NVCASG-14-0040-25
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 26: Grazing permit transfers would not be approved without review of GRSG habitat conditions. Where GRSG objectives (See Table 2-6) are not being met in an allotment and causal factors are attributable to livestock grazing, adjust the annual grazing authorization or operating instructions to reflect the allowable use levels as identified in Table 2-7 prior to the next grazing season. The Habitat Assessment Framework will be the tool to determine the level to which standards are or not being met.

CCA & CFBF Recommended Alternative: Proposed Action LG 26: The grazing permit renewal process will include a review of GRSG habitat conditions. The review shall be based on ecological site potential, GRSG habitat requirements, existing condition, and state and transition models. An interdisciplinary team that includes the grazing permittee, range ecologists, and sage-grouse biologist shall determine if changes in livestock terms and conditions can be used to meet site-specific objectives. No changes shall be made to permit terms and conditions in regards to sage-grouse if the ID Team determines that:

1. GRSG habitat requirements are being met relative to ecological site potential;

2. Livestock grazing is not a causal factor where GRSF habitat requirements are not being met; or,

3. If the permittee has voluntarily developed a conservation element within their Allotment Management Plan and implementation of the Plan has resulted in a favorable trend for meeting GRSG habitat requirements.

Comments: Permittees need to actively participate in achieving conservation success. When incentives are available for voluntary participation, mutual goals and objectives will lead to creative solutions
Comment Number: NVCASG-14-0040-27
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 28: Under appropriate conditions implement Drought Policy (BLM 20Uc) to protect GRSG PPMAs and PGMA. Implement post drought management to allow for vegetation recovery that meets GRSG life cycle needs in PPMAs and PGMA.

CCA & CFBF Recommended Alternative: Proposed Action LG 28: Under appropriate conditions implement BLM Instruction Memorandum No. 2013-094 for livestock program guidance during drought to provide temporary additional rest for water-stressed plants in PPM/PGMA. Work with livestock permittees and seek input on management decisions that necessitate changes to the annual grazing plan.

Comment Number: NVCASG-14-0040-28
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 29: During the annual grazing application, work with permittees to avoid concentrated turn-out locations for livestock within approximately 3 miles of known lek areas during the March 1 to May 15 period. Avoid domestic sheep use, bedding areas, and herder camps within at least 1.24 miles (2 kilometers) of known lek locations. Utilize land features and roads on maps provided to the permittee to help demarcate livestock use avoidance areas. Require terms and conditions language for affected livestock grazing permits regarding livestock use during the lekking period.

CCA & CFBF Recommended Alternative: Delete Action LG-29

Comments: Blanketed application of 'rules of thumb' will always have exceptions to the rule. These criteria are better suited as guidelines or Best Management Practices.

Comment Number: NVCASG-14-0040-29
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG 30: During the permit renewal process, include terms and conditions language regarding livestock use during the lekking period.

CCA & CFBF Recommended Alternative: Proposed Action LG 30: During the permit renewal process, include terms and conditions language regarding livestock use during the lekking period developed by the ill Team overseeing the permit renewal (See Action LG 27).

Comments: Terms and conditions, if needed, should be developed on a site-specific basis.

Comment Number: NVCASG-14-0040-3
Comment Excerpt Text:
Given these circumstances, CCA and CFBF suggest that California BLM grazing allotments be excluded from the final EIS similar to the action taken to exclude activities on the Modoc National Forest. If the BLM determines that these allotments must remain part of the final EIS, CCA and CFBF would further suggest that any reference to the currently proposed Alternative D be eliminated and in turn apply the standards and guidelines referenced in the Northern eastern California and Northwestern Nevada Standards for Rangeland Health and Guidelines for Livestock Grazing Management (Attachment 2).

The standards and guidelines outlined in Attachment 2 provide a full suite of objectives to properly manage upland soils, streams, water quality, riparian and wetland sites, biodiversity and provide a more appropriate and flexible application of utilization guidelines to determine when and what management actions are required to protect GSG and essential habitat. It is clear that the best on-the-ground results occur when permittees work closely with their federal employee counterparts to implement adaptive management. The standards and guidelines provided in Attachment 2 are far superior to those mandated in Table 2.6 and Table 2.7 of the DEIS because they allow adaptive management to ensure rangeland health objectives are met.

The standards and guidelines provided in Attachment 2 is the result of years of hard work and
collaboration between permittees, academics and various state and federal agencies to provide a workable strategy to conserve GSG populations and improve essential habitat. The Conservation Strategy for Sage-Grouse and Sagebrush Ecosystems within the Buffalo-Skedaddle Population Management Unit is the product of the Northeast California Sage-Grouse Working Group which includes the California Department of Fish and Wildlife, USFWS, BLM, USDA NRCS, Lassen County, Modoc County, the University of California Cooperative Extension and numerous public lands permittees and ranchers. To ignore this document, which is already in place and in use, would represent a considerable step backwards for recognizing the work done by public and private stakeholders to achieve collective GSG and habitat conservation goals.

Comment Number: NVCASG-14-0040-30
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG-CC 1: As climate change data become available through REAs or other ecological studies, identify areas of unfragmented GRSG habitat and key habitat linkages that provide the life-cycle and genetic transfer needs for GRSG. Manage the identified areas as PPMAs.

CCA & CFBF Recommended Alternative: Delete Action L-CC 1

Comments: Current mapping developed by state wildlife agencies and sage-grouse planning groups have accounted for key habitat linkages and genetic transfer needs for GRSG. This proposed action circumvents the State’s authority to manage wildlife through mapping of priority habitat and should be eliminated

Comment Number: NVCASG-14-0040-31
Comment Excerpt Text:

CCA & CFBF Recommended Alternative: Delete Action L-CC 2

Comments: See above comments to D-LG-CC 1

Comment Number: NVCASG-14-0040-32
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Action D-LG-D 1: Due to drought conditions, changes in livestock management may be required to protect PPMAs. The Field Manager or the Forest Service District Ranger should encourage permittees to take voluntary measures to delay turnout, reduce numbers, and adjust livestock operations. Absent voluntary measures to change livestock management by permittees, the District Manager or Forest Service District Ranger would implement appropriate changes to livestock grazing through decision or Annual Operating Instructions

CCA & CFBF Recommended Alternative: Delete Action LG-D 1

Comments: This action is addressed in Action LG 28

Comment Number: NVCASG-14-0040-8
Comment Excerpt Text:
BLM Proposed Action (Alternative D): Objective D-LG I: In PPMAs and PGMAs, manage for vegetation composition and structure consistent with ecological site potential to achieve GRSG seasonal habitat objectives (see Table 2-6).

CCA & CFBF Recommended Alternative: Proposed Objective LG I: In PPMAs and PGMAs, manage for vegetation composition and structure consistent with ecological site potential based upon existing conditions and state and transition models where available

Comments: The habitat objectives in Table 2-6 should not be used as management criteria. They are to be used as general guidelines as originally intended by the authors. The use of ESDs and State and Transition Models should be the primary tools used in managing for habitat objectives as they will take existing site potential and conditions into account
Comment Number: NVCASG-14-0040-9

Comment Excerpt Text:
BLM Proposed Action (Alternative D): Objective D-LG 2: Manage lentic and lotic riparian areas in PPMAs and PGMAs to maintain a component of perennial forbs with diverse species richness and maintain suitable cover; manage adjacent upland habitat to promote adjacent cover relative to site potential to facilitate brood rearing (see Table 2-6).

CCA & CFBF Recommended Alternative: Proposed Objective LG 2: Manage lentic and lotic riparian areas in PPMAs and PGMAs to maintain a diverse component of perennial forbs that are suitable for GRSG cover and forage during brood rearing with adequate groundcover suitable to maintain hydrologic functions and erosion control; manage adjacent upland habitat to promote adjacent cover relative to ecological potential to facilitate brood rearing.

Comments: This objective is very clear and does not require a reference to Table 2-6

Comment Number: NVCASG-14-0050-12

Comment Excerpt Text:
Given the state of degradation and the pervasive nature of livestock grazing, we recommend establishing a utilization rate of 25-30% while meeting sage grouse habitat objectives.

We recommend the following strengthened management approaches to minimize further degradation of sage grouse habitats from livestock grazing and the impacts from feral wild horses.

Management Prescriptions:

i. Management inside SGCAs in sage grouse habitat

• Issue no new grazing permits.
• Identify existing grazing allotments where permanent retirement of the grazing privileges are feasible, and proceed with such retirements.

• Avoid all new structural range improvements, and prohibit water developments and salting within 10 km of active leks.
• Authorize no new water developments for diversion from spring or seep sources.

115 Connelly et al. 2004, page 7-34.
116 Pages 16-21.


• Ensure new or rehabilitated water developments are designed to use best management practices to limit and mitigate potential impacts from the West Nile virus.
• Remove, modify or mark fences in areas of moderate or high risk to sage grouse collisions. 119
• Institute 25-30% grazing utilization standard on existing allotments while meeting objectives for sage grouse habitat conditions.
• Prioritize completion of land health assessments and ensure grazing systems and practices under permit are designed and required to meet sage grouse habitat objectives. Institute timely monitoring to ensure objectives are being met.
• Manage riparian and wetland areas to meet properly functioning condition standards. Manage wet meadows to maintain perennial forbs and a rich species mix needed for sage grouse brood-rearing.
• Review free-roaming horse and burro herd management plans with sage grouse habitat objectives in mind. Aggressively manage herds to maintain them at or below herd management objectives.
ii. Management outside SGCAs in sage grouse habitat

- Identify existing grazing allotments where permanent retirement of the grazing privileges are feasible, and proceed with such retirements.
- Avoid all new structural range improvements, and prohibit water developments and salting within 10 km of active lets.
- Authorize no new water developments for diversion from spring or seep sources.
- Ensure new or rehabilitated water developments are designed to use best management practices to limit and mitigate potential impacts from the West Nile virus.
- Remove, modify or mark fences in areas of moderate or high risk to sage grouse collisions.\textsuperscript{120}
- Institute 25-30\% on existing allotments while meeting objectives for sage grouse habitat conditions.
- Manage rangelands to meet properly functioning condition standards. Manage wet meadows to maintain perennial forbs and a rich species mix needed for sage grouse brood-rearing.
- Manage free-roaming horse and burro populations at levels demonstrated to achieve and maintain sage grouse habitat objectives.

Nevada, a person must prove beneficial use such as stock watering, mining, irrigation, etc. The preferred alternatives (B) and (F) (see DEIS Action LG 15, pg.234) poses a threat to permittees existing water rights by threatening their ability to make beneficial use thereof. Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally managed lands, especially those related to livestock water rights and rights of way to access these water rights.

An example of how valid existing rights will be compromised in the preferred alternative (D) is explained below:

- Appendix A, “Required Design Features,” states that in priority habitat (PPMA), agency action would be to “remove livestock ponds built in perennial channels that are negatively impacting riparian habitat, either directly or indirectly, and do not permit new ones to be built in these areas.”
- Appendix A, “Required Design Features,” would also “remove or modify existing water developments that are having a net negative impact on GRSG habitats.

\textbf{Comment Number: NVCASG-14-0051-8}

\textbf{Comment Excerpt Text:} For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed, as it appears it will be full force and effect. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come up with a 10-year plan that makes progress toward utilization objectives.


120 Ibid.

\textbf{Comment Number: NVCASG-14-0051-1}

\textbf{Comment Excerpt Text:} Specific to stock water rights, Nevada Water Law is based on two principles: prior appropriation and beneficial use. Prior appropriation refers to “first in time, first in right.” To obtain a water permit in
Comment Number: NVCASG-14-0052-4
Comment Excerpt Text:
2.4.4 Alternative D provides for up to 10% adjustment in PPMAs and PGMAs to adapt to changing conditions. Is this adjustment in the boundaries of the management areas? How will these adjustments affect existing permittees and land users?

Comment Number: NVCASG-14-0064-2
Comment Excerpt Text:
For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come up with a 10 year plan that makes progress toward utilization objectives.

Comment Number: NVCASG-14-0066-4
Comment Excerpt Text:
Water and Water Rights: Several of the alternatives that have been developed and analyzed by the BLM indicate a desire to remove, alter or relocate range improvements including watering facilities. The BLM MUST recognize that in the State of Nevada water rights are considered private property. The removal, alteration or relocation of watering facilities that associated water rights will likely result in a "taking", as such the BLM Must work in collaboration with the livestock permittee and water right holder prior to any alterations to water facilities.

Comment Number: NVCASG-14-0083-34
Comment Excerpt Text:
Ch: 2, Sec: 2.8.2, Pg. No.: 196

Text Referencing: Table 2.5; Action D-LG-D 1

Comment: 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.

Comment Number: NVCASG-14-0083-35
Comment Excerpt Text:
Ch: 2, Sec: 2.8.2, Pg. No.: 214

Text Referencing: Table 2.5; Action D-LG-D 1

Comment: 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.

Comment Number: NVCASG-14-0091-35
Comment Excerpt Text:
Action LG 15

There is no discussion on interactions and recognition of water rights or rights of way (RS 2339). No water development should be modified or dismantled unless agreed to by the water rights holder which may or may not be the permittee. Many, or most, of these developments have been permitted and installed at permittee's expense and a number of the developments, including assigned water rights, are privately held.

Comment Number: NVCASG-14-0091-36
Comment Excerpt Text:
Action LG 29

While three mile buffer may be the approximate distance from leks, it may also prove impractical or nonsensical to apply in many instances as the result of topography and other factors. This action should be a guideline to assist when planning allotments with leks. However a specific lek may require much less distance separation for grazing if separated by steep inaccessible topography, etc. Conducting site specific assessments and planning to identify the best alternative can address this concern.

Comment Number: NVCASG-14-0102-1
Comment Excerpt Text:
C: ES.7 states that "The LUPA's will recognize valid existing rights," yet in Alternative D appendix A, "Required Design Features," it states that in priority habitat (PPMA), agency action would be to "remove
livestock ponds built in perennial channels that are negatively impacting riparian habitat, either directly or indirectly, and do not permit new ones to be built in these areas.” It also says to “remove or modify existing water developments that are having a net negative impact on GRSG habitats.” This is not recognizing valid and existing rights, including but not limited to, grazing preference and stock water rights. This language should be removed from alternative D.

**Comment Number: NVCASG-14-0109-17**

*Comment Excerpt Text:*  
140, E, Section 4.9.8, 741

A preferred approach to adjusting grazing, if warranted, would be to work cooperatively with the permittee to develop an AMP that incorporates objectives and proposed changes in the grazing operation incorporated. This provides a direction for the future with assurances and allows for monitoring and adaptive management to assess whether the implemented practices or treatments are achieving the desired results.

**Comment Number: NVCASG-14-0116-6**

*Comment Excerpt Text:*  
In some alternatives, reductions in forage allocations would be borne equally by domestic livestock and wild horses and wild burros, despite the fact that domestic livestock vastly outnumber wild horses and wild burros in terms of: 1) land impacted (66% of BLM land used for domestic livestock vs. 12% of BLM land used for wild horses and wild burros); 2) forage allocated within wild horse and wild burro Herd Management Areas (82+% for private domestic livestock vs. 18% for federally-protected wild horses and wild burros); and 3) population numbers (domestic livestock outnumber wild horses and wild burros by at least 50-1 on BLM land).

**Comment Number: NVCASG-14-0125-4**

*Comment Excerpt Text:*  
Action-D-VEG-23 proposes to manage lotic riparian habitats in conjunction with adjacent terraces and/or valley bottoms as natural fuel breaks to reduce the size and frequency of wildfires. However, Action D-LG 2 demands that any area not meeting (or not making progress toward) sage grouse objectives will face a rest and deferment period and/or limited grazing. These are contradictory in that the required rest will allow a buildup of fuel loads. Further contradiction exists in the requirements for tall forb habitats and proposed seeding of sagebrush throughout the region.

**Comment Number: NVCASG-14-0125-9**

*Comment Excerpt Text:*  
The goals and objectives proposed for livestock grazing remain unattainable and unmanageable. The single goal enumerated for livestock grazing is to “manage livestock grazing to maintain and/or enhance PPMAs and PGMAs to meet all life cycle requirements of the GRSG during permit administration.” BLM and USFS are currently unable to meet current permit administration requirements such as monitoring, yet livestock will now be held solely responsible for meeting all life cycle requirements for sage grouse.

**Comment Number: NVCASG-14-0132-2**

*Comment Excerpt Text:*  
Many of the Livestock Grazing Actions refer to Tables 2.6 and 2.7. However, there exists absolutely no science-based nexus between “Proposed Habitat Objectives for Greater Sage-Grouse” (Table 2.6) and the “Guidelines for Establishing Allowable Use Levels if Not Meeting (or Not Making Progress Toward) GRSG Objectives (Table 2.7), and there is absolutely no science-based correlation between the generic Rangeland Health Standards and the relatively specific “optimum” habitat requirements of GRSG.

**Comment Number: NVCASG-14-0132-29**

*Comment Excerpt Text:*  
Action D-LG 20. There is no science-backed basis for this Action item. It should be removed from the final document. This provision as written may very well preclude range infrastructure and practices that would be beneficial to livestock distribution and riparian habitats, because the structure/practice may be on a ridgeline, but the ridgeline is less than ½ mile from riparian areas to either (or one) side of the
ridge. At the very least the Action item should be modified to allow such practices less than ½ mile from the riparian areas, if they will serve the desired purpose of not concentrating livestock on the riparian areas.

**Comment Number: NVCASG-14-0132-30**
*Comment Excerpt Text:*
Action D-LG 29. This Action item should be removed from the final document. There is no science-based nexus between the presence of concentrated livestock turnout within 3 miles of a lek and any documented harm to GRSG or its habitat. The same is true of sheep bedgrounds within 2 km of any known lek.

**Comment Number: NVCASG-14-0132-31**
*Comment Excerpt Text:*
Action D-LG 30. This Action item should be removed from the final document. There is no science-based nexus between the mere presence of livestock on the rangeland and lekking activity.

**Comment Number: NVCASG-14-0132-8**
*Comment Excerpt Text:*
Table 2.6 is self-contradictory, because “meadows” and riparian streambanks generally have to be covered with deep-rooted sod-forming grasses in order to be considered PFC; however, those meadows and streambanks with such grass cover preclude or severely restrict the establishment and growth of forbs.

**Comment Number: NVCASG-14-0148-3**
*Comment Excerpt Text:*
D, action LG 16: Clarify "vegetation treatment" in first reference. Clarify what a treatment area is.

**Comment Number: NVCASG-14-0148-6**
*Comment Excerpt Text:*
D LG 29: Rewrite to: Define concentrated turnout areas; clarify whether the action designed to address sage grouse themselves, or the habitat; address concerns that a three-mile buffer seems excessive, especially on small allotments. It really represents a six-mile swath.

**Comment Number: NVCASG-14-0148-7**
*Comment Excerpt Text:*
Clarify the reference for the three-mile buffer.

**Comment Number: NVCASG-14-0148-9**
*Comment Excerpt Text:*
D LG 30: Need to define terms and conditions language. This is unclear as written. Clearly state the terms and conditions during lekking season. Habitat restoration/vegetation management

**Comment Number: NVCASG-14-0169-32**
*Comment Excerpt Text:*
Alternative C would prohibit grazing in PPMAs and require the removal of grazing infrastructure such as fences, spring developments, stock ponds, water troughs, pipelines, and wells. This management action is severely restrictive, contrary to the multiple use mandate, and does not recognize that grazing can benefit GRSG habitat. Further, the proposal to remove grazing infrastructure is not warranted and does not recognize or analyze the negative effects that such removal would cause.

5. First, the removal of such infrastructure would increase the disturbance of GRSG habitat, at least temporarily, and could promote the spread of invasive weeds.

6. Second, this proposal does not analyze the negative effects that removal of grazing infrastructure may have on GRSG populations and habitat due to the exposure of riparian areas to wild horses and burros.

**Comment Number: NVCASG-14-0171-10**
*Comment Excerpt Text:*
Because there will be ongoing opportunities for restoring AUMs through various means, this document should not be the vehicle for reducing permitted AUMs, even if reductions in grazing should be necessary for a time. Reductions should be placed in "rest" until such time that juniper treatments, fire rehabilitation or other means have re-established the ability of the landscape to sustain the grazing again. An example of this is the Sage Steppe Ecosystem Restoration Strategy EIS (2008).
Leaving AUMs in "rest" rather than reducing them provides incentives for both the agency and the livestock operator to be creative in developing solutions that could restore that grazing. This is the underlying premise of the Modoc-Washoe Experimental Stewardship Program authorized by the Public Rangeland Improvement Act (1978). This designation includes the BLM Surprise Field Office and the Warner Mountain Ranger District of the Modoc National Forest. The ESP Steering Committee continually searches for those solutions that incentivize grazing management practices that can return "rested" or "suspended" AUMs to use.

**Comment Number: NVCASG-14-0171-19**
**Comment Excerpt Text:**
Action LG 4

NRCS Ecological Site Descriptions (ESDs) should be the basis for the agencies' land health assessments.

**Action LG 5**

ESDs should guide the determination of site potential. Goals should not be developed that the site potential cannot meet. Again this takes us to using the best available local data rather than stretching one set of objectives over a broad landscape. The County attended an early planning team meeting in Reno where the planning team agreed to shift from the WAFWA sourced data and utilize the USGS localized data presented by Peter Coates. The goals and objectives need to be reset using this kind of local on-the-ground data set to determine potential for habitat improvement.

**Action LG 8**

Appropriate plans should be the basis for considering management actions. These can be farm/conservation plans from NRCS that include both the base property and the grazing allotment or Allotment Management Plans/Annual Operating Instructions from the agencies prepared in coordination with the permittees.

**Comment Number: NVCASG-14-0171-21**
**Comment Excerpt Text:**
There are many allotments that are configured poorly for rest systems or are just too small to accommodate rotational grazing systems. It should be clarified that management actions will be taken only when habitat objectives are not trending upward and grazing is the responsible cause. Further clarification is needed to allow for differences in site potential. There are areas that cannot meet the proposed standards. Consider including language that shows livestock grazing can be used as a management tool for improving Sage Grouse conditions (controlling cheat grass, medusa head etc. and reducing fire risk). Reference the work by James Clements of the Agricultural Research Service on cheat grass.

**Comment Number: NVCASG-14-0171-22**
**Comment Excerpt Text:**
Action LG 16

Vegetation treatment and treatment area need to be more clearly defined. Treatments need to be designed as much as possible to accommodate grazing, like using pasture fences as planning area boundaries or designing treatment times around pasture rotations, etc. and clearly coordinating implementation with the permittee.

**Comment Number: NVCASG-14-0171-23**
**Comment Excerpt Text:**
Action LG 20

This is an example of a one-size-fits-all that should only be a guideline. There will be allotments that geography, allotment and pasture boundaries and other restrictions will not allow this to be met. There appears to be no studies to justify doubling the existing guideline. Salting, watering facilities, corrals, feeding areas are all part of plans developed in coordination with permittees and should conform to the site specific location.
Comment Number: NVCASG-14-0171-26
Comment Excerpt Text:
Action LG 28

Currently the Northeast California BLM Field Offices have, as per BLM policy, local drought policies that have been developed in conjunction with the local grazers that have proven to be workable. Local drought policies should be referenced and provide the guidance if they exist.

Comment Number: NVCASG-14-0171-28
Comment Excerpt Text:
Action LG 30

The terms and conditions need to be defined. What are the terms and conditions as related to lekking season? Again these may or may not be implementable given the characteristics of the allotment. Coordination with the permittee will be required.

Comment Number: NVCASG-14-0171-29
Comment Excerpt Text:
Table 2.7

There is no validity to the standard for no grazing in brood rearing areas in habitat not meeting or making progress toward desired Sage Grouse objectives. There may be no difference in Sage Grouse use of grazed and un-grazed meadows in mid-summer. (Evans 1986) In additions Sage Grouse actually prefer meadows in late summer that had been grazed in the spring. This is attributed to the birds preferring the high palatability and nutritional value of the newer growth.

Comment Number: NVCASG-14-0171-6
Comment Excerpt Text:
The County understands the rationale for eliminating the proposed livestock grazing alternative from a detailed analysis. However, it is important to carry the theme of that proposed alternative through the alternative development process and display those elements that are appropriate.

Comment Number: NVCASG-14-0171-8
Comment Excerpt Text:
There are many conditions that would cause habitat to be less than suitable that grazers cannot fix. Perches, whether they be tall trees or structures within a certain distance of the lek or the fact that often leks are located on or near heavy use areas like salting grounds (Klebenow, 1985) are examples. There must be a connection between livestock utilization and the failure to meet clearly delineated objectives before proposing to make changes in grazing standards.

Comment Number: NVCASG-14-0172-2
Comment Excerpt Text:
Many of our members graze within the Modoc-Washoe Experimental Stewardship Program area. Within this area, the guiding Steering Committee, whose membership represents a full spectrum of stakeholders and interested public, seek win-win solutions to ecological problems. They have found that providing incentives, to both the agencies and the users alike, creates opportunities for success. Consequently we urge you adopt the ESP model of putting AUMs at rest for a period of time, rather than across the board approach of reducing permitted AUMs. That way, when opportunities appear to implement activities that can again put those AUMs back to use, no additional environmental review is necessary. Otherwise additional NEPA work must be done, that often is beyond the workload capability of the agency staff to complete.

Comment Number: NVCASG-14-0175-2
Comment Excerpt Text:
The Nevada Rangeland Monitoring Handbook (NCE 2006) and most agency handbooks should be used to guide grazing management at the allotment level. The key management area concept is inconsistent with these guide lines. In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the Sage Grouse habitat standards defined in Table 2.6. By this proposed action a significant loss of AUM’s would create substantial economic difficulty in maintaining a sustainable ranching operation.
Comment Number: NVCASG-14-0179-1
Comment Excerpt Text:
Quality habitat is essential for thriving sage grouse populations. The objectives in Table 2.6 will be impossible to achieve throughout large grazed units. Immediate removal of grazing (3-5 days) if a portion of a unit meets or exceeds guidelines is unrealistic. The Guidelines for Allowable Use Levels (Table 2.7) are not needed. The grazing Standards and Guidelines already in place are quite adequate to assure quality sage grouse habitat. No grazing of riparian areas between May 15 and August 30 in brood rearing areas is counterproductive. Grazed meadows are highly favored by chicks for their insects and animal droppings when not overgrown by vegetation.

Comment Number: NVCASG-14-0180-2
Comment Excerpt Text:
The document inappropriately identifies "grazing" by livestock, wild horses and wildlife generally into a single threat category. The document must rectify this issue by identifying that livestock grazing is currently the most regulated use of public lands, while management of wild horses is the responsibility of the federal land management agencies and management of wildlife is the responsibility of the state wildlife agency.

Comment Number: NVCASG-14-0180-7
Comment Excerpt Text:
…there appears to be a major discrepancy between the BLMs document and the US Fish and Wildlife Service’s analysis of grazing. On page xvii of the Executive Summary the document states, Commenters stated that national grazing policies should be reformed as the requirements are too limiting and impact ranchers’ livelihoods. Decisions about livestock grazing national policies are outside the scope of this amendment and are not made in this planning effort. However, the reduction or elimination of livestock (i.e., permitted grazing use) in GRSG habitat is considered. This is consistent with 1M No. 2012-169, RMP Alternative Development for Livestock Grazing (BLM 201 2a).

In stark contrast, the notice of 12-month petition findings (page 13940 I Federal Register I Vol. 75, No. 55 I Tuesday, March 23, 2010 I Proposed Rules) from the US Fish and Wildlife Service states,
Aldridge et al. (2008, p. 990) did not find any relationship between sage-grouse persistence and livestock densities. However, the authors noted that livestock numbers do not necessarily correlate with range condition. They concluded that the intensity, duration, and distribution of livestock grazing are more influential on rangeland condition than the livestock density values used in their modeling efforts (Aldridge et al. 2008, p. 990).

With this being the case, the last thing the BLM should be considering is reduction or elimination of livestock. As such, Alternatives B, C and F should be eliminated from further consideration. The Livestock Grazing Goals, Objectives and Management Action under Alternative D should be eliminated in addition to any reference to Table 2.6 or 2.7. Furthermore, every effort should be made to work collaboratively with permittees in areas where range health standards are not being met - if livestock grazing is a casual factor in not meeting standards. All existing regulations that provide more flexibility to livestock operators should be available in the collaborative planning process (i.e. Temporary Non-renewable Permittee, Stewardship Contracting, and Allotment Management Plans) as well as implementation of NRCS Sage-grouse Initiative-approved conservation measures.

Comment Number: NVCASG-14-0188-14
Comment Excerpt Text:
Page 195, Alternative B, Action B-LG 2
Incorporation of sage-grouse habitat objectives within all BLM and Forest Service grazing allotments within PPMAs by itself will not make any on-the-ground change in habitat conditions. The means to achieve these habitat objections have to become part of the allotment grazing plan, which must include vegetation management and livestock grazing management modifications. Modifying grazing without modifying
the vegetation, or modifying the vegetation without modifying the grazing, cannot achieve the habitat objectives.

**Comment Number: NVCASG-14-0188-15**
**Comment Excerpt Text:**
Page 195, Alternative D, Action D-LG 2

There is an erroneous assumption in this action element that changes in grazing practices, time of use, etc. will improve conditions for sage-grouse. This is not likely the case where sagebrush is the dominant plant on the landscape and the goal is to achieve greater abundance of perennial grasses and forbs. Once sagebrush has established on a site and reached canopy cover values of between 12 and 20 percent, this plant is capable of out-competing perennial grasses and forbs for limited nutrients and water. Only with changes in the shrub canopy can greater abundance of perennial grasses and forbs be achieved. Abusive grazing enhances the competitive advantage of sagebrush, but the removal of livestock grazing cannot reverse a biological and ecological condition that is not the result of livestock grazing.

**Comment Number: NVCASG-14-0188-16**
**Comment Excerpt Text:**
Page 198, Alternative B, Action B-LG 7

While this action element seems to be dead on, it is not clear if "manage for vegetation composition and structure consistent with ecological site potential and within the reference state" is to be achieved only by changes in livestock management, or through vegetation treatments; if the former, then this will result in a train wreck. Ecological site potential is a target or goal; it is not sustainable without periodic inputs of energy (i.e. disturbance) to modify the vegetation. The reference state is not a "steady state" condition; it is a condition that occurs for some period of time on the landscape and is subject to modification due to plant-plant interactions (i.e., competition) and plant-animal interactions (e.g., herbivory), among other change vectors. Once this condition is achieved, it cannot be maintained in perpetuity by grazing management. Thus, while the objective of this action element may be laudable, the achievement of this objective is not likely to occur, and certainly is not going to last if grazing management is the only management tool to be used.

Page 198, Alternative 0, Action D-LG 8

The comment above for Action B-LG 7 is applicable to this action element. The only actions in this element are livestock management related. This alone cannot achieve the objective of Action B-LG 7.

Page 198, Alternative E, Action E-LG 8

The comment above for Action B-LG 7 is applicable to this action element. The only actions in this element are livestock management related. This alone cannot achieve the objective of Action B-LG 7.

**Comment Number: NVCASG-14-0188-18**
**Comment Excerpt Text:**
Page 203, Alternative B and F, Action B-LG 16 and F-LG 16

No discussion of short-term or long-term time frames. Some treatments may take time to fully restore sage-grouse habitat values, and some treatments will provide long-term benefits to sage-grouse as the vegetation changes over time. As written, treatments with short-term impacts but long-term benefits could be prohibited under these alternatives.

**Comment Number: NVCASG-14-0188-19**
**Comment Excerpt Text:**
Page 207, Alternative B Action B-LG 23 and Alternative F Action F-LG 23

The option of re-opening grazing privileges if a new permittee acquires a ranch/allotment where grazing privileges have been retired should also 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. But 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.

**Comment Number: NVCASG-14-0195-16**  
*Comment Excerpt Text:*
Alternative Number: D

Section: VEG 12

Comment: 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.

**Comment Number: NVCASG-14-0199-53**  
*Comment Excerpt Text:*

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.

**Comment Number: NVCASG-14-0238-13**  
*Comment Excerpt Text:*
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.

**Comment Number: NVCASG-14-0259-4**  
*Comment Excerpt Text:*
select an alternative for the Final LUPA/EIS that will encourage private land owners to partner with agencies and use methods such as prescriptive grazing to suppress undesirable vegetation types that are preventing GRSG objectives from being achieved (see proposed Action Alternative D-VEG-ISCE 2 in Chapter 2, Table 2.5, and page 141).

**Comment Number: NVCASG-14-0270-1**  
*Comment Excerpt Text:*
Action E-LG 33: The wording of this is fine up until the last five words. "...herbage removal within acceptable limits" puts the emphasis on leaf area 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. accepted with revision 2014) A standard utilization level is an approach bound to fail because it cannot be adequately monitored everywhere whenever needed.

**Comment Number: NVCASG-14-0278-15**  
*Comment Excerpt Text:*
EIS Section: Table 4-2, Chapter & Page: p 174

Comment: "Action B-FFM-HFM 13: During fuels management project design, consider the utility of using livestock to strategically reduce fine fuels (Diamond et al. 2009), and implement grazing management that will accomplish this objective
Consult with ecologists to minimize impacts on native perennial grasses."

It is unwise to assume that all "ecologists" understand grazing management, and have an appropriate background in plant development, growth, physiology and response to defoliation. You want an experienced grazing management specialist, who in all likelihood may not be a federally recognized ecologist.

**Comment Number: NVCASG-14-0278-18**

**Comment Excerpt Text:**

EIS Section: Table 4-2, Chapter & Page: p 194

Comment: "Action C-LG 1: No grazing will be allowed in PPMAs. Livestock grazing will be phased out over a period of three years, in accordance with grazing regulations 4110.4-2."

This action is not consistent with the level of the threat. There is no record of sage-grouse ever being extirpated from any area due to livestock grazing. Yes, poorly managed grazing can alter habitat characteristics and these changes could result in depressed populations, but there is no evidence that any population, sub-population or other classification unit has been lost due to the effects of grazing. Numerous studies have shown the direct and indirect benefits that managed grazing can have for sage-grouse (e.g., Neel 1980; Klebenow 1982, 1985; Evans 1986) or their habitat (e.g., Laycock 1967; Davies 2009, 2010). Furthermore, numerous studies have found very small or no increases in the perennial herbaceous component of sagebrush rangelands after the removal of livestock and at times found greater increases in the perennial herbaceous plants on adjacent moderately grazed sites (Sneva et al. 1980, Holechek & Stephenson 1983, West et al. 1984). Finally the proposal is not consistent with the provisions and legal requirements in the Taylor Grazing Act, the Federal Land Management and Policy Act, the Forest Management Act.

**Comment Number: NVCASG-14-0278-23**

**Comment Excerpt Text:**

EIS Section: Table 2-4, Chapter & Page: p 203

Comment: Action B-LG: In PPMAs, only allow treatments that conserve, enhance or restore GRSG habitat (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve GRSG habitat). The comment below applies to all sections of the EIS that use similar language about conserving, benefiting, restoring, enhancing, or improving GRSG habitat or populations.

It is unclear how the authors are defining the term conserve. It means not harm then this statement should include actions that are neutral with respect to sage-grouse. As it is written, any action that has a neutral effect on sage-grouse is precluded, even if said action benefits other resources.

**Comment Number: NVCASG-14-0278-24**

**Comment Excerpt Text:**

EIS Section: Table 2-4, Chapter & Page: p 206

Comment: "Action D-LG 20: Salting and supplemental feeding locations, livestock watering and handling facilities (corrals, chutes, etc.) would be located at least 1/2-mile from riparian zones, springs, and meadows, or active leks in PPMAs and PGMA. The distance can be greater based on local conditions."

In many areas it will be difficult, and sometimes impossible to find locations at least one-half mile from the features identified in this action. This unnecessarily precludes the use of a management tool that may be useful. In other situations only a few locations in an allotment, or large portion of an allotment, will fit the distance criteria. For salt and nutrient supplements, this will result in the same spots being used annually, which is likely to result in unnecessary degradation of those areas.
Comment Number: NVCASG-14-0278-26
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: p 208

Comment: Action D-LG 26(also Action D-27, page 209): Grazing permit transfers would not be approved without review of GRSG habitat conditions. Where GRSG objectives (See Table 2-6) are not being met in an allotment and causal factors are attributable to livestock grazing, adjust the annual grazing authorization or operating instructions to reflect the allowable use levels as identified in Table 2-7 prior to the next grazing season. The Habitat Assessment Framework will be the tool to determine the level to which standards are or not being met.

Reducing forage utilization levels is pointless if the primary problem is improper season of use year after year. Grazing management solutions have to address the specific cause of the problem, not rely solely on utilization levels.

Comment Number: NVCASG-14-0285-52
Comment Excerpt Text:
Collisions with fences pose a potentially major cause of mortality for sage grouse. Stevens et al. (2013) found that fence collisions are an important source of grouse mortality, and fences on flat areas near leks were a particularly high risk for causing sage grouse fatalities. Attachment 14. Christiansen (2009) found similar results in a WGFD investigation near Farson, Wyoming, but found that marked fences also were a significant mortality cause for sage grouse; marking fences reduced grouse collisions by only 61%. Attachment 15. Of course, eliminating fences has the effect of reducing collisions to zero. With this in mind, fences in sage grouse Preliminary Priority and General Habitats should be inventoried to identify the minimum necessary fencing required for livestock management. Fences determined to be unnecessary should be removed, especially in flat areas near leks, and remaining fences should be outfitted with reflectors or other visibility devices to reduce sage grouse collisions. No new fences should be permitted in sage grouse habitats within Priority Areas. New fences should be precluded on all lands within Priority Habitats, and the RMP should include language to prioritize dismantlement of existing fences and addition of visibility markers for those that remain.

Comment Number: NVCASG-14-0285-63
Comment Excerpt Text:
The potential conflict between livestock grazing and sage grouse is intensified near water sources due to the importance of these areas to sage grouse. Heavy cattle grazing near springs, seeps, and riparian areas can remove grasses used for cover by grouse (Klebenow 1982). According to Call and Maser (1985: 17), “rapid removal of forbs by livestock on spring or summer ranges may have a substantial adverse impact on young grouse, especially where forbs are already scarce.” BLM should require the fencing off of natural springs with buck-and-pole fences (to reduce collision mortalities) and place livestock water sources outside the fences rather than at the spring itself. If past actions have dried up natural springs or wetlands to create stock tanks, then remedial action should be required return some water to ground for sage grouse and vegetation, in an area protected from livestock.

Comment Number: NVCASG-14-0285-64
Comment Excerpt Text:
Holloran (1999) documented that livestock disturbance caused a sage grouse hen to abandon her nest in one case. Call and Maser (1985: 17) noted that nest desertion is most prevalent in the vicinity of sheep bed grounds, and reached the following conclusion: “There is no indication that livestock are a serious factor in the destruction of nests, although desertion of nests because of livestock activities is frequent under certain conditions.” In addition, the presence of livestock in 48 nesting habitats can cause problems for sage grouse. Livestock drives could also negatively impact sage grouse populations during the nesting season. According to Call and Maser (1985: 18), “Hens abandon their nests with little provocation during the egg-laying period (mid-April through early May). Yearling hens are prone to abandon their nests even when disturbed during incubation. The impact of a livestock drive could, therefore, be great because
yearling hens are usually the largest reproductive age class.” For allotments where sage grouse nesting is known to occur, shifting on-off dates (if necessary) could minimize the chances of impacts to nesting sage grouse, and livestock drives should be routed to avoid sage grouse leks during the strutting and nesting seasons.

**Comment Number: NVCASG-14-0285-65**
**Comment Excerpt Text:**
Manier et al. (2013) provides a fairly comprehensive review of potential impacts of livestock grazing on sage grouse. These researchers point out that a reduction in livestock stocking rates can directly increase residual vegetation substantially, potentially assisting in meeting this target level for grasses. Sage grouse require residual grass as cover as a component of nesting habitat. BLM should include residual grass requirements inside all sage grouse habitats to be applied in as amendments to Allotment Management Plans. Kaczor (2008) found that a residual stubble height of 10.2 inches best provided for the habitat needs of nesting sage grouse in South Dakota. The RMP should include at least one alternative that targets a residual summer height of 18 cm throughout sage grouse nesting habitat during the nesting season.

**Comment Number: NVCASG-14-0285-66**
**Comment Excerpt Text:**
The Nevada – Northeastern California RMP amendment should implement its management standards such that this direction is achieved. Furthermore, we recommend that BLM should include a provision to retire livestock grazing allotments on a willing-permittee basis when they come up for renewal under all alternatives, as is included under all alternatives in the BLM’s South Dakota RMP Draft EIS. Allowing retired allotments to be purchased and taken out of service is a far preferable outcome for grouse. Therefore, language in Alternative D conditioning retirement of grazing permits on sage grouse habitat enhancement objectives is unnecessary and irrelevant; unless the agency can articulate a justification for sage grouse habitat objectives not being enhanced by permit retirement, it should presumptively accept that improvements in native understory composition, residual grass height, forb production, alleviation of soil compaction, alleviation of biological soil crust destruction, and alleviation of cheatgrass expansion will necessarily improve sage grouse habitats.

**Comment Number: NVCASG-14-0285-86**
**Comment Excerpt Text:**
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

**For Priority Habitats:**

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of
existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns 68 within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12%
cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/ Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment). 70

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient...
supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12”, except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

**Comment Number: NVCASG-14-0308-16**

*Comment Excerpt Text:*

Action D-LG 2: Within PPMAs and PGMA containing GRSG nesting habitat, implement the following management actions, if not meeting GRSG habitat objectives:

- Provide periods of rest or deferment during critical herbaceous growth period
- Limit grazing duration to allow plant growth sufficient to meet GRSG habitat objectives (see Table 2-6)
- Employ herd management techniques to minimize impacts of livestock on nesting habitat during the nesting season (March 1 - June 30).

Comment: This Action would apparently be implemented during grazing permit renewals. The DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years. The DEIS should have included a spreadsheet of the permit expirations for planning area allotments and the dates when the agencies plan to undertake analysis to demonstrate the degree to which this Action would be implemented. Nor does the LUPA/DEIS establish that meeting the GRSG habitat objectives in Table 2-6 will conserve sage-grouse.

**Comment Number: NVCASG-14-0308-17**

*Comment Excerpt Text:*

Action D-LG 4: Continue land health assessments on BLM public lands or other monitoring methods on Forest Service-administered lands in PPMAs and PGMA to evaluate current conditions as compared to GRSG habitat objectives described in Table 2-6. Incorporate the results of BLM and Forest Service monitoring and land health assessments into future management applications to ensure progress toward meeting GRSG habitat objectives.

Comment: When this Action would be implemented is completely uncertain since BLM is not required to conduct land health assessments with any frequency and the Preferred Alternative ignores the NTT recommendation to prioritize completion of land health assessments in priority sage-grouse habitats. The DEIS should have included a timetable for land health assessments and the frequency with which repeat assessments will be made. The LUPA/DEIS has not established that meeting the GRSG habitat objectives in Table 2-6 will conserve greater sage-grouse or its habitat.

**Comment Number: NVCASG-14-0308-18**

*Comment Excerpt Text:*

Action D-LG 10: Manage riparian areas and wet meadows for proper functioning condition (Forest Service may use other analysis) within PPMAs and PGMA.

Comment: This Action would apparently be implemented during grazing permit renewals. The DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years. The DEIS should have included a spreadsheet of the permit expirations for planning area allotments and the dates when the agencies plan to undertake analysis to demonstrate the degree to which this Action would be implemented. The LUPA/DEIS does not establish that managing riparian areas and wet meadows for proper functioning condition will conserve crucial greater sage-grouse brood-rearing habitat.

**Comment Number: NVCASG-14-0308-19**

*Comment Excerpt Text:*

Action D-LG 13: In PPMAs and PGMA, apply principles of prescriptive livestock grazing that control time and timing of grazing so that hot season use does not occur on an annual basis.

Comment: This Action would apparently be implemented during grazing permit renewals. The
DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years. Reductions in hot season grazing should apply to all sage-grouse habitat in all years to conserve sage-grouse.

**Comment Number: NVCASG-14-0308-20**

**Comment Excerpt Text:**
Action D-LG 14: Authorize new water development for diversion from spring or seep source when PPMAs and PGMAs would benefit from the development.

Comment: This Action would apparently be implemented during grazing permit renewals but the failure to include the NTT recommendation to include developing new water sources for livestock as part of an AMP/conservation plan to improve GRSG habitat suggests that the agencies are being deliberately obtuse. Unless this Action is modified to specifically tie the authorization to an allotment management plan or grazing management NEPA analysis it promote sage-grouse habitat degradation. If the agencies were serious about conserving sagegrouse the Preferred Alternative would include a moratorium on all new water developments that divert water from in springs or seeps.

**Comment Number: NVCASG-14-0308-23**

**Comment Excerpt Text:**
Action D-LG 18: In PPMAs and PGMAs, assess and modify as needed existing structural range developments to make sure they conserve, enhance, or restore GRSG habitat.

Comment: This Action would apparently be implemented during grazing permit renewals. The DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years.

**Comment Number: NVCASG-14-0308-25**

**Comment Excerpt Text:**
Action D-LG 20: Salting and supplemental feeding locations, livestock watering and handling facilities (corrals, chutes, etc.) would be located at least 1/2-mile from riparian zones, springs, and meadows, or active leks in PPMAs and PGMAs. The distance can be greater based on local conditions.

Comment: This Action would apparently be implemented during grazing permit renewals. It is completely inadequate to protect crucial sage-grouse use areas. The most significant environmental predictor of lek persistence or abandonment is the level of anthropogenic disturbance within 3.1 miles of the lek (Knick and Hanser, 201131). The NTT Report at 20-21 notes that even a four mile buffer would be inadequate to protect nesting sage-grouse. The half mile distance is a small fraction of these recommended distances. The DEIS utterly fails to demonstrate that this proposed action will help conserve sage-grouse or their habitat.

**Comment Number: NVCASG-14-0308-27**

**Comment Excerpt Text:**
Action D-LG 24: Establish vegetation treatment project monitoring sites prior to project implementation. Measure project monitoring sites annually during the livestock grazing closure period.

Comment: It is unclear when this Action would occur but would apparently be implemented during grazing permit renewals per Action D-LG 16. It is also unclear what the intent of this measure is. If the agencies are seeking to determine the effectiveness of vegetation treatments then exclosures need to be established to exclude livestock.

**Comment Number: NVCASG-14-0308-29**

**Comment Excerpt Text:**
Action D-LG 27: Utilize the GRSG habitat assessment framework and adjust terms and conditions in the grazing permit renewal process where GRSG objectives (See Table 2-6) are not being met in an allotment and causes are attributable to livestock grazing. Where habitat conditions as defined in Table 2-6 are not being met, and causal factors are attributable to livestock grazing, adjust the annual grazing authorization or operating instructions to reflect the allowable use levels as identified in Table 2-7 prior to the next grazing season. The Habitat
Assessment Framework will be the tool to determine the level to which standards are or not being met.

Comment: This Action would be implemented during grazing permit renewals. The DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years. The DEIS should have included a spreadsheet of the permit expirations for planning area allotments and the dates when the agencies plan to undertake analysis to demonstrate the degree to which this Action would be implemented. Nor does the LUPA/DEIS establish that meeting the GRSG habitat objectives in Table 2-6 will conserve sagegrouse.

Comment Number: NVCASG-14-0308-30
Comment Excerpt Text:
Action D-LG 28: Under appropriate conditions implement Drought Policy (BLM 2011c) to protect GRSG PPMAs and PGMAs. Implement post-drought management to allow for vegetation recovery that meets GRSG life cycle needs in PPMAs and PGMAs.

Comment: BLM Drought Policy is already in effect. The second sentence, “Implement post drought management to allow for vegetation recovery that meets GRSG life cycle needs in PPMAs and PGMAs” is sufficiently vague to be meaningless since the DEIS provides no post drought management guidance.

Comment Number: NVCASG-14-0308-31
Comment Excerpt Text:
Action D-LG 29: During the annual grazing application, work with permittees to avoid concentrated turn-out locations for livestock within approximately 3 miles of known lek areas during the March 1 to May 15 period. Avoid domestic sheep use and bedding areas, and herder camps within at least 1.24 miles (2 kilometers) of known lek locations. Utilize land features and roads on maps provided to the permittee to help demarcate livestock use avoidance areas. Require terms and conditions language for affected livestock grazing permits regarding livestock use during the lekking period.

Comment: The 1.24 miles (2 kilometers) distance from leks for domestic sheep use bedding areas and herder camps is inadequate. The most significant environmental predictor of lek persistence or abandonment is the level of anthropogenic disturbance within 3.1 miles of the lek (Knick and Hanser, 2011). The NTT Report at 20-21 notes that even a four mile buffer would be inadequate to protect nesting sage-grouse.

Comment Number: NVCASG-14-0308-32
Comment Excerpt Text:
Action D-LG 30: During the permit renewal process, include terms and conditions language regarding livestock use during the lekking period.

Comment: This Action would be implemented during grazing permit renewals. The DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years.

Comment Number: NVCASG-14-0309-5
Comment Excerpt Text:
The paper “A Blueprint for Sage-grouse Conservation and Recovery (Braun 2006) states “if livestock grazing is permitted on public rangelands, it is to not exceed 25-30% utilization of herbaceous forage each year. Grazing should not be allowed until after 20 June and all livestock should be removed by 1 August with a goal of leaving at least 70% of the herbaceous production each year to form residual cover to benefit sage-grouse nesting the following spring.” The DEIS does not adopt any such meaningful management parameters

Comment Number: NVCASG-14-0311-14
Comment Excerpt Text:
Like Alternative A, Alternative B would allow livestock grazing on 39.7 million acres in Sage-grouse habitat, at least in theory. However, there are a number of restrictive provisions that undermine access to habitat, especially Preliminary Priority Management Areas (“PPMAs”). Alternative B should make crystal clear that the NTT Report’s recommendation of no more than 3 percent
anthropogenic disturbance does not apply to livestock grazing. Although this appears to be the case in the NTT Report itself that report could have been more clearly written. The 3 percent cap appears to apply to "discrete anthropogenic disturbances." NTT Report at 7. Disturbances are later defined as either discrete, and covered by the 3 percent cap, or diffuse and apparently not covered by the cap. Livestock grazing is considered a diffuse disturbance. Id. at S. However, the DEIS did not clearly state that the NTT Report's 3 percent cap is inapplicable to livestock grazing. This omission should be clearly corrected in the FEIS.

Comment Number: NVCASG-14-0311-26
Comment Excerpt Text:
none of the proposals within the various action alternatives adequately acknowledges that the No Action Alternative would protect Sage-grouse habitat through limitations to areas open to grazing or available animal unit months ("AUMs"), modification of grazing strategies, or changes to seasons of use, as described in the nature and types of effects that could occur under the various action alternatives. See Section 4.9.2. Y -3 II notes that the Idaho DEIS cites to scholarly articles for the benefits of livestock grazing regarding control of noxious weed invasion, fire prevention and moderation, and prevention of habitat fragmentation. See Idaho DEIS, Section 4.2.3, page 4-50. The Nevada DEIS, Section 4.9.2, lacks similar recognition of the benefits of livestock on public lands.

Comment Number: NVCASG-14-0330-5
Comment Excerpt Text:
Alternative A, Livestock Grazing, Table 2.8 states: "Wildfire would remove livestock forage over the short term but can result in increases in forage post fire. Impacts on livestock operations could also occur when a livestock grazing rest period is required following vegetation stabilization and rehabilitation treatments post-fire. These required rest periods may impact the ability of livestock operators to fully utilize permitted AUMs." The Department recommends that the Draft LUPA/EIS fully describe the current practices regarding the management of livestock post fire, including vegetative response and utilization based on monitoring data.

Comment Number: NVCASG-14-0345-3
Comment Excerpt Text:
There is no alternative in the Draft LUPA/DEIS that combines vegetation management and livestock management with the common goal of improving or maintaining the integrity of ecological sites.

Comment Number: NVCASG-14-0345-4
Comment Excerpt Text:
Page 195, Alternative D, Action D-LG 2

There is an erroneous assumption in this action element that changes in grazing practices, time of use, etc. will improve conditions for sage-grouse. This is not likely the case where sagebrush is the dominant plant on the landscape and the goal is to achieve greater abundance of perennial grasses and forbs. Once sagebrush has established on a site and reached canopy cover values of between 12 and 20 percent, this plant is capable of out-competing perennial grasses and forbs for limited nutrients and water. Only with changes in the shrub canopy can greater abundance of perennial grasses and forbs be achieved. Abusive grazing enhances the competitive advantage of sagebrush, but the removal of livestock grazing cannot reverse a biological and ecological condition that is not the result of livestock grazing.

Comment Number: NVCASG-14-0345-5
Comment Excerpt Text:
Page 198, Alternative B, Action B-LG 7

While this action element seems to be dead on, it is not clear if "manage for vegetation composition and structure consistent with ecological site potential and within the reference state" is to be achieved only by changes in livestock management, or through vegetation treatments. Ecological site potential is a target or goal; it is not sustainable without periodic inputs of energy (i.e., disturbance) to modify the vegetation. The reference state is not a "steady state" condition; it is a condition that occurs for some period of time on the landscape and is subject to modification due to plant-plant interactions (i.e.,
competition) and plant-animal interactions (e.g., herbivory), among other change vectors. Once this condition is achieved, it cannot be maintained in perpetuity by grazing management.

**Comment Number: NVCASG-14-0345-6**

**Comment Excerpt Text:**
Page 203, Alternative B and F, Action B-LG 16 and F-LG 16

No discussion of short-term or long-term time frames. Some treatments may take time to fully restore sage-grouse habitat values, and some treatments will provide long-term benefits to sage-grouse as the vegetation changes over time. As written, treatments with short-term impacts but long-term benefits could be prohibited under these alternatives.

**Comment Number: NVCASG-14-0345-7**

**Comment Excerpt Text:**
Page 208, Alternative D Action D-LG 25

The implication of this action element is that the terms and conditions attached to the grazing permit for sage-grouse will supersede any other resource protection measures. There is no provision for resolving resource conflicts.

**Comment Number: NVCASG-14-0346-9**

**Comment Excerpt Text:**
Chapter: 2, Section: Table 2.4, Page Number: 111-112

Comment: Relative Livestock Grazing, Table 3.31 on page 472 illustrates that, in Nevada, there are 353 allotments comprised of 10,832,853 acres of GRSG habitat that have no determination as to whether standards are being met for rangeland health. It seems necessary to include an objective to reduce these allotments and acreages that have not been evaluated by some reasonable amount over the next 5-10 year period. Additionally, the above referenced table also points out that, of the 197 assessed allotments (comprising 7,637,942 acres of GRSG habitat) that have been assessed or evaluated, only 45 (or 23% of total assessed acreage) were found to be in Category 1 (standards being met). It also seems necessary to include a measurable objective to increase the number of allotments and acreages over the next 3-5 year period to actually meet Category 1 status.

**Comment Number: NVCASG-14-0347-1**

**Comment Excerpt Text:**
It is evident in the DEIS, and in the preferred alternative specifically, BLM did not recognize specific valid and existing rights including but not limited to grazing preference and stock water rights.

Specific to stock water rights. Nevada Water Law is based on two principles: prior appropriation and beneficial use. Prior appropriation refers to "first in time, first in right." To obtain a water permit in Nevada, a person must prove beneficial use such as stock watering, mining, irrigation, etc. The preferred alternatives (B) and (F) (see DEIS Action LG 15, pg.234) poses a threat to permittees existing water rights by threatening their ability to make beneficial use thereof Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

An example of how valid existing rights will be compromised in the preferred alternative (D) is explained below:

- Appendix A, "Required Design Features," states that in priority habitat (PPMA), agency action would be to "remove livestock ponds built in perennial channels that are negatively impacting riparian habitat, either directly or indirectly, and do not permit new ones to be built in these areas."
- Appendix A, "Required Design Features," would also "remove or modify existing water developments that are having a net negative impact on GRSG habitats.

Grazing Permit Retirement: Retirement of a grazing permit as an option should NEVER be a...
consideration. There is statutory evidence, supported by case law, suggesting that the BLM is overstepping its bounds in the DEIS by suggesting that grazing permits may be terminated permanently (see DEIS Vol. 2 p.166, etc.). Although the Secretary is authorized to decrease or even temporarily discontinue grazing through the RMP process (or on a more temporary basis) for the sake of rangeland health, Taylor Grazing Act (TGA) and Federal Land Policy Management Act mandate that forage resources on grazing districts, if deemed sufficiently healthy, are to be made available for grazing:

BLM may impose temporary reductions, or permittees may voluntarily reduce their grazing levels. The presumption is, however, that if and when range conditions improve and more forage becomes available, permissible grazing levels will rise. Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing (PLC v. Babbitt, 167 F.3d 1287, 1308 10th Cir. 1999).

By allowing for permit retirements in the planning area, BLM would not only be in danger of violating the law; it would be opening the floodgates to harassment of ranchers by radical special interest groups bent on eliminating grazing. This has proven to be the case in past instances where Congress acted to make permit retirement legal in specific areas, such as the Owyhee Wilderness Area in Idaho.

**Comment Number: NVCASG-14-0347-2**

**Comment Excerpt Text:**

DR. PAUL TUELLER, professor of range ecology at UNR for 42 years: "The extreme fire years in the recent past must be due, in part, to the noted reduction in grazing the forage base, resulting in significant fuel buildup. The lower and sometimes upper reaches of the mountain ranges have turned yellow as a result of post-fire cheatgrass establishment...Development of intensive grazing strategies is needed to allow utilization of cheatgrass and reduce future fuel loads. Grazing animals will be the tools that must be used to make desirable changes in vegetation."

DR. LYNN JAMES, director of the USDA ARS plant research laboratory at Logan, Utah for 35 years: "Fires depend on adequate fuels-grasses and certain shrubs. The larger the fuel load, the hotter the fire will burn and the more damaging it will be...An economical and efficient way to remove excess grass is with an on-off grazing system. Fuel loads are reduced; while producers benefit from forage consumed by their livestock Other grazing strategies can aid in preventing or managing wildfires and controlled burns. Fires that do occur burn with reduced intensity and a general upward trend in rangeland condition is sustained"

DR. KEN SANDERS, professor of rangeland ecology at the University of Idaho for 32 years: "The third biggest threat is the reduction in grazing on public rangelands. If the proposed sage grouse habitat guideline that recommends leaving a grass stubble height of 18 centimeters is applied, it will not only result in an adverse economic impact on livestock producers, but it will also result in increased, higher intensity wildfire due to a larger fuel load."

DR. WAYNE BURHIIARDT, UNR professor of range management, emeritus: "For the past 40 years, the management strategy, at least on public lands, has been to reduce or modern livestock grazing on these annual grasses, presumably to allow the re-establishment of native bunchgrasses. This has proven to be disastrous. Pre-adopted annual grassroots [such as cheatgrass] can out-compete native bunchgrasses for early spring moisture on arid range sites. Reductions in grazing on these rangelands have not promoted the establishment of native flora, but rather have allowed flammable fuel buildup and increased fire frequency, intensity and spread. These unnatural fires remove the sagebrush overstory, prevent shrub re-establishment and create the conditions for the establishment of monotypic annual grasslands on what should be a shrub/grassland vegetation community."

All of the alternatives in (Section 4.3.2 pg. 607) of the DEIS states that "fire is the primary threat to GRSIG populations and habitat ... in the western half etc.......
(per Baker2011)”, and later in that section states “fire is a primary threat to GRSG populations and habitat...etc. (USFWS 2010a). We agree with "the" or "a" primary threat, as stated above, correct? It is interesting to note that James A. Young and Charles Clements, USDA ARS Range Scientists, are not cited in this section as relates to cheatgrass, as they are widely recognized by many as possibly the most knowledgeable and experienced authorities on this issue as relates to cheatgrass and other invasive species in Nevada and the Great Basin, and have recently published a book entitled Cheatgrass. We strongly recommend citing their work as part of this DEIS effort.

Given the findings of Hubert, Pyke, Mack, Pellant and others regarding fires and their impacts, it seems only prudent and advisable to strongly support grazing as a means of reducing this threat and helping to protect sage grouse habitat and biodiversity. The choices as outlined appears to be to allow cheatgrass, wildfires, and draconian and unnecessary grazing restrictions to dominate the public lands going forward, or to enlist a strong commitment to AMP development to help to maintain and/or improve the sagebrush ecosystem and critical sage grouse habitat without impacting or eliminating grazing as a tool. Industry can commit to work with this kind of approach in so far as it does not threaten the economic viability of ranching or the local economy.

12.2 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCASG-14-0040-6
Comment Excerpt Text:
The nexus has not been made between the proposed management direction and the desired on-the-ground results. Use of the habitat objectives in Table 2.6 as criteria for making management decisions that are limited to excessively restrictive utilization standards and sequential restrictions on grazing in the following seasons (Table 2.7) cannot be justified on any technical basis as a means to effectively improve seasonal habitat suitability for GSG.

The habitat criteria in Table 2.6 are intended to be used as guidelines for delineating habitat suitability. They are appropriate and useful for identifying areas where marginal habitat may be improved to suitable habitat based on additional analyses of current ecological status, ecological site potential, soils, presence of invasive species, and other site-specific factors. However, the individual indicator values in Table 2.6 do not, by themselves, define site suitability. Overall habitat suitability descriptions require an interpretation of the relationships between the indicators and other site-specific factors such as fragmentation. Professional expertise and judgment are required for these steps (Stiver, et al. 2010). As such, these standards should not be used as the sole indicator to determine when cattle are moved from an allotment.

Comment Number: NVCASG-14-0051-5
Comment Excerpt Text:
DR. KEN SANDERS, professor of rangeland ecology at the University of Idaho for 32 years: “The third biggest threat is the reduction in grazing on public rangelands. If the proposed sage grouse habitat guideline that recommends leaving a grass stubble height of 18 centimeters is applied, it will not only result in an adverse economic impact on livestock producers, but it will also result in increased, higher intensity wildfire due to a larger fuel load.”

Comment Number: NVCASG-14-0060-1
Comment Excerpt Text:
Why are the Rangeland Monitoring Handbooks for California and Nevada not included in this listing? BLM was an active participant in developing and agreeing to use of these handbooks for statewide use, and as such, these documents should be considered as part of this document.

Comment Number: NVCASG-14-0064-4
Comment Excerpt Text:
Ch. 2 p. 195 states that, if priority or general nesting habitat does not reach “habitat objectives,” grazing will be deferred or reduced. The “habitat objectives” include:
In riparian areas and wet meadows, stubble height requirements of 4-6 inches. Stubble height requirements as a trigger for livestock are never useful. Determination of stubble height in riparian areas should be determined at the conclusion of the growing season. The amount of biomass removed is of less importance as the amount that is left at the end of the growing season. Sufficient stubble height at the end of the growing season insures proper sediment capture that is important in providing for healthy riparian areas. Stubble height requirements as a trigger for livestock removal could, in some years, mean that livestock would never be able to graze at any time of year.

Comment Number: NVCASG-14-0091-10
Comment Excerpt Text:
Davies et al. 2009 and Davies et al. 2010, both demonstrated through field research that managed 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…”

Comment Number: NVCASG-14-0091-11
Comment Excerpt Text:
Davies et al. (2009 and 2010) also found that long-term rest increases the likelihood of fire-induced 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.

Comment Number: NVCASG-14-0091-12
Comment Excerpt Text:
In another paper, Davies et al. (2011, p. 2575) concluded 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.” 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.

Comment Number: NVCASG-14-0091-13
Comment Excerpt Text:
Regarding livestock grazing of meadows and riparian areas, 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 without any scientific reference: “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 in Nevada by Neel (1980), Klebenow (1982), and Evans (1986) concluded that cattle grazing can be used to stimulate forb production and that GRSG tended to prefer grazed meadows. These studies were all
conducted in Nevada, focusing on livestock use of upland meadows frequented by sage-grouse. Also, in Chapter 4, p. 86, there is a statement that is incomplete and misleading:

“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 sagegrouse 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.

Comment Number: NVCASG-14-0091-14
Comment Excerpt Text:
Other examples of livestock grazing literature missing from the DEIS includes, but is not limited to, the following:

• 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 enclosure. 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.

Comment Number: NVCASG-14-0091-15
Comment Excerpt Text:
Additionally, we have a major concern with the way the DEIS inappropriately cites grazing related literature out of context. For example, Chapter 4, p. 15 states “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/year-long to managed systems that defer or rest much of the landscape from grazing during the sagegrouse nesting season. For ground nesting birds in general, Schultz (2010), 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.”

Comment Number: NVCASG-14-0091-16
Comment Excerpt Text:
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 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).

Comment Number: NVCASG-14-0091-17
Comment Excerpt Text:
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).
Comment Number: NVCASG-14-0091-18

Comment Excerpt Text:
Livestock Grazing References That Require Incorporation or Proper Interpretation Citations marked with * are not cited in the DEIS. Also note that many of the referenced papers in these cited below should too be included.


Comment Number: NVCASG-14-0091-3
Comment Excerpt Text:
See great work by the USDA-ARS Research Station in Dubois, Idaho where active grazing management and prescribed burning to mimic the historic fire regime has created an increase in GRSG when neighboring BLM and USFS land has continued to see a decline in GRSG (“A Home on the Range”, Agricultural Research, November/December 2006).

Comment Number: NVCASG-14-0091-34
Comment Excerpt Text:
Action LG 13

Hot season grazing, when under a planned grazing system that allows for periodic growing season rest and recovery periods for the riparian areas, is not normally detrimental. Every effort should be made to allow for flexible and adaptive processes in developing and implementing grazing on riparian and meadow complexes. These free water environments typically have an ability to re-grow quickly when afforded periods of rest during the grazing season. An overabundance of deep breathing occurs around these wet environments while what is needed is careful site specific planning to avoid unnecessary impacts to the permittees and their permits while allowing for recovery. Avoid recommendations such as Aldridge and Brigham, Crawford, et al., and Hagen as the final word in this document. These sources all represent potential applicable tools and information; however, these cited sources are not all inclusive as there are many other unlisted studies and management tools that need to be considered during site specific planning for grazing management.

Comment Number: NVCASG-14-0091-37
Comment Excerpt Text:
Action E-LG 33

The phrase “…herbage removal within acceptable limits” puts the emphasis on leaf 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. accepted with revision 2014).

Comment Number: NVCASG-14-0091-45
Comment Excerpt Text:
As Wyman et al. (2006) and Swanson et al. (accepted with revision 2014) point out, utilization is important is 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.

Comment Number: NVCASG-14-0091-46
Comment Excerpt Text:
Grazing before May 15 may cause riparian areas to not be grazed, 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 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.

Comment Number: NVCASG-14-0091-47
Comment Excerpt Text:
How can low condition range meet rangeland health standards by reducing livestock grazing? The only means of achieving the health standard would be to mechanically renovate the area and reseed, as there would not be sufficient remnant desirable vegetation remaining to expect a natural response toward DFC.

Comment Number: NVCASG-14-0091-49
Comment Excerpt Text:
Page 474, Table 3.33

Are those acres not meeting Land Health Standards with grazing and the causal factor due to current grazing practices, or historic? How is it determined that grazing is negatively impacting the GRSG if the birds are continuing to return to and utilize the habitat over decades of time? Grazing practices have
only improved since range science came on the scene in the early to mid-1900’s.

Comment Number: NVCASG-14-0116-1  
Comment Excerpt Text: Research indicates that the removal of domestic livestock from public land is the recommended strategy to improve ecological conditions and protect public resources (Fleischner, 1994) (Donahue, 1999) (Belsky, Matzke, Uselman, 1999) (Wuerthner, Matteson, 2002).

Comment Number: NVCASG-14-0116-2  
Comment Excerpt Text: In addition, the Appendix “K” “Livestock Grazing (Table K-1) data does not provide any date(s) that the rangeland health categories were assigned. This health category must be current or it is valueless and could possibly be considered purposeful deception by the BLM and USFS to the public and the decision makers.

Comment Number: NVCASG-14-0132-22  
Comment Excerpt Text: The DEIS RDF would, “To reduce the probability of Culex mosquitoes or reductions in nesting habitat volumes, evaluate the need for livestock reductions or changes in seasons of use before considering construction of new livestock ponds in PPMA.” However, this ignores the science presented in Knight 2011, in which Walker and Naugle 20113 state that “several strategies are recommended to reduce mosquito production from artificial water sources without eliminating the water source.

Comment Number: NVCASG-14-0132-24  
Comment Excerpt Text: Section 2.6.3. The DEIS states that “There are currently no science-based studies that demonstrate that increased livestock grazing on public lands would enhance or restore GRSG habitat or maintain or increase GRSG abundance and distribution.” While this is true in terms of increases beyond Permitted Use, the document cites Davies et al 2010, who noted that moderately grazed areas did help reduce the threat (severity, etc.) of wildfire over areas that were not grazed. Weber et al (not cited by the DEIS, but should have been), in another recent study conducted in southeast Idaho, found similar results. See: http://giscenter.isu.edu/research/techpg/nasa_wildfire/Final_Report/Documents/Chapter9.pdf It is equally true that there are currently no science-based studies that demonstrate that decreased livestock grazing on public lands would enhance or restore GRSG habitat or maintain or increase GRSG abundance and distribution.

Comment Number: NVCASG-14-0132-36  
Comment Excerpt Text: Relative to livestock grazing, the best science is that “There is little direct experimental evidence linking grazing practices to sage grouse population levels (Braun 1987, Connelly and Braun 1997).” Connelly et al 2000

Comment Number: NVCASG-14-0132-41  
Comment Excerpt Text: If “drought” is defined as any precipitation less than the long term average, and “post drought” management is to ensue after a year of less-than-average precipitation, then BLM and FS would be managing the landscape as being in an emergency situation nearly all the time. Further, neither “drought” nor “under appropriate conditions” are adequately defined in the DEIS.

Comment Number: NVCASG-14-0148-8  
Comment Excerpt Text: Consider adding: During the annual livestock grazing application, work with permittees to avoid concentrated turnout locations for livestock during the March 1 to May 15 period. Utilize land features and roads on maps provided to the permittee.

Comment Number: NVCASG-14-0151-10  
Comment Excerpt Text: The only information being considered as credible is the WAFWA data developed by wildlife biologists who are not trained in rangeland management nor the management of livestock on ranges. As a result, grazing and range management have been portrayed
as being a threat to Sage-grouse rather than a potential tool to enhancing Sage-grouse habitat. This leaves an enormous gap in the data when considering both the recommendations and the ability of livestock grazing to contribute a role in benefiting Sage-grouse. Rangeland Specialists should play an integrate role in developing Planning Criteria as relates to livestock impacts and grazing recommendations. The County would encourage the BLM to review and incorporate the following peer-reviewed studies into its analysis:


Comment Number: NV CASG-14-0151-5
Comment Excerpt Text:
In regards to livestock grazing, the document treats managed and regulated livestock grazing primarily as a "threat" to Sage-grouse. As such, the document contains a negative tone in regards to grazing, and a major data gap in terms of scientific literature that supports the advantages of grazing in a sagebrush ecosystem (see Attachments 1 and 2 for details). Grazing and agricultural production have been a positive contributing factor to healthy Sage-grouse populations for generations. Taken as a whole, the resource development, maintenance and stewardship associated with grazing and agricultural production have historically been paramount in contributing to increases in Sage-grouse numbers.

Comment Number: NV CASG-14-0154-1
Comment Excerpt Text:
There is research and studies that has been conducted that supports the science that sheep grazing benefits the sage grouse population such as an article published in the Nov./Dec. issue of Agricultural Research denoting a definitive increase in male sage grouse numbers during lek counts.

Comment Number: NV CASG-14-0171-10
Comment Excerpt Text:
Because there will be ongoing opportunities for restoring AUMs through various means, this document should not be the vehicle for reducing permitted AUMs, even if reductions in grazing should be necessary for a time. Reductions should be placed in "rest" until such time that juniper treatments, fire rehabilitation or other means have re-established the ability of the landscape to sustain the grazing again.
An example of this is the Sage Steppe Ecosystem Restoration Strategy EIS (2008).

Leaving AUMs in "rest" rather than reducing them provides incentives for both the agency and the livestock operator to be creative in developing solutions that could restore that grazing. This is the underlying premise of the Modoc-Washoe Experimental Stewardship Program authorized by the Public Rangeland Improvement Act (1978). This designation includes the BLM Surprise Field Office and the Warner Mountain Ranger District of the Modoc National Forest. The ESP Steering Committee continually searches for those solutions that incentivize grazing management practices that can return "rested" or "suspended" AUMs to use.

Comment Number: NVCASG-14-0171-24
Comment Excerpt Text:
Action LG 21

We believe this section should reflect the language from the NRCS publication "Applying the Sage Grouse Collision Risk Tool to Reduce Bird Strikes" (November 2012). The Service already recognizes the following language regarding accidental mortality regarding adverse effects of fences; 1) Avoiding placement of new fences near all leks; 2) Removing or relocating existing fences near all leks where feasible; and 3) At a minimum, marking all existing fences within '1/4 mile from all leks and in areas where collisions are known to occur." (Conference Report on the SGI, USFWS 2010).

Comment Number: NVCASG-14-0171-34
Comment Excerpt Text:
Section 4.3.2

It is implied that Sage Grouse must have high quality habitat conditions including an abundance of sagebrush and residual cover, especially grass and litter. Popham and Gutierrez (2003) reported different results in Northeast California, including rock cover was greater at successful nests, success was moderately higher at other shrub species than sagebrush, and visual obstruction (not necessarily grass height) was greater at successful nesting sites. Once again another example of why cookie cutter approaches do not take into consideration local conditions and must be avoided. Language in the document must focus on the outcome, in this case successful nesting, rather than a specific set of conditions.

Again livestock grazing is beneficial or harmful depending on the appropriateness of the management. "Appropriately managed grazing is critical to protecting the sagebrush ecosystem; livestock grazing per se is not a stressor threatening the sustainability of the [sage steppe] ecosystem (Davies et al 2011). The DEIS states; "Livestock may also trample nests and disturb GRSG behavior." This is in contradiction to video evidence in Bell 2011 thesis in which approaching cattle neither trampled the nest nor did the cattle flush the nesting hen and the hen was still on the nest 24 hours later. This statement should be removed or the additional refuting information presented be added to the document.

Comment Number: NVCASG-14-0172-1
Comment Excerpt Text:
MCFB's members that graze federal permits understand that the Public Rangeland Improvement Act provides them with the opportunity to consult, cooperate and coordinate with the agencies as standards and guidelines that affect their grazing permits are developed. However we also realize that most of the public and many of your local staff do not know this. As a large portion of this EIS involves potential impacts to how livestock will be grazed in Sage Grouse country, we believe it is a good preventative action to clearly state that any and all of the proposed changes Juniper into the Sage Steppe Ecosystem. We point out, as an aside, that this is different than the pinyon-juniper discussion throughout the EIS which need to be clearly separated from Western Juniper issues.
Comment Number: NVCASG-14-0183-1
Comment Excerpt Text:
If Riparian areas were fenced in a large enough area that they could be grazed a good management practice could be developed where they were lightly grazed in the Spring, removed during the summer season, and then more heavily grazed in the Fall so that both Sage Grouse and livestock were benefitted. Some studies not used in this Draft EIS would support such management including: Dalldorf, K. et al. (2013).

Comment Number: NVCASG-14-0188-1
Comment Excerpt Text:
The Cagney et al. citation is used to support drought management activities. The Cagney document only uses the word "drought" five times in the document and does not appear to discuss or support the drought management actions presented in the LUPA/DEIS.

Comment Number: NVCASG-14-0193-6
Comment Excerpt Text:
We also disagree that habitat is currently being lost due to grazing as indicated on the list of major threats to greater sage-grouse habitat (Chapter 1.3, page 8). Grazing allotments have been under prescribed grazing management for many years and experience frequent monitoring. This monitoring includes rangeland health assessments that result in any necessary modifications to grazing prior to reissuance of grazing permits.

Comment Number: NVCASG-14-0195-14
Comment Excerpt Text:
Alternative Number: B, Section: Action LG 2, Page Number: 227
Comment: Development of resource objectives must be site specific and involve the direct inputs of the permittee. While limiting livestock use to attain greater plant cover, increased fuel loading can contribute to increased fire hazard. Use of AMPs and Conservation Plans should be given highest priority for allotments to address any identified problems or issues in preference to the permit renewal process. This approach provides an appropriate focus on a variety of management tools as recommended in Swanson, et. al (in press) and Wyman, et.al (2006).

Comment Number: NVCASG-14-0195-15
Comment Excerpt Text:
Alternative Number: E, Section: Action LG 8, Page Number: 230
Comment: Strategic livestock grazing improves greater sage-grouse habitat by increasing the quality and accessibility of forbs for sage grouse (Neel 1980, Evans 1996, Messmer. T. 2009), and can be used to control invasive weeds (Olson, et., al. 1994, Walker et al.1994).

Comment Number: NVCASG-14-0195-18
Comment Excerpt Text:
Alternative Number: All, Section: Section 4.3.4, Page Number: 615
Comment: This section states in some cases this management would require livestock removal or restrictions in riparian areas to reduce impacts caused by livestock, etc. Under no circumstance will industry accept forced removal (2-5 days) of livestock from the allotment on the basis of hitting a utilization standard for riparian areas applied early in the grazing season and based on imposed draconian key management area (KMA) standards that are appearing in recent RMP updates. This approach is vehemently opposed. Furthermore, research supports managed grazing systems as a benefit to habitat composition and condition of riparian areas, such as rotation.
systems that incorporate spring rest (Dallldorf.K. et al. 2013).

**Comment Number: NVCASG-14-0195-4**  
**Comment Excerpt Text:**  
The DEIS must address a large array of management options to properly analyze impacts and implement management actions that may be used. However, scientific research and documentation used within the DEIS is limited in scope to repetitive authors and does not adequately use literature by rangeland scientists and other professionals. This will limit the availability of management options and does not properly address the benefits of livestock grazing in relation to greater sage-grouse habitat conservation. Pertinent research is needed to address the functionality of the sagebrush ecosystem in regards to livestock grazing use and greater sage-grouse habitat conservation.

**Comment Number: NVCASG-14-0205-24**  
**Comment Excerpt Text:**  
28, 2.8.1  

“The Nevada LUPs do not contain management guidance for permitted livestock grazing specific to conserving GRSG habitat.”

BLM land management under existing LUPs must be done in compliance with BLM Manual 6840. The US Forest Service lists sage-grouse as a sensitive species and has similar direction in Forest Service Manual 2670.

Therefore, the No Action Alternative has adequate management guidance to protect GRSG while permitting livestock grazing to conserve GRSG habitat.

**Comment Number: NVCASG-14-0218-1**  
**Comment Excerpt Text:**  
DEIS 3.8 discusses the issue of Livestock Grazing. It is an informational section about what the various government entities do to regulate and control livestock grazing. Toward the end of this section a statement is made about the "Wildlife Land Health Standards.” It states that “... BLM administered lands not meeting wildlife land health standards due to livestock can be found throughout the range of GRSG.” The words "due to livestock" should be removed from this section as this seems to be a blanket statement suggesting that the only reason an area may be deemed to have unfit health standards is due to livestock.

**Comment Number: NVCASG-14-0225-1**  
**Comment Excerpt Text:**  
PLC and NCBA is of the view that the BLM’s analysis of Alternative A (no action)—namely, the existing regulatory frameworks, standards and guidelines applicable to livestock grazing and range management—is inadequate and, moreover, does not provide a rational foundation for changing existing regulatory mechanisms applicable to livestock grazing and range management in favor of new standards and guidelines specifically applicable to sage-grouse. The BLM should have analyzed the effectiveness of current regulatory mechanisms before developing alternatives, and should have used that analysis for considering appropriate changes to the RMP. Accordingly, PLC and NCBA request that the BLM conduct a more thorough analysis of the effectiveness of current frameworks, standards and guidelines applicable to livestock grazing and range management in conserving sage-grouse habitat and populations. Alternatives to the existing regulatory mechanisms should then be developed only if such analysis reveals a true purpose and need.

**Comment Number: NVCASG-14-0225-2**  
**Comment Excerpt Text:**  
As applied to livestock grazing and range management, the BLM’s statement of the purpose and need is inaccurate and misleading because the FWS never found, nor has the BLM found, that existing regulatory mechanisms applicable to livestock grazing and range management pose a threat to sage-grouse habitat or populations, much less that changes in such regulatory mechanisms are necessary to avoid a listing decision.
Comment Number: NVCASG-14-0240-6
Comment Excerpt Text:
grazing by other herbivores in Nevada needs to be adequately reviewed such as ungulates and wild horse and burros. Grazing, as determined by the USFWS, refers to native wildlife, feral horses and livestock but BLM failed to address all species thoroughly.

Comment Number: NVCASG-14-0258-3
Comment Excerpt Text:
Chapter 3. Affected Environment. The description of the affected environment should include a complete listing of the current allotment rangeland health evaluation (ARHE) schedule(s) for the planning area. The tables illustrating the current ARHE schedule(s) should also include which of these allotments currently have designated PPH and/or PGH areas within the allotments. This may be accomplished by adding a new table to Appendix K and/or by modifying Table K-1 in Appendix K.

Comment Number: NVCASG-14-0259-1
Comment Excerpt Text:
The Draft LUPA/EIS states that livestock infrastructure, including fences, spring developments, pipelines, and stock ponds are "harmful facilities" (Chapter 2, page 204), but it does not justify why each of these facilities are in fact harmful to GRSG.

Comment Number: NVCASG-14-0262-2
Comment Excerpt Text:
The DEIS does not disclose the reasons for the difference between actual and active livestock use and, through the lack of disclosure, infers this difference may represent a voluntary or discretionary action by the involved ranchers. This inference is incorrect since the difference between active and actual livestock is the result of many factors including: existing grazing restrictions, fire and drought closures, vacant and unassigned allotments, economic market conditions, etc. Many, if not most, of these contributing factors do not represent items directly controlled by the rancher. As such, the difference between active and actual use cannot be viewed as a voluntary or discretionary action by the involved permittees.

Comment Number: NVCASG-14-0262-3
Comment Excerpt Text:
In addition to this disclosure issue, the difference between active and actual livestock use can be used to measure the economic effects resulting from current regulatory mechanisms under Alternative A. Table 3.79 indicates that there is a decline of 1.6 million AUMs between active permitted livestock use and the 12-year average actual or billed use. Using the lower cattle-based economic values from Table 0-4, this grazing reduction equates to an estimated annual loss across the sub-area of $49 million in direct livestock production, $98 million in total economic output, $36 million in labor earnings, and 1,037 jobs. These existing economic effects are not disclosed under the description or evaluation of Alternative A in this DEIS.

Comment Number: NVCASG-14-0263-2
Comment Excerpt Text:
Section 2.4, Table 2.1: Grazing is listed as a threat to GSG, yet there is a large body of evidence that suggests the opposite. It is evident from the DEIS that grazing has been considered only as a threat, and therefore is a factor to be limited, in spite of the fact that significant data exist to support the positive impacts to the landscape from grazing of cattle and sheep. Why were the positive impacts from grazing not given more emphasis in the DEIS?

Comment Number: NVCASG-14-0278-29
Comment Excerpt Text:
EIS Section: Ch 3, Chapter & Page: 39
Comment: "For instance, judicious grazing and prescribed fire are still associated with varying degrees of uncertainty regarding short-term and long-term outcomes in these plant communities. A degree of uncertainty can be expected because the manner in which these key disturbance activities are conducted varies with time and location."

The authors describe the uncertainty of grazing, which is probably understandable given the near absence of the vast literature base about grazing and herbivory. Much of this work is summarized in the

**Comment Number: NVCASG-14-0281-2**

**Comment Excerpt Text:**
We have found that the BLM often assumes that habitat damage that has occurred on our allotment was caused by cattle. In each of these cases, site examinations have shown that the damage was actually caused by wild horses.

**Comment Number: NVCASG-14-0285-45**

**Comment Excerpt Text:**
In addition, Braun (2006) recommended a maximum 25% forage utilization standard for livestock. Please review the scientific literature and make a determination regarding what percentage of available forage should be dedicated to forage utilization for domestic livestock.

**Comment Number: NVCASG-14-0285-71**

**Comment Excerpt Text:**
BLM rangeland health measurements have been lumped into categories that make it impossible to determine how many allotments and how many acres are meeting rangeland health standards 59 due at least in part to livestock grazing, and how many are not. See Table 3.30, DEIS at 470. This makes it impossible for BLM or the reader to determine exactly how pervasive livestock grazing problems really are. In this table, only Category 1 is clearly defined. For Category 2, allotments where all standards have been met are lumped together with allotments where range health standards are not being met, but have an upward trend. Please separate these categories, so it is possible to see the number and acreage of allotments for which all rangeland health standards are being met. For category 3, allotments where one rangeland health category was not known or measured are lumped together with allotments where there is a known failure to meet standards, for which the cause remains unknown. Please split out the allotments and acres known to be not meeting rangeland health standards. Allotments and acres in Category 4 are not meeting land health standards, yet because allotments where livestock is a contributing cause are lumped together with allotments where grazing is not a contributing cause, it is not possible to determine the relative contribution of grazing to the problem. Please clarify the presentation of data in this table accordingly. Also, please provide separate metrics to clarify the acreage of sage grouse Priority and General Habitat by alternative that are meeting or not meeting land health standards, splitting acres by where livestock grazing is known to be contributing and where it is not.

**Comment Number: NVCASG-14-0296-1**

**Comment Excerpt Text:**
i read in places that because of the demand for wood for fuel, and charcoal that say Eureka, for thirty miles around in the 1890’S it was deforested. if that much pinion was missing, it would free up copious amounts of water, and hence, springs and seeps would be plentiful, and sage grouse habitat would be enhanced. I’m not saying, go cut all the pinion, but my point is, did ranching mining make a habitat that was conducive to larger sage grouse populations than today, and if so, then your base assumptions about populations would be in error.

**Comment Number: NVCASG-14-0298-1**

**Comment Excerpt Text:**
the Sage Grouse were not plentiful (present but not abundant) if you read the journals of the old timers. The sage grouse began to return to a healthy level when sheep and cattle grazing came to this area. Grazing developed water sources and removed the old, tough grasses and allowed the growth of the forbs needed for the Sage Grouse. Insects came with the grazing and fed the sage grouse.

**Comment Number: NVCASG-14-0299-1**

**Comment Excerpt Text:**
His observation was that the birds followed the cattle for the tiny greens and the bugs that found under the manure pads. He also started that the birds decreased as cattle stocking rates decreased. He
knew the stocking because of his large animal clients and he knew the bird’s numbers because of his hunting observation.

**Comment Number: NVCASG-14-0301-1**
**Comment Excerpt Text:**

Cattle and their owners are beneficial of the grouse’s environment in more ways than one. Ranchers are responsible for the water sources and the cattle are responsible for the removal of tougher grasses which allow the growth of the forbs needed for the sage grouse. Along with grazing came the insects that the grouse feed on.

**Comment Number: NVCASG-14-0302-1**
**Comment Excerpt Text:**

Planned grazing should be used following fire. Research shows it speeds recovery, controls invasive weeds, helps timber stands and improves wildlife habitat. Requiring two full growing seasons of rest was agreed upon by ranchers years ago but only when improved grasses were mechanically planted. Now grazing is needed to help distribute native grass seed.

**Comment Number: NVCASG-14-0303-1**
**Comment Excerpt Text:**

I've lived on the Sheldon Wildlife Refuge for 33 years and have seen first-hand what non-grazing can do. It is devastating to wildlife which like I said I have witnessed first-hand. When the cattle were removed and the wild horses were unmanaged the Sage Grouse habitat were destroyed by horses or wild fires.

**Comment Number: NVCASG-14-0303-2**
**Comment Excerpt Text:**

The cattle provide many attributes to the Sage Grouse and its survival, such as helping to lessen the threat of wild fires, the livestock also help with grazing on tougher grasses to allow the growth of forbs needed for the Sage Grouse to survive.

**Comment Number: NVCASG-14-0308-12**
**Comment Excerpt Text:**

Nowhere does the LUPA/DEIS provide a thorough disclosure of existing livestock grazing management, as required by NEPA. Useful information such as recent actual use and season of use data are completely absent although the BLM evidently have this and recognize its importance (“Present management involves carefully adhering to permit stipulations, particularly regarding livestock numbers and season-of-use restrictions”). DEIS Chapter 3 at 78. Because the LUPA/DEIS lacks sufficient and accurate baseline information, it lacks a barometer with which to measure the proposed actions. The limited data on conditions that is provided includes an admission that 25 allotments including over half a million acres of sage-grouse habitat are failing to reach standards due to livestock in the Alturas, Eagle Lake and Surprise resource areas. It is unclear why an alternative that closes these allotments has not been considered nor why specific actions to address these failing allotments are not part of the Preferred Alternative.

**Comment Number: NVCASG-14-0308-34**
**Comment Excerpt Text:**

The preferred alternative prescribes no maximum utilization for livestock grazing allotments that meet or are making progress toward rangeland health standards.

**Comment Number: NVCASG-14-0308-6**
**Comment Excerpt Text:**

Without information on existing grazing in the planning area, it is more difficult to tell whether the preferred alternative substantially changes management to benefit sage-grouse. Nowhere does the LUPA/DEIS provide a thorough disclosure of existing grazing management, as required by NEPA. Specifically, failing to indicate actual recent livestock use on the cattle allotments makes the preferred alternative unclear. The LUPA/DEIS should have included actual use for each allotment in the chart that lists authorized AUMs in Appendix K. Because the LUPA/DEIS lacks sufficient and accurate baseline information, it lacks a barometer with which to measure the proposed actions.

Nor does the LUPA/DEIS disclose the seasonality of grazing on allotments within the planning area, which
Comment Number: NVCASG-14-0309-38
Comment Excerpt Text:
We also highlight the striking difference in the way FWS on Sheldon views any nonnative ungulate, and the way this DEIS avoids taking any hard look at all at domestic cattle and sheep grazing disturbance impacts. See Sheldon Refuge Comprehensive Management Plan, especially its removal of stock ponds, fences and other facilities to provide for sage-grouse and wildlife; needs and the detailed discussions of the threats that these pose including to sage-grouse. These threats and the harm these facilities cause do not vary between land federal land ownerships.

Comment Number: NVCASG-14-0309-43
Comment Excerpt Text:
The Idaho P&N describes “the primary threats to GRSG include habitat loss and fragmentation due to increased occurrence of wildfire, expansion of invasive species, human development and infrastructure”.

This omits reference to livestock grazing. This is despite livestock grazing being a primary causal agent of flammable invasive species expansion in unburned sagebrush habitats, as well as burned habitats that receive minimal rest from weed-promoting grazing disturbance post-fire. Harmful facilities and infrastructure must be considered a threat. Intensive areas of livestock disturbance must be considered disturbance. Whisenant 1991, Billings 1994, Connelly et al. 2004, USFWS WBP Finding, Reisner et al. 2013, Manier et al. 2013.

Comment Number: NVCASG-14-0311-3
Comment Excerpt Text:
DEIS Chapter 3, Affected Environment, discusses livestock grazing in Section 3.8. The FEIS should explain why current laws, regulations, and management are insufficient to address the need for Sage-grouse conservation without undertaking land use plan amendments of the nature proposed by the DEIS. As noted in Section 3.8, BLM must meet or ensure progress toward BLM’s Standards and Guidelines for Livestock Grazing Administration that are currently required by BLM grazing regulations. The Fundamentals of Rangeland Health are found at 43 C.F.R. § 4180.1 and establish baseline requirements for the physical function and biological health of water quality and plant and animal populations or communities on the public rangelands.

Comment Number: NVCASG-14-0311-6
Comment Excerpt Text:
Y-3 II also notes that all action alternatives within the DEIS could impose road access restrictions that will effectively end livestock grazing. See Section 4.9.3. It is therefore of little consolation to Y-3 II that it might have continued access to grazing allotments through management decisions and not be able to physically access those allotments due to road restrictions. Lack of physical access also undercuts the often repeated statements within the DEIS that valid existing rights will be protected and maintained.

Comment Number: NVCASG-14-0312-1
Comment Excerpt Text:
There is a well-defined correlation between the loss of AUMs due to regulatory fiat and the amount of acreage being destroyed by fire. Between 1960 and 1999 there have been reductions in permitted grazing AUMs (BLM, USFS, USFWS and BOR) from 2.69 million down to 2.5 million, or a loss of 149,000 AUMs. From 1999 to 2012 there has been a reduction of permitted AUMs of 784,000. Adding to this suspended non-use of 420,000 AUMs brings the total loss of AUMs to a whopping 1,353,000 AUMs. Using an average 6 moth grazing season would indicate we now have 225,500 less cattle utilizing available range forage. For the northern part of Nevada, using an average approximation of 5 acres to 25 acres per AUM would indicate around 11 acres per AUM and 85 lbs. per acre of available forage. With the fact that mature cattle eat around 3% of
their body weight (approximately 25 to 30 lbs. of forage per day) would indicate 900+- pounds per month. At 11 acres per head per AUM times 6 months is 66 acres per head per season. 225,500 head x 66 acres = 14.8 million acres of unused forage ready to burn each year.

From 1982 to 1985 acreage burned in Nevada increased from 10,000 acs. to 800,000 acs. From 1986 to 1995 fires were in the 30,000 to 200,000 ac. range. In 1996 this jumped to 700,000 acs. and in 1999 1,872,000 acs. burned. This was followed by a reprieve in 2000 to 2003 of 700,000 acs. down to 19,000 acs. Again in 2005 and 2006 1,320,000 acs. and 1,350,000 acs. burned respectively. Again we had a reprieve from 2007 through 2009 and 10, followed by 424,000 acs. in 2011. In 2012 we burned 424,000 acs. Adding to this the Holloway Fire which was basically NV. and Ore. Of 613,000 acs. for a combined Holloway (NV. & Ore.) fire of 1,037,000 acs.

Source: NIFC, Boise, Id. National Interagency Fire Center.

The tendency becomes quite clear that there has been an increased amount of range burned from 1982 through 2012 which correlates with reductions in AUMs of 64,000 from 1960 through 1995; 85,000 from 1995 through 1999; and 784,000 from 1999 through 2012.

**Comment Number: NVCASG-14-0312-3**
**Comment Excerpt Text:**
Alternative A: No Action.

Comment: Table 3.79 shows the average actual use billing over a 12 year period to be only 62% of the permitted use, however it doesn’t disclose or show any reason for this causing the casual reader to assume that the use was reduced voluntarily and that it was not needed or necessary to the permitees. This puts forth the wrong message as the reduction in actual use may be due to drought, fire, temporary closures or other restrictions outside of the permitees control. This should be pointed out in the DEIS and was not disclosed per NEPA requirements

**Comment Number: NVCASG-14-0345-10**
**Comment Excerpt Text:**
Page 85, First paragraph

It is not clear how the numbers presented in this paragraph were compiled. The "approximately 6.6 million acres (10.42 percent) of BLM-administered GRSG range did not meet land health standards, ..." does not account for the 10,832,855 acres of BLM-administered sage-grouse habitat for which BLM has not made land health determinations. The vast majority of this acreage represents allotments that are low priority for BLM; therefore, there is high probability that these low priority allotments are not meeting standards.

**Comment Number: NVCASG-14-0345-8**
**Comment Excerpt Text:**
Page 77, Last paragraph on the page, Second sentence

This sentence states that BLM is "improving rangeland health by controlling animal number and season-of-use and by resting severely damaged rangeland (principally caused by wildfires)." There is no mention of the many types of rangeland improvements that would facilitate this process.

**Comment Number: NVCASG-14-0345-9**
**Comment Excerpt Text:**
Within the Draft LUPA/DEIS planning area, there are 15,737,500 acres of PGH and PPH (Table 3.32).
According to Table 3.33, there are only 2,773,000 acres of BLM-administered lands with PGH and PPH where land health standards are not being met, or 12,964,500 acres where land health standards are being met. This information does not agree with the data presented in Table 3.31. Table 3.31 indicates that only 1,740,312 acres of BLM-administered lands within sage-grouse habitat are meeting land health standards. This apparent discrepancy in acres of BLM-administered lands meeting land health standards needs to be clarified.

Comment Number: NVCASG-14-0346-22
Comment Excerpt Text:
Chapter: 3, Section: 3.8, Page Number: 472

Comment: Table 3.31 identifies the number of allotments and acreages within those allotments considered sage-grouse habitats that are either Category 1, 2, 3, 4, or 5. Of the approximately 18.5 million acres of sage-grouse habitat in Nevada, only 7.6 million acres had been assessed. Again, it was concerning to learn that almost 11 million acres had no assessment as to whether or not those allotments were meeting rangeland health standards. Even more of an issue is that just 23% of the allotments evaluated were considered category 1 (indicates standards being met). It seems that an objective should be identified to increase both allotment evaluations and the number of allotments where standards are being met.

Comment Number: NVCASG-14-0351-19
Comment Excerpt Text:
Aldridge et al. (2008, p. 990) did not find any relationship between sage-grouse persistence and livestock densities, but concluded that other aspects of livestock management (intensity, duration, and distribution) may be more influential on rangeland conditions than livestock density. Evans (1986, P.67) Reported that GRSG grazed meadows significantly more during late summer because grazing had stimulated regrowth of forbs. Klebenow (1981, p.121), noted that GRSG used openings in meadows created by cattle.

12.3 IMPACT ANALYSIS

Comment Number: NVCASG-14-0066-2
Comment Excerpt Text:
In Table 2.7, the Proposed Action (Alternative D) proposes to deviate from moderate use levels in areas not achieving the sage-grouse habitat criteria defined in Table 2.6. See Action D-LG 27 in Table 2.5. It becomes readily apparent that implementation of these restrictive forage utilization levels, coupled with the KMA approach found in the Winnemucca District Proposed RMP/FEIS, will substantially reduce currently permitted grazing and render most ranching on public lands as uneconomical. This impact was not disclosed in Section 4.9 in this DEIS. Further, this reasonably foreseeable impact was not identified or disclosed in Section 5.8 or Table 5.1 in this DEIS. This lack of disclosure in this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative impact assessment.
Comment Number: NVCASG-14-0083-39
Comment Excerpt Text:
Ch: 4, Sec: 4.3.5, Pg. No.: 30

Text Referencing: Greater Sage-Grouse and Greater Sage-Grouse Habitat Alternative B - Impacts from Livestock Grazing Management Under Alternative B, the same number of acres would be open to livestock grazing as under Alternative A, with the same number of acres of modeled nesting habitat affected within the sub-region. Agencies, in coordination with permittees, would prioritize a number of management actions in PPMAs to incorporate GRSG habitat objectives and management considerations into livestock grazing management, though there would be no change to the acreage open for grazing or available AUMs unless an allotment is retired from grazing.

Comment: Additional restriction of livestock grazing would not fulfill the Multiple Use mandate of FLPMA 1976. Removal of livestock grazing would expand fire fuels and promote larger and more costly wildland fires. This proposal is excessive and will serve to distress local and regional economies. This proposal would have negative nationwide repercussion concerning the consumer cost of beef and beef products. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11)

Comment Number: NVCASG-14-0083-62
Comment Excerpt Text:
Ch: 4, Sec: 4.9.7, Pg. No.: 146

Text Referencing: Livestock Grazing Alternative D - Impacts from Riparian Areas, Wetlands, and Water Resources Management. Effects on livestock grazing would be greater than under Alternative A. Alternative D would cause changes to current permitted use, based on specific actions taken to return riparian areas to PFC and improve plant community species richness.

Comment: Elko County maintains that water rights in the State of Nevada are regulated by the State Engineer. State Water Rights are the right of the owner to develop points of diversion and places of use to show beneficial use on private lands and on federally managed public lands.

Comment Number: NVCASG-14-0083-63
Comment Excerpt Text:
Ch: 4, Sec: 4.9.7, Pg. No.: 147

Text Referencing: Livestock Grazing Alternative D - Impacts from Recreation Management. Under Alternative D, closing PGMAs/PPMAs to recreation facilities construction would reduce disturbance and conflicts as compared to Alternative A.

Comment: Elko County fails to see the benefit of closing PGMA’s and PPMAs to recreation use and how it will impact livestock grazing and benefit GRSG habitat. Available data and science proves that proper Livestock grazing is beneficial to GRSG habitat by helping to eliminate fine fuels that have cause recent wildland fires that have diminished the sage steppe habitat.

Comment Number: NVCASG-14-0083-64
Comment Excerpt Text:
Ch: 4, Sec: 4.9.7, Pg. No.: 147

Text Referencing: Livestock Grazing Alternative D - Impacts from Non-Energy Leasable Minerals. Under Alternative D, the impact on livestock grazing from non-energy mineral leasing would be less than Alternative A. 17,732,900 acres of PPMAs/PGMAs would be closed to leasing so less acreage would be subject to development than under A.

Comment: What level of benefit would grazing have from the closure of leasing of 17,732,900 acres to Non-Energy Leasing? Elko County disagrees with this proposed management action. Elko County does not believe that the proposed closures will provide a direct benefit GRSG habitat. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012)
Comment Number: NVCASG-14-0091-21
Comment Excerpt Text:
Please remove “to alleviate threats” so sentence simply reads “…complete removal of livestock grazing.” The phrase “to alleviate threats” comes to a misplaced conclusion not founded in fact and out of place since it appears in the EIS without any robust and objective analysis on livestock grazing threats. It is mismanaged (or undermanaged) livestock grazing that is the issue, not livestock grazing itself. Again, the EIS, from the onset, sets the theme for unduly framing of the totality of livestock grazing as a threat.

Comment Number: NVCASG-14-0091-55
Comment Excerpt Text:
The use of input-output model has a long history of showing economic linkages and impacts of the local Range Cattle Sector. However another important issue for the local Range Cattle Sector is how this sector impacts economic stability in small local economies. Agricultural producers when faced with lower agricultural prices usually do not reduce production levels or production expenditures, but rather have a tendency to absorb the resulting income reductions. From a previous study on agriculture in Churchill County, Harris and Kerna (2009) found the variability of agricultural production cash expenditures were lower when compared to agricultural cash incomes. This shows that the agricultural sector has a stabilizing effect on small economies in the short run. In the long-term a reduction in range cattle production due to added restrictions for sage-grouse conservation can decrease both cash receipts and cash expenses associated with range livestock production in local economies. The agricultural sector in Modoc County California is highly dependent on public lands for livestock production. Cash livestock receipts in Modoc County averaged $29.4 million over the last 10 years. This is a 21.9% decrease from the $35.9 million average from 1969 through 2011. Further reductions in public land AUMs will continue to adversely impact both cash receipts and cash expenses in the long run. These expected outcomes from the DEIS alternatives should be fully explored and disclosed.

Comment Number: NVCASG-14-0091-75
Comment Excerpt Text:
Impacts from Livestock Grazing – do the 39,782,900 acres accurately reflect those acres presently authorized, and also do the 2,210,500 AUMs reflect active, or fully permitted AUMs for all allotments in the study area?

Comment Number: NVCASG-14-0109-5
Comment Excerpt Text:
In addition, grazing by other herbivores in Nevada needs to be adequately reviewed such as ungulates and wild horse and burros. Grazing, as determined by the USFWS, refers to native wildlife, feral horses and livestock but BLM failed to address all species thoroughly and I request BLM readdress these concerns.

Comment Number: NVCASG-14-0195-8
Comment Excerpt Text:
The KMA concept is not consistent with the direction provided in the Nevada Rangeland Monitoring Handbook (NCE 2006) and most, if not all, agency handbooks developed to guide grazing management at the allotment level. The reasoning for this distinction is the widely recognized tenet that the reduction of livestock numbers will not effectively reduce grazing impacts in preferred grazing sites or concentration areas. Further, the requirement to remove livestock within 2 to 5 days when forage utilization levels are met at any given KMA, without considering forage use on the remaining allotment, will have the effect of severely reducing the duration or the length of the grazing season, which in-turn represents a reduction in permitted grazing.

In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the...
currently permitted grazing and will potentially render much of the ranching on public lands as uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1.

**Comment Number: NVCASG-14-0195-9**

Comment Excerpt Text:
Vast areas of Nevada's rangelands are documented to be negatively impacted by feral horses (Beever, E. et al. 2011). However, BLM does not thoroughly address this issue in the DEIS. BLM should reconsider more intensive management of feral horses by reducing AMLs. BLM is legally required to do so under the Wild Horse and Burro Management Act. More attention needs to be given to this critical issue in the LUPA. The Association requests BLM amend the LUPA by setting out a schedule by which feral horse/burro populations will be reduced, especially when over AML. Please reduce AMLs where horses have and are overgrazing sage-grouse habitat. Please more thoroughly analyze the effects and likelihood of feral horse and burro reductions on each allotment.

**Comment Number: NVCASG-14-0205-12**

Comment Excerpt Text:
Alternative C would prohibit grazing in PPMAs and require the removal of grazing infrastructure such as fences, spring developments, stock ponds, water troughs, pipelines, and wells. This management action is severely restrictive, contrary to the multiple use mandate, and does not recognize that grazing can benefit GRSG habitat. Further, the proposal to remove grazing infrastructure is not warranted and does not recognize or analyze the negative effects that such removal would cause.

First, the removal of such infrastructure would increase the disturbance of GRSG habitat, at least temporarily, and could promote the spread of invasive weeds.

**Comment Number: NVCASG-14-0230-2**

Comment Excerpt Text:
the conclusion that the added regulatory mechanisms implemented for sage-grouse conservation under the Alternatives B, D and E will not further reduce actual livestock use beyond current documented levels is unsubstantiated and unsupported in the DEIS.

**Comment Number: NVCASG-14-0262-4**

Comment Excerpt Text:
Alternatives B, D, E. Tables 4.30 and 0-2 are used to conclude that the expected grazing reductions from Alternatives B, D and E will not exceed the 12-year average actual (or billed) livestock use documented for the planning area. Based on this difference the DEIS concludes these alternatives will not adversely affect current grazing levels or result in induced economic effects in the dependent local economies. This conclusion is unsubstantiated as the 12-year average actual use could also be interpreted to approximate the effects associated with the current 4 regulatory and economic pressures that are beyond the control of the affected ranchers. Based his understanding, the conclusion that the added regulatory mechanisms implemented for sage-grouse conservation under the Alternatives B, D and E will not further reduce actual livestock use beyond current documented levels is unsubstantiated and unsupported in this DEIS.

**Comment Number: NVCASG-14-0262-5**

Comment Excerpt Text:
In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands as uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of
the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1. This lack of disclosure in 6 • ... this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative effect analyses.

Comment Number: NVCASG-14-0308-28
Comment Excerpt Text:
Action D-LG 25: Within PPMAs and PGMAs, incorporate terms and conditions into grazing permits to meet GRSG habitat objectives (see Table 2-6).

Comment: This Action would be implemented during grazing permit renewals. The DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years. The DEIS should have included a spreadsheet of the permit expirations for planning area allotments and the dates when the agencies plan to undertake analysis to demonstrate the degree to which this Action would be implemented. Nor does the LUPA/DEIS establish that meeting the GRSG habitat objectives in Table 2-6 will conserve sagegrouse.

Comment Number: NVCASG-14-0309-2
Comment Excerpt Text:
Anderson and Inouye34 found that viable remnant populations of native grasses and forbs are able to take advantage of improved growing conditions when livestock are removed. They found further that despite depauperate and homogenous conditions of permanent plots in 1950, after 45 years of no livestock grazing, vegetation had been anything but static, clearly refuting claims of long-term stability under shrub dominance. Mean richness per plot of ALL growth forms increased steadily in the absence of domestic livestock grazing. Grasses and forbs increased significantly

Comment Number: NVCASG-14-0309-29
Comment Excerpt Text:
A capability and suitability analysis must be included as part of a Supplement to the DEIS to serve as a basis for understanding uses that are in conflict with all of the DEIS’s goals. The EIS process must then act to amend LUPs and remove harmful uses from lands that cannot sustain them – i.e. are not capable and/or not suitable. The risk of soil erosion and loss of site potential, weed invasions, too high a degree of disturbance of habitats or populations must also be considered as part of the suitability analysis. A much broader range of alternatives must be developed and much more concrete and clear goals, objectives, MAs, etc.

Comment Number: NVCASG-14-0309-3
Comment Excerpt Text:
The primary long-term threat is the widespread conversion of mid-stature cool season bunchgrasses, that did not evolve with significant herbivory, to short stature, grazing tolerant species. This livestock-induced conversion has occurred throughout much of the planning area already and is a primary source of imperilment for sage-grouse

Comment Number: NVCASG-14-0309-42
Comment Excerpt Text:
For all alternatives of the DEIS, what populations can withstand further declines at present? What is the magnitude of declines that might occur with the aggressive treatments being proposed? Unless agencies deal upfront in this DEIS allocation process with removal of livestock from land areas targeted for treatment and their surroundings, the success of any treatments and positive outcomes will be more highly uncertain.

Livestock must also be removed from the surrounding lands so that the sage-grouse population has a habitat cushion of less disturbed untreated habitat lands until the treated sites recover sagebrush and other characteristics to the level that was anticipated. Livestock removal is necessary so that recovery can be maximized.
Comment Number: NVCASG-14-0309-44  
Comment Excerpt Text:  
NV (undated): Major threats for the NV sub-region are: Wildfire “due to wildfire” – no mention of synergistic effect of grazing in promoting flammable weeds, invasive species, conifer invasion, infrastructure, climate change, grazing, hard rock mining, oil and gas, human uses. Renewable energy is not listed, despite potential wind and geothermal. DEIS at 8. We note that Idaho at least mentions isolated populations. NV, by writing off nearly all the Northwestern Interior area, is writing off the population.

Comment Number: NVCASG-14-0311-29  
Comment Excerpt Text:  
The NTT Report and Alternative B would also impose limitations on water developments which could have an adverse effect on a rancher’s ability to move livestock that would otherwise improve Sage-grouse habitat. This imposition should be clarified and recognized for its possible detrimental impacts. The Alternative B does recognize under the heading of water resources management that permitted use would decline under this alternative.

Comment Number: NVCASG-14-0311-5  
Comment Excerpt Text:  
Chapter 4, Environmental Consequences, Section 4.9.2, states that retirement of grazing privileges would likely result in reduction of conflicts between grazing and other land uses and may improve range health and forage conditions for remaining permitted use in the area. No citation is provided to support this statement. Any effort to retire grazing privileges must comport with the Taylor Grazing Act, the federal courts’ rulings on the Taylor Grazing Act, and the Department of the Interior Solicitor’s Opinion M-37008. As noted in that M-Opinion, the elimination of grazing may:

- Disrupt the orderly use of the range;
- Breach the Secretary’s duty to adequately safeguard grazing privileges;

- Be contrary to the protection, administration, regulation, and improvement of public lands in grazing districts;
- Hamper the government’s responsibility to account for grazing receipts; or
- Impede range improvements as authorized by the Taylor Grazing Act and Federal Land Policy and Management Act (“FLPMA”).

Comment Number: NVCASG-14-0312-5  
Comment Excerpt Text:  
Alternatives B, D and E.

Comment Number: NVCASG-14-0312-6  
Comment Excerpt Text:  
Comment: These conclude from Table 4.30 that grazing reduction will not exceed the 12 year average of billed (actual) use for the planning area and as such will not adversely affect current grazing levels. This is also not true as the actual use is a result of such factors as regulatory decisions, climate factors as fire and drought which the permittee has no control over. Continued reductions in grazing WILL OCCUR if the actions and objectives of Alt. D (the preferred alternative) are instituted.

Comment Number: NVCASG-14-0312-8  
Comment Excerpt Text:  
Alternative C. Comment: This is not consistent with the Taylor Grazing Act nor the BLMs multiple use mandate. This would eliminate all grazing which would result in an annual loss of $ 136 million of economic output, $ 50 million in labor earnings and 1489 full time job losses.

Comment Number: NVCASG-14-0330-4  
Comment Excerpt Text:  
Alternative A, Livestock Grazing, Table 2.8, states: "Forage availability may increase in the long term due to improved land health and forage productivity. Weed control treatments would increase forage availability in the long term by improving native plant productivity." The statements above reflect current policy and presumably were based on effectiveness monitoring. They should be substantiated in the document as other alternatives conclude that impacts
from GRSG management would be similar to those described under Alternative A.

**Comment Number: NVCASG-14-0358-4**

**Comment Excerpt Text:**
Alternatives B, D, E. Tables 4.30 and 0-2 are used to conclude that the expected grazing reductions from Alternatives B, D and E will not exceed the 12-year average actual (or billed) livestock use documented for the planning area. Based on this difference the DEIS concludes these alternatives will not adversely affect current grazing levels or result in induced economic effects in the dependent local economies. This conclusion is unsubstantiated as the 12-year average actual use could also be interpreted to approximate the effects associated with the current regulatory and economic pressures that are beyond the control of the affected ranchers. Based on this understanding, the conclusion that the added regulatory mechanisms implemented for sage-grouse conservation under the Alternatives B, D and E will not further reduce actual livestock use beyond current documented levels is unsubstantiated and unsupported in this DEIS. The goals, objectives, and actions proposed in Alternative D, the Preferred Alternative, will most certainly result in further reductions to actual livestock use.

**Comment Number: NVCASG-14-0358-6**

**Comment Excerpt Text:**
The KMA concept is not consistent with the direction provided in the Nevada Rangeland Monitoring Handbook (NCE 2006) and most, if not all, agency handbooks developed to guide grazing management at the allotment level. The reasoning for this distinction is the widely recognized tenet that the reduction of livestock numbers will not effectively reduce grazing impacts in preferred grazing sites or concentration areas. Further, the requirement to remove livestock within 2 to 5 days when forage utilization levels are met at any given KMA, without considering forage use on the remaining allotment, will have the effect of severely reducing the duration or the length of the grazing season, which in-turn represents a reduction in permitted grazing.

**Comment Number: NVCASG-14-0358-7**

**Comment Excerpt Text:**
In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS.

### 12.4 CUMULATIVE IMPACT ANALYSIS

**Comment Number: NVCASG-14-0040-5**

**Comment Excerpt Text:**
In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat criteria defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada, it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1. This lack of disclosure in this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative effect analyses.

**Comment Number: NVCASG-14-0066-2**

**Comment Excerpt Text:**
In Table 2.7, the Proposed Action (Alternative D) proposes to deviate from moderate use levels in areas not achieving the sage-grouse habitat criteria
defined in Table 2.6. See Action D-LG 27 in Table 2.5. It becomes readily apparent that implementation of these restrictive forage utilization levels, coupled with the KMA approach found in the Winnemucca District Proposed RMP/FEIS, will substantially reduce currently permitted grazing and render most ranching on public lands as uneconomical. This impact was not disclosed in Section 4.9 in this DEIS. Further, this reasonably foreseeable impact was not identified or disclosed in Section 5.8 or Table 5.1 in this DEIS. This lack of disclosure in this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative impact assessment.

Comment Number: NVCASG-14-0109-20
Comment Excerpt Text:
In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands as uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1. This lack of disclosure in this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative effect analyses.

Comment Number: NVCASG-14-0144-26
Comment Excerpt Text:
Section 5.8 fails to adequately describe the past, present and foreseeable actions affecting livestock grazing. Historic records show significant declines in livestock grazing and AUM utilization. The analysis in the DEIS appears to only address the current conditions and vague predictions about the future. Please include historic information and evaluate it in the overall cumulative analysis.

Comment Number: NVCASG-14-0195-8
Comment Excerpt Text:
The KMA concept is not consistent with the direction provided in the Nevada Rangeland Monitoring Handbook (NCE 2006) and most, if not all, agency handbooks developed to guide grazing management at the allotment level. The reasoning for this distinction is the widely recognized tenet that the reduction of livestock numbers will not effectively reduce grazing impacts in preferred grazing sites or concentration areas. Further, the requirement to remove livestock within 2 to 5 days when forage utilization levels are met at any given KMA, without considering forage use on the remaining allotment, will have the effect of severely reducing the duration or the length of the grazing season, which in-turn represents a reduction in permitted grazing.

In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands as uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1.

Comment Number: NVCASG-14-0308-51
Comment Excerpt Text:
The monitoring framework also does not acknowledge livestock operations or infrastructure as
disturbance. DEIS at Appendix E-7. This is simply unfounded.

**Comment Number: NVCASG-14-0346-23**
**Comment Excerpt Text:**
Chapter: 5, Section: 5.3.4, Page Number: 890

Comment: The document suggests that "Grazing" is a "Lesser Threat" within this Management Zone (V). However, the USFW5 COT Report (pg. 84) identifies "improper livestock grazing practices and wild horse utilization causing severe habitat degradation in some instances, especially with respect to meadow, spring and riparian habitats" suggesting an elevated level of concern for Management Zone V.

### 12.5 Mitigation Measures

**Comment Number: NVCASG-14-0065-3**
**Comment Excerpt Text:**
For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come up with a 10 year plan that makes progress toward utilization objectives.

**Comment Number: NVCASG-14-0109-10**
**Comment Excerpt Text:**
30, D, Action LG 4, 228

Land Health Assessments must be supported by on the ground monitoring if these assessments are to result in changes to the grazing permit. Particularly needed is trend data to support findings of the assessment teams for both BLM and USFS. Absent this information the findings are likely highly subjective and could result in negative impacts to the ranching operation and local economy. Because of this TR 1734-6 clearly states that the rangeland health assessment method shall not be used independently to make grazing management changes (BLM 2005).

Also it is imperative that the permittee be included at the onset of any assessment on his/her allotment.

**Comment Number: NVCASG-14-0132-34**
**Comment Excerpt Text:**
The DEIS RDF states that “An Environmental Assessment is required for applications for monitoring sites in known Sage Grouse Population Management Units." However, the DEIS is entirely unclear as to what monitoring sites are being referred to, and could be construed that BLM and FS are required to file an EA every time they want to establish a rangeland monitoring site on the federal lands.

**Comment Number: NVCASG-14-0259-10**
**Comment Excerpt Text:**
SNWA encourages the BLM and USFS to incorporate language for adaptive management in the livestock grazing section of the Final LUPA/EIS. The goals and objectives found in the Draft LUPA/EIS (Chapter 2, pages 79-80) imply but never explicitly describe the intent to use adaptive management.

**Comment Number: NVCASG-14-0376-3**
**Comment Excerpt Text:**
For the most part, alternative D does not allow for adaptive management. Action D-LG 27 would call for removal of livestock in the next grazing season if utilization objectives are not being attained. These utilization levels, in many areas, will be impossible to reach at any point in the year. Therefore, we can assume that grazing may never be allowed. This is antithetical to adaptive management. Instead, BLM should, for example, work with permittees to come up with a 10 year plan that makes progress toward utilization objectives.

### 13. Locatable Minerals

#### 13.1 Range of Alternatives

**Comment Number: NVCASG-14-0003-5**
**Comment Excerpt Text:**
AEMA contends that the surface use restrictions and land withdrawals proposed within sage-grouse habitat under Alternatives B, C and F, and to a lesser degree...
Alternative D conflict with the 11 RMPs goals and objectives for minerals, BLM's own policy in Manual 6840, the General Mining Law, and its multiple use mandate under FLPMA (discussed in detail below), and represents a fatal flaw which renders the DLUPA/DEIS both inadequate and inconsistent with existing laws and policies.

Comment Number: NVCASG-14-0003-7
Comment Excerpt Text:

Comment Number: NVCASG-14-0091-68
Comment Excerpt Text:
This section states, "Under Alternative B, no closures of PPMAs would be authorized." What does this mean? This sentence is unclear. Alternative B presents an option for significant proposals for minerals withdrawals, yet this section doesn't present those figures.

Comment Number: NVCASG-14-0114-1
Comment Excerpt Text:
It is well known that SG have very strong site fidelity, (5) so once SG is displaced by resource extraction it is potentially a permanent loss to SG populations even with reclamation. Therefore, withdrawal from mineral development needs to be an option in the chosen management plan, which is essentially the first two conservation options stated in the COT report:


Comment Number: NVCASG-14-0188-30
Comment Excerpt Text:
Table 2.5 - B-LOC 1, C-LOC 1, and F-LOC-1

There is insufficient information in the description of this Action Item to allow the public to properly evaluate and determine the need for this Action with regards to protecting GRSG populations. Specifically, the second bullet point references "additional effective mitigation in perpetuity for conservation." This statement is unclear as to what is considered effective mitigation, including use of ratios; strategies can be applied as mitigation, success criteria, etc. Most importantly, this Action Item seems to overlook or downplay opportunities for Avoidance and Minimization of impacts.

Comment Number: NVCASG-14-0188-32
Comment Excerpt Text:
Table 2.8, Greater Sage Grouse - Alternative D - Locatable Minerals

"Impacts on GRSG habitat from locatable minerals management would be the same as under Alternative A." This statement is inconsistent with Action D-LOC 1 which states "apply mitigation and GRSG BMPs that minimizes the loss of PPMAs or provides for enhancement of PPMAs through off-site mitigation within the WAFWA management zone."

Comment Number: NVCASG-14-0198-7
Comment Excerpt Text:
Alternative D includes a requirement for all impacted lands to be restored to their previous topography. If Alternative D was in fact selected, open pit mines would be prohibited. There is no way to re-establish the pre-existing contours of an open pit mine since much of the dirt or rock has been physically removed from the site or compacted. This proposal is physically and economically infeasible and thus would prevent these types of mines from being constructed in much of Nevada.
Comment Number: NVCASG-14-0199-51
Comment Excerpt Text:
Table 2.5 (Page 255) - B-LOC 1, C-LOC 1, and F-LOC 1:

There is insufficient information in the description of this Action Item to allow the public properly evaluate and determine the need for this Action with regards to protecting GRSG populations. Specifically, the second bullet point references "additional effective mitigation in perpetuity for conservation." This statement is unclear as to what is considered effective mitigation, including use of ratios; strategies can be applied as mitigation, success criteria, etc.

Comment Number: NVCASG-14-0199-54
Comment Excerpt Text:
Table 2.8, Greater Sage Grouse (Page 327) - Alternative D - Locatable Minerals:

"Impacts on GRSG habitat from locatable minerals management would be the same as under Alternative A." This statement is inconsistent with Action D-LOC 1 that states "apply mitigation and GRSG BMPs that minimizes the loss of PPMAs or provides for enhancement of PPMAs through off-site mitigation within the W AFW A management zone."

Comment Number: NVCASG-14-0285-58
Comment Excerpt Text:
Alternative D offers essentially no protection from locatable minerals mining (DEIS at 84), and given the limited latitude that agencies have to regulate projects under the 1872 Mining Law, this is a particularly egregious abdication of the responsibility to protect and restore sage grouse populations. Mining activity is widespread across the planning area, so the impacts from mining projects on key sage grouse habitats would be expected to be substantial. The priority habitats designated should all be withdrawn from locatable minerals entry and the federal agencies should propose this through the RMP amendment. We lack confidence in federal agencies' abilities to restrict the level of activity and surface disturbance on mining claims filed under the 44 1872 mining law to accommodate sage grouse habitat needs. Therefore, the appropriate course of action is to avoid allowing claims to issue in these priority habitats. We are particularly concerned about the potential for uranium extraction, be it underground, strip mining, or through in situ drilling and extraction methods. The lack of uranium mining activity thus far in the planning area is not a reliable measure of future development potential.

Comment Number: NVCASG-14-0285-86
Comment Excerpt Text:
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit
overhead transmission except within 0.5 mile of existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns 68 within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment). 69

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).
Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12% cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities.

Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment).

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).
Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

13.2 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCAGS-14-0003-17
Comment Excerpt Text:
BLM failed to describe the affected environment adequately by failing to include any discussion of geology (See Ch. 3; see also Ch. 3 at 113), and limiting discussion of locatable minerals to the identification of the laws that govern them, examples of locatable minerals, and a remedial description of the process of location (Ch. 3 at 113). What the discussion lacks is any useful information as to what minerals are present in the Planning Area and where, or the mineral potential within the Planning Area. Without a discussion of geology, mineral potential, and existing conditions, it makes it impossible to analyze the potential impacts the proposed alternatives will have on various resources, especially locatable minerals.

Comment Number: NVCAGS-14-0071-2
Comment Excerpt Text:
The Draft EIS fails to include a thorough discussion of geology or the value of mineral resources in Nevada. Nevada contains some of the highest value and most significant mineral resources in the world. Many of the Alternatives in the Draft EIS would limit the ability to explore for or develop these minerals. It is critical that the Draft EIS include a section on geology and identify the extent and value of the mineral resources within the EIS study area. The lack of such a section is a fundamental flaw in the draft EIS and makes it impossible for the public or the industry to understand and comment on the impact of the proposed actions.

Comment Number: NVCAGS-14-0169-28
Comment Excerpt Text:
The amount of disturbance associated with locatable minerals needs to be presented before one can conclude that withdrawing land from mineral entry is necessary. The DEIS inflates the amount of disturbance caused by mining activity because it does not account for the fact that claim areas are generally much larger than the actual areas disturbed under an approved plan of operations. The percentage of GRSG habitat currently disturbed by locatable mineral activity needs to be known to determine the magnitude of the impact and the need to reduce the magnitude of the impact.

Comment Number: NVCAGS-14-0188-34
Comment Excerpt Text:
Page 120, Table 3.58
This information is misleading. The data in the table inflates the "impact" of locatable mineral activity as claim areas are generally much larger than areas under Plans of Operation, which are generally larger than the areas of actual disturbance. This acreage of disturbance of locatable mineral activity should be presented to provide perspective. This is the data that BLM requires in mining EIS documents and BLM should be held to the same standard of data presentation.

Comment Number: NVCAGS-14-0198-2
Comment Excerpt Text:
The Draft EIS fails to include even a rudimentary section on geology or the value of mineral resources in Nevada. Nevada contains some of the highest value and most significant mineral resources in the country. Many of the Alternatives in the Draft EIS would limit the ability to explore for or develop these minerals. It is critical that the Draft EIS include a section on geology and Nevada's mineral resources and identifies and quantifies the economic impacts which will occur if many of these mineral deposits (whether known or unknown) are "locked up" through proposed
management strategies. This is a fundamental flaw in the draft EIS and makes it impossible for the public or the industry to understand and comment on the impact of the proposed actions.

Comment Number: NVCASG-14-0199-56
Comment Excerpt Text:
Page 120, Table 3.58:

The information contained in this table is misleading. The data inflates the "impact" of locatable mineral activities. The acreage of disturbance of locatable mineral activity should be presented to provide perspective. This is the data that BLM requires in mining EIS documents and BLM should be held to the same standard of data presentation. Such information would give the public context to determine if mining disturbance is an issue that warrants the restrictions proposed in the various alternatives in Chapter 2. Data is available from BLM's own LR2000 records and at the Nevada Division of Environmental Protection

Comment Number: NVCASG-14-0199-67
Comment Excerpt Text:
Chapter 4.14.2 Environmental Consequences, Locatable Minerals (Page 189) - Assumptions:

Please provide a citation for the DEIS Assumptions, especially regarding the establishment of grass/forb and sagebrush vegetation on reclaimed lands. Otherwise, the information can be assumed to be inaccurate.

Comment Number: NVCASG-14-0200-11
Comment Excerpt Text:
The serious errors and inconsistencies in Section 4.14.2, compounded with the error in Table 2.8, cannot withstand scrutiny under even minimal standards for clarity, accuracy, completeness, and utility pursuant to NEPA and BLM's guidelines for complying with the Data Quality Act. BLM must prepare a corrected, revised draft and provide the public with another opportunity to review a clear, complete and accurate draft and provide comments.

Comment Number: NVCASG-14-0200-12
Comment Excerpt Text:
The omission of a section on geology and mineral resources in Chapter 3 is a serious shortcoming of the DEIS that must be corrected in a revised DEIS. Information about geology and mineral potential are essential to describing the affected environment and analyzing the environmental and economic consequences that would result from implementing any of the alternatives.

Comment Number: NVCASG-14-0200-5
Comment Excerpt Text:
The omission of sections on geology and mineral potential have a ripple effect throughout the document because without this discussion, there is no baseline against which to measure the impacts to locatable minerals that would be associated with the mineral withdrawals proposed in Alternatives B, C, and F.

Comment Number: NVCASG-14-0306-18
Comment Excerpt Text:
Chapter 3 of the DEIS is incomplete because it lacks any discussion of geology and mineral resources (e.g., locatable minerals, leasable/fluid minerals and mineral materials). Consequently, the DEIS fails to consider an essential fact about the planning area; it has exceptionally important mineral potential. In fact, the planning area contains some of the most prolific gold-producing mineral trends in the world, some of which are located in areas with GSG habitat. The State of Nevada is an important producer of gold, silver, and other minerals. Individual claim owners, small and large mineral exploration companies, small and large mineral producers, county governments in areas with mineral production, and the State of Nevada all derive economic benefits from mineral exploration and production thanks to the world-class mineral endowment in the planning area. The DEIS must be revised to quantify how these entities would be adversely affected by Alternatives B, C, D, and F.

The omission of sections on geology and mineral potential in the Affected Environment chapter means there is no baseline against which to measure the
impacts to locatable minerals (or oil and gas, geothermal, or mineral materials) that would be associated with the mineral withdrawals proposed in Alternatives B, C, and F. The section in Chapter 4 dealing with impacts to locatable minerals – and other mineral resources as well – is simplistic because it merely lists the number of acres that would be withdrawn from mineral entry or other types of mineral development under each alternative.

Comment Number: NVCASG-14-0306-20
Comment Excerpt Text:
Finally we request that BLM revise the figures for Alternative E in the DEIS because they consistently misrepresent the July 2012 Nevada State Plan. A fundamental concept of the July 2012 Nevada State Plan is that it does not place any lands off-limits to development due to the presence of GSG habitat. Unfortunately, the DEIS figures for Alternative E show lands as excluded from use, off-limits to development, or proposed withdrawals from operation of the Mining Law without explaining that these are proposed BLM withdrawals and exclusions and not part of the State Plan. For example, Figure 2-56, Locatable Minerals, shows lands proposed for withdrawal from mineral location. The BLM – not the State of Nevada – is proposing withdrawal of these lands. This and other figures in the DEIS need to be revised to clarify that the proposed withdrawals are BLM proposals – not State-supported withdrawals.

13.3 IMPACT ANALYSIS

Comment Number: NVCASG-14-0003-30
Comment Excerpt Text:
BLM states that environmentally responsible mineral development is a primary goal and a key objective of the existing RMPs; however, Alternatives B, C, and F severely limit the possibility of hard rock mineral development by way of land withdrawals, validity exams, and surface use restrictions in order to protect and conserve sage-grouse, which is inconsistent with the stated goals and objectives of the existing RMPs. The BLM must eliminate this inconsistency, in addition to the inconsistencies cited above, and re-issue a draft for the public to review and comment on.

Comment Number: NVCASG-14-0003-38
Comment Excerpt Text:
BLM asserts numerous times throughout the DLUPA that:

...any entity that holds valid existing rights to locatable mineral development would not be affected by withdrawal of lands from locatable mineral entry because the valid existing right would supersede a withdrawal if it occurs...

The above statement demonstrates a complete lack of knowledge associated with claim validity, the impact of withdrawals, and the General Mining Law. BLM maintains that its “analysis” above supports the conclusion that production of locatable minerals would be unaffected by implementation of any of the alternatives, and therefore no impact analysis is necessary. BLM must remove the above statement and revise the impact analysis in order to comply with NEPA and withstand legal scrutiny.

Comment Number: NVCASG-14-0003-41
Comment Excerpt Text:
BLM failed to identify or provide useful explanations of impacts to locatable minerals associated with each alternative as required by 40 CFR §§1502.16(a) (b), 1508.7 (See Ch. 4). AEMA contends that the impact analysis, including the cumulative impacts related to mineral withdrawals, and surface use restrictions in sage-grouse habitat across the range were not adequately considered, analyzed and disclosed.

Comment Number: NVCASG-14-0015-15
Comment Excerpt Text:
In addition, because Alternative C proposes to withdraw from mineral entry over four million acres more than Alternative B, the Draft LUPA/EIS’s statement that impacts from locatable mineral management actions under Alternative C would be the same as under Alternative B is inaccurate. Moreover, as with Alternative B, the limitation of impact analysis to management actions specific to locatable minerals overlooks the fact that other
management actions under Alternative C, such as restrictions related to roads and rights-of-way, have significant potential to impact mining operations. The Final LUPA/EIS must evaluate and disclose these impacts.

**Comment Number: NVCASG-14-0071-3**

Comment Excerpt Text:
The draft EIS seems to virtually ignore the Mining Law of 1872. In addition to the proposed land withdrawals, many of the alternatives would reduce the ability of prospectors to access and develop valid mining claims; even in general sage-grouse habitats, by requiring roads and the utility lines needed to develop them to follow straight lines or pre-existing corridors. Since the whole point of exploring is to find new areas to mine, many of the alternatives would make it impossible to either develop existing claims or explore for new ones. The Draft EIS must disclose the impact that road and ROW restrictions would have on locatable minerals.

Even if lands were kept open and not withdrawn from exploration, it would mean nothing if development of the roads, pipelines, power lines and the like needed to support mineral operations are severely restricted or even prohibited.

**Comment Number: NVCASG-14-0091-76**

Comment Excerpt Text:
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.

As indicated on page 189, “Mineral resources are not evenly distributed across the landscape.” This alone should be sufficient reason for not withdrawing lands from mineral entry. Until the mineral potential is known, closing areas to exploration and development is inappropriate. Alternative D, which allows for mitigation of impacts, is the only approach that can be implemented and still maintain a viable minerals industry and ensure consistency with federal law.

**Comment Number: NVCASG-14-0091-78**

Comment Excerpt Text:
The first paragraph assumes that all mineral exploration and development is entirely incompatible with GRSG on a landscape scale and offers no flexibility to develop multiple-use strategies. Collaborative approaches allow mineral development to occur with minimal impacts to GRSG. This offers no potential for compromise and prevents implementation of avoid, minimize, mitigate strategy, which is highly preferred.

The third paragraph states, "Like Alternative A, under Alternative B, 12,693,500 acres of PPMA would be recommended for withdrawal from location under the Mining Law of 1872." This statement and action is not proposed under Alternative A, or it not clearly stated in Alternative A.
achieved through avoidance, minimization of impacts, and mitigation of impacts within the designated areas.

**Comment Number: NVCASG-14-0188-40**  
**Comment Excerpt Text:**  
Chapter 4.14.2 Environmental Consequences, Locatable Minerals (Page 189) - Assumptions

Please provide a citation for the LUPAIDEIS Assumptions, especially regarding the establishment of grass/forb and sagebrush vegetation on reclaimed lands. Otherwise, the information can be assumed to be inaccurate.

**Comment Number: NVCASG-14-0198-8**  
**Comment Excerpt Text:**  
The Alternatives in the Draft EIS will cause significant socioeconomic harm to the mineral exploration industry, as well as to the communities within which we work, the Nevada counties which contain both the largest concentrations of sage-grouse and the largest concentrations of mineral potential, the state of Nevada, and the federal government itself. However, an analysis of these potential economic impacts is largely missing from the documents, or if mentioned at all, downright misleading. For example, Alternatives Band C would withdraw between 12 and 17 million acres from mineral entry yet the economic impacts of this action are identified as "the same as" the other alternatives or as "impossible to analyze". This approach is unacceptable. Mineral exploration and development are the key economic drivers in the Nevada counties which contain much of the sage-grouse habitat in Nevada. The BLM must do better.

**Comment Number: NVCASG-14-0199-20**  
**Comment Excerpt Text:**  
DEIS, Ch. 4 at 191 (783). This analysis is lacking in substance. Merely restating the amount of acres that would be withdrawn from mineral entry does not constitute an analysis of how that withdrawal would impact locatable minerals in the planning area. BLM must explain in detail the significant impacts that such proposed withdrawal would have on locatable minerals.

**Comment Number: NVCASG-14-0199-21**  
**Comment Excerpt Text:**  
because Alternative C proposes to withdraw from mineral entry over four million acres more than Alternative B, the DEIS’s statement that impacts from locatable mineral management actions under Alternative C would be the same as under Alternative B is inaccurate. Moreover, as with Alternative B, the limitation of impact analysis to management actions specific to locatable minerals overlooks the fact that other management actions under Alternative C, such as restrictions related to roads and rights-of-way, have significant potential to impact mining operations. The Final LUPA/EIS must evaluate and disclose these impacts.

**Comment Number: NVCASG-14-0199-22**  
**Comment Excerpt Text:**  
DEIS, Ch. 4 at 191 (783). There is no analysis of the impacts that mitigation requirements, application of BMPs, restrictions and design features, and limitation of surface disturbance could have on locatable-mineral development. BLM must analyze and disclose the potential effects that these management actions could have on locatable minerals.

**Comment Number: NVCASG-14-0199-23**  
**Comment Excerpt Text:**  
Because the management actions and restrictions that could impact locatable minerals differ between Alternatives B and F, BLM and USFS must provide an analysis of how Alternative F would impact locatable-mineral development, not just assume that those impacts will be the same as Alternative B. If BLM and USFS ultimately determine that the impacts will be the same, it must describe how it reached that conclusion in light of the differences described above.

**Comment Number: NVCASG-14-0199-55**  
**Comment Excerpt Text:**  
Table 2.8, Socioeconomic and Environmental Justice (Page 352-353) - Alternative D:

There is no discussion relative to the economic loss of locatable minerals exploration and development, yet in Table 2.8 Section Locatable Mineral (p. 346),
the DEIS notes that additional design features can result in "reduced access to new or existing mines," and "reduced efficiency and increased operational costs that make potential locatable mineral development economically infeasible." These statements are contradictory and represent inadequate and incomplete analysis.

**Comment Number: NVCASG-14-0205-32**
**Comment Excerpt Text:**
120, Table 3.57

There are 6,547,200 acres withdrawn from further location of mining claims or sites in the planning area.

SEE ATTACHMENT for TABLE 3.57

Gold, silver, and copper are the primary mineral resources found in the planning area, and are therefore the focus of discussion for this section.

Comment:

First, it is confusing that the text states the acres are already withdrawn and the table states the acres are petitioned for withdrawal.

Please clarify.

**Comment Number: NVCASG-14-0205-8**
**Comment Excerpt Text:**

There is no analysis of why the proposed withdrawal from mineral entry based on risk to GRSG and its habitat is necessary where the same objective can be achieved through avoidance, minimization of impacts, and mitigation of impacts within the designated areas.

**Comment Number: NVCASG-14-0205-9**
**Comment Excerpt Text:**

The amount of disturbance associated with locatable minerals needs to be presented before one can conclude that withdrawal from mineral entry of 12.7 million acres is necessary. The percentage of GRSG habitat currently disturbed by locatable mineral activity needs to be known to determine the magnitude of the impact and the need to reduce the magnitude of the impact.

**Comment Number: NVCASG-14-0306-11**
**Comment Excerpt Text:**

The discussion in Section 4.14.2 on locatable minerals fails to meet the NEPA requirement to take a hard look at the impacts of each alternative and to quantify those impacts in as much detail and specificity as possible. This section is so full of errors and internal inconsistencies that the public cannot understand the analysis well enough to provide meaningful comments.

**Comment Number: NVCASG-14-0306-15**
**Comment Excerpt Text:**

The claim validity discussion on Page 245 in Chapter 4 is completely erroneous and reflects a profound lack of knowledge of claim validity, operation of the Mining Law, and the implications of withdrawing land from mineral entry. It seems clear that BLM and USFS mineral experts were not consulted in preparing or reviewing this analysis. They must be consulted and the DEIS must be revised to properly analyze the short- and long-term impacts that would result from putting millions of acres off limits to any type of mineral activity for the foreseeable future.

**Comment Number: NVCASG-14-0342-33**
**Comment Excerpt Text:**

There is no analysis of why the proposed withdrawal from mineral entry based on risk to GRSG and its habitat is necessary where the same objective can be achieved through avoidance, minimization of impacts, and mitigation of impacts within the designated areas.

**Comment Number: NVCASG-14-0342-34**
**Comment Excerpt Text:**

The DEIS inflates the amount of disturbance caused by mining activity because it does not account for the fact that claim areas are generally much larger than the actual areas disturbed under an approved plan of operations. The percentage of GRSG habitat currently disturbed by locatable mineral activity needs to be known to determine the magnitude of the impact and the need to reduce the magnitude of the impact.
Comment Number: NVCASG-14-0366-2
Comment Excerpt Text:
DEIS Impact on Minerals: The public has the right to know the location of the greater sage-grouse habitat with respect to minerals and mining in Nevada. As part of the EIS process, the BLM needs to plot all Nevada mining districts, active claims and past/present mines to determine their spatial relationship to the location of preliminary priority habitat (PPH) and preliminary general habitat (PGH). Mineral maps can be obtained from the Nevada Bureau of Mines and Geology and records of active claims and mineral leases are maintained by the BLM. The presence of greater sage-grouse habitat in geologically favorable areas must not preclude mineral exploration, development, and production.

13.4 CUMULATIVE IMPACT ANALYSIS

Comment Number: NVCASG-14-0003-42
Comment Excerpt Text:
This DLUPA/DEIS is part of multiple NEPA documents, including revisions for Wyoming, Idaho, Montana, and Utah. AEMA maintains that the cumulative impact to locatable minerals from the combined land withdrawals, segregations, and de facto withdrawals currently in place, as well as the future land withdrawals proposed in dozens of RMP revisions will have an inadequately defined and significant adverse effect on the hard rock mining industry nationwide. The nationwide impacts must be thoroughly analyzed; otherwise BLM’s analysis is significantly flawed and incomplete. AEMA further contends that the direct, indirect, and cumulative impact analysis is inadequate and lacks convincing data as well as rationale, as described above. BLM must resolve the above issues and re-issue a draft of this LUPA to allow for public comment. BLM must also expand the analysis to look at the cumulative impacts on such important economic factors as increased unemployment, decreased domestic mineral and energy production, and increased reliance on foreign sources of minerals and energy.

Comment Number: NVCASG-14-0015-20
Comment Excerpt Text:
Statement: "Locatable mineral development is an ongoing enterprise in the cumulative impact analysis area and is expected to continue under Alternatives A and C"

Page #: 65 (913)

Comment: Locatable mineral development is expected to continue in the cumulative impact analysis area under all alternatives, not just Alternatives A and C. This is recognized by the subsequent statement on page 65 that, “[g]iven that the locatable minerals program is a non-discretionary program by the BLM and Forest Service, mineral exploration and development would be expected to continue to occur under all alternatives.”

Comment Number: NVCASG-14-0015-23
Comment Excerpt Text:
Statement: “Decreases in production would be expected to be greatest under Alternatives B and F, under which the BLM and Forest Service would recommend all PPMA be withdrawn from mineral entry.”

Page #: 65 (913)

Comment: This statement fails to recognize that Alternative C would have the greatest impacts on locatable minerals because it would identify a greater number of acres as PPMA and recommend that all PPMAs be withdrawn from mineral entry. Draft LUPA/EIS, Ch. 4 at 191 (783)

Comment Number: NVCASG-14-0015-24
Comment Excerpt Text:
Statement: “Overall, management under Alternatives B, E, and F may be restrictive to mineral development and could significantly impact mineral exploration and development in the study area.”

Page #: 65 (913)
Comment: This statement also fails to acknowledge Alternative C’s significant impacts to locatable minerals.

Comment Number: NVCASG-14-0015-25
Comment Excerpt Text:
Statement: Table 5.6 indicates that an additional 11,466,300 acres would be recommended for withdrawal under Alternatives B and F.

Page #: 65 (913)

Comment: Table 2.3 indicates that an additional 11,397,400 acres would be recommended for withdrawal under Alternatives B and F. Draft LUPA/EIS, Ch. 2 at 38 (70) (12,693,500 – 1,296,100 = 11,397,400).

Comment Number: NVCASG-14-0015-27
Comment Excerpt Text:
Statement: "Management under Alternative C has the same goals and objectives as Alternative A and would have the same cumulative impacts."

Page #: 66 (914)

Comment: Alternative C would recommend the greatest amount of acres for mineral withdrawal (17,732,900 acres total; 16,436,800 additional). Draft LUPA/EIS, Ch 4 at 191 (783). Thus it would not have the same cumulative impacts as the no-action alternative.

Comment Number: NVCASG-14-0169-15
Comment Excerpt Text:
A discussion of the range-wide withdrawal for the GRSG is important, as the purpose and need of each DEIS is aimed at shoring up a perceived inadequacy under the ESA and focused on avoiding a range-wide listing for the GRSG. Accordingly, it is important to gain a better understanding of the total number of acres proposed for withdrawal by the Agencies in order to determine whether there is a possibility of avoiding the listing - an essential element of the Purpose and Need of this LUPA process - because the boundaries for purposes of the ESA are not confined by state borders. See Defenders of Wildlife et al. v. Salazar, 729 F.Supp 1207 (D. Montana 2010) (rejecting a USFWS proposal to delist gray wolf populations in Idaho and Montana.) Here, the Agencies are considering major withdrawals in the States of Idaho, Nevada, and Utah in separate DEIS documents. However, there is no review or analysis of the cumulative withdrawals throughout these three states. In fact, not only has BLM failed to consider the total withdrawals in all three plans, but has likewise failed to consider the cumulative effects of these withdrawals in all 11 Western states in sage grouse habitat.

Comment Number: NVCASG-14-0199-59
Comment Excerpt Text:
Additionally, there is a general lack of consistency applied to sections relative to Locatable Minerals. Some sections provide acreages, whereas others do not.

Comment Number: NVCASG-14-0199-66
Comment Excerpt Text:
Page 188, Section 4.14.2:
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.

Comment Number: NVCASG-14-0199-68
Comment Excerpt Text:
The third paragraph states, "Like Alternative A, under Alternative B, 12,693,500 acres of PPM A would be recommended for withdrawal from location under the Mining Law of 1872." This statement and action is
not proposed under Alternative A, or it not clearly stated in Alternative A.

**Comment Number:** NVCASG-14-0342-17  
**Comment Excerpt Text:**
The DEIS documents are part of several related NEPA documents, including the DEISs for Oregon, Idaho and southwestern Montana, Nevada and northeastern California, and Utah. The total potential acreage withdrawn and the contribution in this DEIS to a broader total number of acres proposed to be withdrawn from future public use is not discussed. This is a fatal NEPA analytical gap.

**Comment Number:** NVCASG-14-0342-18  
**Comment Excerpt Text:**
A discussion of the range-wide withdrawal for the GRSG is important, as the purpose and need of each DEIS is aimed at shoring up a perceived inadequacy under the ESA and focused on avoiding a range-wide listing for the GRSG. Accordingly, it is important to gain a better understanding of the total number of acres proposed for withdrawal by the Agencies in order to determine whether there is a possibility of avoiding the listing — an essential element of the Purpose and Need of this LUPA process - because the boundaries for purposes of the ESA are not confined by state borders.

**Comment Number:** NVCASG-14-0342-19  
**Comment Excerpt Text:**
Agencies are considering major withdrawals in the States of Idaho, Nevada, and Utah in separate DEIS documents. However, there is no review or analysis of the cumulative withdrawals throughout these three states. In fact, not only has BLM failed to consider the total withdrawals in all three plans, but has likewise failed to consider the cumulative effects of these withdrawals in all 11 Western states in sage grouse habitat. Accordingly, until BLM does so, it is in clear violation of NEPA and its implementing regulations that require the agency evaluate cumulative impacts.

### 13.5 Mitigation Measures

**Comment Number:** NVCASG-14-0091-38  
**Comment Excerpt Text:**
There is insufficient information in the description of this Action Item to allow the public properly evaluate and determine the need for this Action with regards to protecting GRSG populations. Specifically, the second bullet point references "additional effective mitigation in perpetuity for conservation." This statement is unclear as to what is considered effective mitigation, including use of ratios; strategies can be applied as mitigation, success criteria, etc.

### 14. Disturbance Cap

**Comment Number:** NVCASG-14-0003-20  
**Comment Excerpt Text:**
BLM fails to show how the goal of 50-70% sagebrush cover in priority habitat (i.e. PPMA) and the 3% disturbance cap are necessary, reasonable, and achievable, or how they would actually benefit sage-grouse and not result in unintended adverse consequences to sage-grouse or other species. BLM asserts under Alternative F that limiting disturbance to 3% would result in maintenance of sagebrush/perennial grass vegetation communities within PPMA (DLUPA Ch. 2 at 330).

However, BLM inappropriately assumes that surface disturbance is the primary cause of the spread of invasive species and provides no scientific support for this assertion. In fact, BLM does not cite any studies that support the assertion that limiting surface disturbance will result in quality sagebrush/perennial grass communities. If BLM has relied on any such studies, then BLM must provide citation and access to these studies. If such studies do not exist, then BLM’s action alternatives do not meet NEPA or BLM-internal requirements to use reliable, accurate, clear, and useful data as required in BLM’s policies implementing the Data Quality Act.
Comment Number: NVCASG-14-0285-38
Comment Excerpt Text:
Alternative D would apply a 3% limit on anthropogenic disturbance, but only for future fluid mineral leases. Relevant to the issue of the 3% disturbance cap, we ask the responsible official to make a formal determination concerning which of the available scientific information is the most accurate, reliable, and relevant in determining what percentage of land area should be allowed to be disturbed in order to achieve the stated goal of the RMP Amendment. We would further ask the Forest Service to determine whether a 3% disturbance cap or no disturbance cap (as proposed for Alternative D) is the scientifically supported measure to apply as a Condition of Approval to existing fluid mineral leases. We would ask the Forest Service to consider the findings of Knick et al. (2013), which concluded in relevant part that 99% of the active leks in the study area (encompassing the entire western range of the greater sage grouse) were surround by habitat with 3% surface disturbance or less. See Attachment 1. We would ask the responsible official to consider the findings of Kirol (2012), which found for his study area immediately north of the planning area that surface disturbance greater than or equal to 4% of the land area had a significant negative impact on greater sage grouse brood rearing habitat. See Attachment 2. We would ask the responsible official to consider the findings of Copeland et al. (2013), which found that if all of the State of Wyoming sage grouse policy provisions (which include a 5% disturbance cap calculated using a Disturbance Density Calculation Tool) were implemented fully and to the letter, that a 9 to 15% decline in greater sage grouse populations would still occur statewide, including a 6 to 9% decline within designated Core Areas (where the 5% disturbance cap would be applied). We would ask the responsible official also to render the same determination regarding the accuracy, reliability, and relevance of science supporting the 3% disturbance cap proposed for implementation as a Condition of Approval for existing fluid mineral leases under Alternative B.

15. Recreation

15.1 Range of Alternatives

Comment Number: NVCASG-14-0032-1
Comment Excerpt Text:
Between March 1 and May 15, prohibit OHV events from using routes that pass through an active lek. Impose a time of day restriction (after 10 a.m.) for routes that pass within ¼ mile of an active lek.

Comment Number: NVCASG-14-0032-2
Comment Excerpt Text:
Consider adopting a defensible standard, such as the 2003 California State OHV Sound Law which states, “Sound emissions of competitive off-highway vehicles manufactured on or after January 1, 1998, shall be limited to not more than 96 dBA, and if manufactured prior to January 1, 1998, to not more than 101 dBA, when measured from a distance of 20 inches using test procedures established by the Society of Automotive Engineers under Standard J-1287, as applicable. Sound emissions of all other off-highway vehicles shall be limited to not more than 96 dBA if manufactured on or after January 1, 1986, and not more than 101 dBA if manufactured prior to January 1, 1986, when measured from a distance of 20 inches using test procedures established by the Society of Automotive Engineers under Standard J-1287, as applicable.” Link to CA Sound Law - http://ohv.parks.ca.gov/?page_id=23037

Comment Number: NVCASG-14-0238-14
Comment Excerpt Text:
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
Substantive Comments on the Nevada and Northeastern California Greater Sage-Grouse Draft LUPA/EIS

plan, particularly since it conflicts with the BLM's multiple-use mandate.

15.2 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCASG-14-0083-36
Comment Excerpt Text:
Ch: 2, Sec: 2.8.2, Pg. No.: 215

Text Referencing: Table 2.5; Action D-REC 2

Comment: Is there scientific literature on the effects on GRSG from low-impact recreational activities such as hiking and camping? It is not discussed 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.

Comment Number: NVCASG-14-0178-1
Comment Excerpt Text:
While we understand that on the local level there may need to be consideration of how OHV trails and areas impact the sage-grouse on a case-by-case basis, there seems to be little science supporting OHV use as a substantial factor affecting overall sage-grouse populations.

Comment Number: NVCASG-14-0188-8
Comment Excerpt Text:
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 within 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 dispersal), possibly including the Bi-State Distinct Population Segment.

Comment Number: NVCASG-14-0193-8
Comment Excerpt Text:
the Proposed Action (Alternative D) includes Action DREC-2, which states that, "no new recreation facilities would be constructed in PPMAs and PGMAs (e.g. Campgrounds, day-use areas, scenic pullouts, and trailheads)." (Chapter 2.8.2, p. 215). 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 this management action; otherwise we propose this be eliminated from consideration in the final plan, particularly since it conflicts with the BLM's multiple-use mandate.

Comment Number: NVCASG-14-0201-30
Comment Excerpt Text:
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 thought. 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 dispersal.


15.3 IMPACT ANALYSIS

Comment Number: NVCASG-14-0201-21
Comment Excerpt Text:
It is not clear in the analysis section if our permits will be allowed (See page 154-155 of Chapter 4). The area of PPMAs is larger than the area of Elko County, NV, and represents a very large proportion of the area where our members conduct business. We think that some specifics of which permits, other than the OHV races, should be included in the analyses. If our permits will not be allowed, then the Socioeconomics and Environmental Justice analysis (Section 4.19) is incomplete, as the economic impact to our members is not included in this analysis.

Consequently, we believe there is insufficient detail in Chapter 4 pertaining to the analysis of this action element, both in respect to how it will be implemented and which permits will be disallowed, and in the economic analysis of disallowing the permits.

15.4 CUMULATIVE IMPACT ANALYSIS

Comment Number: NVCASG-14-0144-6
Comment Excerpt Text:
ES.6 Page XVI- Please explain why BLM and the Forest Service condone hunting of a potentially endangered species? Hunting Sage Grouse is not beyond the scope of the analysis. Federal Agencies are not allowed to simply dismiss an issue in a DEIS because it’s beyond the scope of their authority. The hunting issue also needs to be considered in the cumulative impacts analysis section. Ignoring Sage Grouse hunting further undermines the integrity of the analysis and calls into question the quality of the review.

Comment Number: NVCASG-14-0188-7
Comment Excerpt Text:
While it is true that the BLM cannot change the hunting seasons, the analysis in the Draft LUPA/DEIS should be put in context of the magnitude of the various factors contributing to sage-grouse declines. Without this context, it is not clear if hunting does or does not contribute to the decline in sage-grouse populations, or by how much. But more importantly, the elements of each alternative within Draft LUPA/DEIS cannot be put into context; how much will each element benefit sage-grouse and/or their habitat needs to be known and this cannot be determined if all of the factors contributing to the decline are not revealed.

Comment Number: NVCASG-14-0201-18
Comment Excerpt Text:
Removing more birds from the population each fall (either birds of the year or adult birds) through hunting does not allow for their contribution to the spring breeding population, in which case the impact of hunting a declining population is an additive impact, not a compensatory impact. Without analysis that includes impacts of hunting, the cumulative impacts analysis is inadequate.

The rationale that the hunting should be continued because NDOW obtains important data on the sage-grouse populations from the wings of harvested birds is not valid. NDOW routinely closes some areas to hunting; therefore the data on these populations is not available where hunting is closed and NDOW must find other ways to determine how these populations are faring (e.g., lek counts).

Comment Number: NVCASG-14-0201-22
Comment Excerpt Text:
Table 2.5 Description of Alternative Actions, Alternative D, Action D-REC 2:
This action element proposes no new recreation facilities would be constructed in PPMAs and Preliminary General Management Areas (PGMAs), including trailheads. As will be discussed below, the closure of roads will decrease access to millions of
acres of public lands, and then this action element indicates that no new trailheads will be developed. If the areas of road closure will only be open to non-motorized transportation, then additional trailheads will be necessary for our members. These areas provide room to park horse trailers and to turn around. Certainly an acre or two scattered across the landscape at the point of road closures cannot impact sagegrouse or their habitat sufficiently that these facilities must not be allowed.

16. **Salable Minerals**

16.1 **Range of Alternatives**

**Comment Number: NVCASG-14-0071-7**

**Comment Excerpt Text:**
Alternative D includes a requirement for all impacted lands to be restored to their previous topography. If Alternative D was in fact selected, open pit mines would be prohibited. There is no way to re-establish the pre-existing contours of an open pit mine since much of the dirt or rock has been physically removed from the site or compacted. This proposal is physically and economically infeasible and thus would prevent these types of mines from being constructed in much of Nevada.

**Comment Number: NVCASG-14-0151-22**

**Comment Excerpt Text:**
[Action SAL 1 & 2] Site specific criteria should be implemented when addressing logistics related to salable mineral sites. By allowing certain sites to be developed or maintained, it may prove more beneficial with regard to other impacts. (transportation, weeds, noise, dust, etc.). Comprehensive planning should be incorporated with Action SAL 3 in addition to travel and transportation management and lands and reality to identify and quantify necessary demands and impacts related to state and county needs.

**Comment Number: NVCASG-14-0169-26**

**Comment Excerpt Text:**
There is no analysis of why the proposed withdrawal from mineral entry based on risk to GRSG and its habitat is necessary where the same objective can be achieved through avoidance, minimization of impacts, and mitigation of impacts within the designated areas. Further, because mineral exploration and development are recognized and acceptable uses of public lands, the multiple use mandate requires BLM and USFS to work diligently to find ways to remain flexible and ensure that resources can be developed in a manner that has minimal impact to GRSG.

**Comment Number: NVCASG-14-0192-5**

**Comment Excerpt Text:**
2.5, p. 48 (p. 16), last bulleted item on page.

NDOT asks that existing NDOT material sources be added to the state and federal road easements exemption language, This will encourage NDOT to maximize each site’s use thereby reducing the need to procure additional sources.

17. **Socioeconomics and Environmental Justice**

17.1 **Best Available Information Baseline Data**

**Comment Number: NVCASG-14-0003-39**

**Comment Excerpt Text:**
BLM must revise the socioeconomic impact analysis to include recent employment data, and the most recent Net Proceeds of Minerals information (NPOM, attached hereto), which shows that Nevada counties received $127,274,036 in NPOM tax revenue while the State’s General Fund received $128,371,997 with a significant portion coming from mineral production on public lands.

**Comment Number: NVCASG-14-0052-5**

**Comment Excerpt Text:**
3.23 page 582 Socioeconomics and Environmental Justice:

The text associated with Table 3-80 states "The data underscore the importance of geothermal resources on BLM-administered resources in Churchill County." But there is no discussion of the geothermal plants in Churchill County (7 in operation currently) even
though there is specific discussion of the geothermal plants in other counties and regions of the planning area. The geothermal industry is important in Churchill County and the impact of the industry should not be taken lightly.

**Comment Number: NVCASG-14-0083-11**

Comment Excerpt Text:
Ch: Exec. Sum, Sec: ES.7, Pg. No.: xvii

Text Referencing: Development of Planning Criteria - The BLM and Forest Service will address socioeconomic impacts of the alternatives. Socioeconomic analysis will use the input/output quantitative models Impact analysis for Planning (IMPLAN) and National Renewable Energy Laboratory’s Jobs and Economic Development Impact model (JEDI, for renewable energy analysis) where quantitative data is available.

Comment: Adequate attention was not given to the potential detrimental Social and Economic impacts presented by all of the proposed alternatives. Elko County has provided a comprehensive economic impact study prepared by Dr. George Leaming in 2011 entitled “THE IMPACT OF FEDERAL LAND POLICIES ON THE ECONOMY OF ELKO COUNTY, NEVADA. Other economic impact studies were prepared and provided by Dr. Thomas R. Harris entitled ANALYSIS OF IMPACTS OF PUBLIC LAND GRAZING ON THE ELKO COUNTY ECONOMY, JARBIDGE AND MOUNTAIN CITY MANAGEMENT AREA: PART VII: ECONOMIC IMPACTS OF FEDERAL GRAZING IN ELKO COUNTY and ESTIMATED ECONOMIC IMPACTS OF THE CATTLE RANCHING AND FARMING SECTOR ON THE ELKO COUNTY ECONOMY. None of these reports were referenced or acknowledged in the DEIS.

**Comment Number: NVCASG-14-0091-50**

Comment Excerpt Text:
Page 558, 3.23

For the livestock grazing economic analysis, the reason for aggregating counties is not adequately explained.

**Comment Number: NVCASG-14-0091-51**

Comment Excerpt Text:
Page 560, 3.23

The Current Conditions sections are outdated and don’t properly depict the current baseline. In most cases, there is usage of data from 2010—we are now in 2013.
**Comment Number: NVCASG-14-0091-52**
**Comment Excerpt Text:**
The 2007 Census of Ag reported 86 individual farms in Eureka County. Most, if not all, of the farms in Eureka County have multiple employees including the operator/owner. Additionally, approximately 40 ranching operators are permitted to use public lands for livestock grazing (Rangeland Administration System). Given the reported number of 163 employees and dividing by 86 farms and 40 ranches results in just over 1 employee per farm. This is simply not the case. The Economic Linkages studies by UNR, and namely, Dr. Tom Harris were done for nearly all of the rural Counties in Nevada. These should be the source for the EIS.

**Comment Number: NVCASG-14-0091-53**
**Comment Excerpt Text:**
Further, there is no discussion about the tremendous leakage that takes place in Eureka County. The tables tabulate raw numbers with no explanation about what is taking place. A prime example is that it appears that all of the socioeconomic benefit from mining accrues to Eureka County. However, the jobs in mining in Eureka County are primarily citizens and taxpayers of neighboring counties, primarily Elko County. While tax benefits accrue to the County, social stability and general benefit to Eureka County citizens and other industries is not supported by mining as the tables allude. Further, much of the mining activity in Eureka County is in the northern portion and in areas that have not been mapped as PPH or PGH. This means that impacts related to sage grouse management will fall disproportionately on other industries more reliant on sage grouse habitat areas.

**Comment Number: NVCASG-14-0091-54**
**Comment Excerpt Text:**
Pages 562-566, 3.23

These paragraphs are confusing and hard to follow. Most single out aspects of individual counties that apply to most, if not all, other counties. For instance, open space and retaining rural character is not only important to “urban dwellers” but is singled out for some reason. Also, a paragraph singles out that the Pershing County economy is dominated by mining but fails to make the same link to Eureka, and other, counties. There is substantial discussion regarding Lincoln and White Pine Counties but the same groups hold true in other counties, including Eureka. We would like to see more specific examples about Eureka County in order to inform adequate analysis.

**Comment Number: NVCASG-14-0091-55**
**Comment Excerpt Text:**
Page 564, 3.23

The use of input-output model has a long history of showing economic linkages and impacts of the local Range Cattle Sector. However another important issue for the local Range Cattle Sector is how this sector impacts economic stability in small local economies. Agricultural producers when faced with lower agricultural prices usually do not reduce production levels or production expenditures, but rather have a tendency to absorb the resulting income reductions. From a previous study on agriculture in Churchill County, Harris and Kerna (2009) found the variability of agricultural production cash expenditures were lower when compared to agricultural cash incomes. This shows that the agricultural sector has a stabilizing effect on small economies in the short run. In the long-term a reduction in range cattle production due to added restrictions for sage-grouse conservation can decrease both cash receipts and cash expenses associated with range livestock production in local economies. The agricultural sector in Modoc County California is highly dependent on public lands for livestock production. Cash livestock receipts in Modoc County averaged $29.4 million over the last 10 years. This is a 21.9% decrease from the $35.9 million average from 1969 through 2011. Further reductions in public land AUMs will continue to adversely impact both cash receipts and cash expenses in the long run. These expected outcomes from the DEIS alternatives should be fully explored and disclosed.
Comment Number: NVCASG-14-0091-56
Comment Excerpt Text:
Page 566, Tables 3.73, 3.74, 3.78

In the economic analysis for livestock grazing, a general overview of the study area is presented using decennial population, employment, and income data. Comparing data from 2000 to 2010 shows increases in population, employment, and income in the study area and may convey that the proposed sage-grouse conservation measures would have little effect on a robust and expanding economy. However this conclusion is incorrect because the way the socio-economic data is currently presented it does not disclose the effects from the “Great Recession”. The “Great Recession” started in December 2007 therefore annual changes from 2008 to present should have been presented and analyzed. From the State of Nevada Department of Employment, Training, and Rehabilitation and the State of California Employment Development Department, the employment for the study area counties in 2008 was 359,996 with 2012 annual employment in the study area being 328,887. From 2008 to 2012, employment in the study area has declined by 31,109 employees or there has been an 8.64% decline in employment growth in the study area from 2008 to 2012. As can be seen, these counties have been impacted by the “Great Recession” and by not disclosing these employment figures give an incorrect picture of the current study area employment situation. Additionally, the recovery from the “Great Recession” has been weak and changes in local economic activity caused by sage-grouse conservation could retard the recovery and even lead some counties in the study area into another recession.

Comment Number: NVCASG-14-0091-62
Comment Excerpt Text:
Page 585, Table 3.82 and supporting text

This is an example of mining being given more weight in Eureka County than is real. The text describes that mining contributed the most to earning in Eureka County at 92.1%. This fails to acknowledge that while the employment is at mines within Eureka County (primarily the Carlin Trend) most of these people are not citizens of Eureka County, do not pay taxes in Eureka County, do not live in Eureka County, and do not contribute directly to the economy or social stability of Eureka County. The 2010 Census reported that 1,997 people live in Eureka County but there are nearly 4,000 jobs in mining in the County. Take the number of folks from the 1,997 working in Eureka County and subtract those employed in all other industries in the County and you will see that the actual resident population of the County that is employed in mining is much less than reported. Employment impacts (people) would more likely fall on Elko or Lander counties for mining at the Carlin Trend that is within Eureka County.

This concerns us because it skews the data towards mining and downplays everything else as being anything but minor contributors to socioeconomic stability and sustainability. With a population of less than 2000, a handful of jobs in Eureka County are of the same scale as thousands of jobs in a larger populated County such as Washoe.

What are the figures in Table 3.82 is this based on? They are simply wrong, at least for Eureka County. Are these the mining employees that are residents of Eureka County? The figure is high if so. Less than 200 residents of southern Eureka County work in mines and even less so in the other County areas, primarily
Crescent Valley portion of Eureka County. We wish the data to be accurate.

Also, if the Elko County residents that commute to mines outside of Elko County were taken into account, it would be shown that Elko actually has higher percentages of mining employment (perhaps Lander as well).

**Comment Number: NVCASG-14-0091-74**

Comment Excerpt Text:
Page 722, Table 4.29

All permitted AUMs should be shown on the comparison chart. Only active AUMs are illustrated for comparison. Permittees turn out in accordance with rangeland growing conditions, present livestock market, hay availability and other factors including on farm costs at the time. The active use represents multiple years of varying adjustments, which could have occurred as a result of agency actions, permittee decisions, wildfire deferments, etc.

**Comment Number: NVCASG-14-0144-20**

Comment Excerpt Text:
Section 4.19 page 240 Alternative A analysis does not appear to be consistent with other conclusions about grazing. Throughout the DEIS Alternative A analysis continues to indicate the potential for lower livestock grazing.

**Comment Number: NVCASG-14-0171-11**

Comment Excerpt Text:
The DEIS dismisses the non-market value of federal livestock grazing operations because there is uncertainty about analyzing these benefits to the public. These values are no less uncertain than placing non-market values on Sage Grouse or Wild Horses which is done often. References are Ellington et al., 2006; Brunson and Huntsinger, 2008; and Knight 2007 for peer reviewed studies.

**Comment Number: NVCASG-14-0205-47**

Comment Excerpt Text:
17. 4.3.2

The EIS failed to use the best scientific information available including the 2012 BLM Battle Mountain Mineral Assessment Report as well as other relevant BLM office Mineral Assessment Reports. As shown in Table 4.1 from the 2012 Battle Mountain Mineral Assessment Report, Nevada was the leading US gold, barite, lithium, and gypsum producer in 2010 and the second largest producer of silver in the United States. In addition, planning area mines also produce aggregate, and copper. In total, Nevada’s mineral industry production was valued at $5.8 billion in 2009 (Table 4-1) and precious metal production accounted for about $5.0 billion of this total (Price et al. 2010b).

The BLM must include the economic consequence of any reduction in the potential to utilize minerals within Nevada and NE California due to the proposed restrictions in the various EIS alternatives. BLM has the geological maps and the information. This was a costly omission to the EIS that must be rectified or the EIS is legally inadequate.

SEE ATTACHMENT for Table 4.1

**Comment Number: NVCASG-14-0205-55**

Comment Excerpt Text:
Table 4-30

Impacts are understated.

EIS authors should use 2013 Nevada Agriculture Analysis and Opportunities http://agri.nv.gov/uploadedFiles/agrinvgov/Content/Home/Features/2013nvagreport.pdf

The following relevant facts need to be added to the EIS:

- Nevada’s ranches rank third in the nation in size, averaging 3,500 acres.
- Nevada agriculture is directed primarily toward range livestock production. Cattle and calves are Nevada’s leading agricultural
industry, totaling $732,883,000 or 62.5 percent of the farm receipts (Nevada Department of Agriculture, 2011). “Over eighty percent of meat producers (including cattle, lamb, etc.) sell their meat as live animals on the hoof, while approximately ten percent sell their meat as carcasses” (Curtis, Cowee, & Havercamp, 2007). One reason for this is the limited number of meat processing facilities in the state, which is a potential growth area for the agriculture sector. Cattle- Calf Operations are most prevalent with a few stocker operators and feedlots.

- Dairy, sheep, lambs, and hogs are among Nevada’s other livestock enterprises. The larger cattle and sheep ranches are in the northern half of the state. The greatest number of dairies is in northern Nevada, but the largest dairies are in the south.
- Despite Nevada’s arid climate, irrigation allows for excellent crop growth. Alfalfa hay is the leading cash crop of the state, totaling $232,100,000 (USDA, 2012). Much of the hay is sold to dairy operations in surrounding states. Significant quantities of alfalfa cubes and compressed bales are exported overseas each year. Alfalfa seed is another substantial crop.
- Additional crops produced in Nevada include potatoes, barley, winter and spring wheat, corn, oats, onions, garlic, and honey. Smaller acreages of mint, fruits and vegetables are grown throughout the state.

Comment Number: NVCASG-14-0265-7
Comment Excerpt Text:
In 2010 the Elko County Board of Commissioners addressed changes to federally managed public land use management policies in the Elko County Public Land Use and Natural Resource Management Plan and again in 2012 in the Elko County Greater Sage-Grouse Management and Conservation Strategy Plan. These two plans along with many others, prepared by local agencies were provided to the BLM and USFS for review and consideration during preparation of the GRSG DEIS / LUPA as per NEPA requirement. The plans submitted by Elko County contained realistic professionally prepared information concerning federal land management policy changes and their impacts to the local, state and regional economies; The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11). Elko County again was more than frustrated that neither of these professional documents were given any consideration in the GRSG DEIS / LUPA. The documents provide professionally established information that proves and corroborates that Alternatives A, B,C, D and F proposed GRSG DEIS / LUPA will serve severe economic impacts not only to Elko County but the entire planning area and all western states with GRSG habitat and populations.

Comment Number: NVCASG-14-0344-50
Comment Excerpt Text:
2.10. Appendix 0
As indicated above, the assumptions used on Appendix H for Noble’s activity in Elko District are not in agreement with the information that Noble has submitted to the Elko District as part of two proposed actions and the public record. As a result, the oil and gas economic value is not accurate and significantly undervalued.

17.2 IMPACT ANALYSIS

Comment Number: NVCASG-14-0003-37
Comment Excerpt Text:
BLM estimates a combined value of all locatable mineral totaling approximately $7.2 billion dollars and contributes to 76.9%, 35.1%, 31.7%, 24.5%, 24.3%, 22.2% of employment to Eureka, White Pine, Humboldt, Pershing, Lander, and Elko Counties, respectively (Ch. 3 at 193); nevertheless BLM failed to include locatable minerals in its socioeconomic impact analysis which is a critical flaw, discussed below.
BLM’s justification that the socioeconomic impact be restricted to the 12 counties in the Planning Area that contain sage-grouse habitat because commuter patterns indicate that no labor market in the secondary study area (counties outside the 12 county study area) rely on counties within the socioeconomic study area for a considerable share of their workers, is completely insufficient to describe the socioeconomic impacts to counties and businesses which supply the mining industry, and fails to take into account the lost revenue associated with Net Proceeds of Minerals tax payments to the State of Nevada’s General Fund with benefits counties outside the 12 county study area (See Section 3.23).

Comment Number: NVCASG-14-0003-40
Comment Excerpt Text:
The BLM fails to disclose any socioeconomic impacts that would result under implementation of Alternative C, and fails to include impacts on local government tax revenues as a result of reduced locatable mineral exploration and development. (Ch. 4 at 250). BLM also fails to include any analysis of the socioeconomic impact its proposed wildland fire and fuels management will have on the communities in the Planning Area, despite the proposed management under Alternatives B, C, and F will subject residents, communities, and local government in the Planning Area to increased risk of catastrophic fire.

Comment Number: NVCASG-14-0015-13
Comment Excerpt Text:
Likewise, the Draft LUPA/EIS concludes that the designation of ACECs “would not result in measurable or systematic social or economic impacts that would differ by alternative.” Draft LUPA/EIS, Ch. 4 at 239 (831). This statement is incorrect and completely lacking in support as the extensive designation of ACECs proposed under Alternatives C and F would result in severe restrictions on public-land uses in those areas, with significant associated economic impacts. The Agencies must perform a quantitative economic analysis of the recommended withdrawals and disclose the far-reaching economic impacts that the designation of ACECs under Alternatives C and F would cause.

Comment Number: NVCASG-14-0015-16
Comment Excerpt Text:
Because the management actions and restrictions that could impact locatable minerals differ between Alternatives B and F, BLM and USFS must provide an analysis of how Alternative F would impact locatable-mineral development, not just assume that those impacts will be the same as Alternative B. If BLM and USFS ultimately determine that the impacts will be the same, it must describe how it reached that conclusion in light of the differences described above.

Comment Number: NVCASG-14-0015-19
Comment Excerpt Text:
Tribes in Nevada have a substantial interest in economic development, jobs, and taxes that support local services. The Draft LUPA/EIS fails to identify, consider, and evaluate how these interests might be impacted, particularly by alternatives that include large recommended mineral withdrawals that could directly and adversely impact Tribal interests. The impact analysis for tribal interests also contains multiple references to impacts being unknown because a particular alternative is silent on specific goals and objectives for a particular management category. The repeated conclusion that impacts to tribal interests are unknown due to a lack of goals and objectives fails to constitute a hard look at such impacts, and is inconsistent with the remainder of the Draft LUPA/EIS, which was able to identify impacts on other resources despite the lack of goals and objectives for some alternatives. This is unacceptable where BLM has a long history of consultation with Tribes and Nevada and has specifically identified and discussed in dozens of site-specific EISs the information that is referenced as “unknown.”

Comment Number: NVCASG-14-0040-4
Comment Excerpt Text:
Based on the disclosure requirements associated with the National Environmental Policy Act (NEPA), reviewers of this DEIS should request that realistic and discrete estimates for livestock grazing levels and their associated economic impacts be clearly disclosed for each individual alternative so the agency
decision-makers and interested members of the public will have a clear understanding of how these alternatives will affect existing ranching and dependent rural economies and communities in the sub-area.

Comment Number: NVCASG-14-0046-2
Comment Excerpt Text:
Economics: We are constantly dealing with the miscalculation of AUM loss. There is no alternative forage for AUMs lost by federal agency grazing decisions; it is already being used. The average in Modoc County is a five-six month grazing season, so for example, when 5-6 AUMs are lost on federal range, then the rancher and community economy also lose the other 6-7 AUMs that make up the rest of the Animal Unit. In other words, for every loss in the number of AUMs typically represented by a grazing season, the net loss to the local economy is actually 12 AUMs … because there is no alternative forage, private or federal, to make up the loss from a federal grazing decision. So, that head of livestock completely disappears from that livestock grazer’s operation and from the local economy.

We do not see this calculation present in any of the economic analyses, despite having been presented by Modoc County during the DEIS development.

Comment Number: NVCASG-14-0051-5
Comment Excerpt Text:
DR. KEN SANDERS, professor of rangeland ecology at the University of Idaho for 32 years: “The third biggest threat is the reduction in grazing on public rangelands. If the proposed sage grouse habitat guideline that recommends leaving a grass stubble height of 18 centimeters is applied, it will not only result in an adverse economic impact on livestock producers, but it will also result in increased, higher intensity wildfire due to a larger fuel load.”

Comment Number: NVCASG-14-0052-10
Comment Excerpt Text:
Appendix D Economic Impact Analysis Methodology

The economic impact only analyzes the impact to grazing, geothermal power plants and the oil and gas industry. There would also be an impact to the recreation industry, especially if access by OHV users is limited. If there will no longer be hunting of sage grouse (or other game in GSGR habitat), that will impact businesses in the small towns in the area. There was also no discussion of the impact to mineral resources if there will be no more mining projects proposed in the area. And there will be an economic impact to new projects if they must provide funds for mitigation.

Comment Number: NVCASG-14-0052-11
Comment Excerpt Text:
Economics: What is constantly dealt with is the miscalculation of AUM loss. There is no alternative forage for AUMs lost by federal agency grazing decisions; it is already being used. The average in Modoc County is a five-six month grazing season, so for example, when 5-6 AUMs are lost on federal range, then the rancher and community economy also lose the other 6-7 AUMs that make up the rest of the Animal Unit. In other words, for every loss in the number of AUMs typically represented by a grazing season, the net loss to the local economy is actually 12 AUMs … because there is no alternative forage, private or federal, to make up the loss from a federal grazing decision. So, that head of livestock completely disappears from that livestock grazer’s operation and from the local economy.

We do not see this calculation present in any of the economic analyses, despite having been presented by Modoc County during the DEIS development.

Comment Number: NVCASG-14-0052-11
Comment Excerpt Text:
Economics: What is constantly dealt with is the miscalculation of AUM loss. There is no alternative forage for AUMs lost by federal agency grazing decisions; it is already being used. The average in Modoc County is a five-six month grazing season, so for example, when 5-6 AUMs are lost on federal range, then the rancher and community economy also lose the other 6-7 AUMs that make up the rest of the Animal Unit. In other words, for every loss in the number of AUMs typically represented by a grazing season, the net loss to the local economy is actually 12 AUMs … because there is no alternative forage, private or federal, to make up the loss from a federal grazing decision. So, that head of livestock completely disappears from that livestock grazer’s operation and from the local economy.

We do not see this calculation present in any of the economic analyses, despite having been presented by Modoc County during the DEIS development.

Comment Number: NVCASG-14-0052-11
Comment Excerpt Text:
Economics: What is constantly dealt with is the miscalculation of AUM loss. There is no alternative forage for AUMs lost by federal agency grazing decisions; it is already being used. The average in Modoc County is a five-six month grazing season, so for example, when 5-6 AUMs are lost on federal range, then the rancher and community economy also lose the other 6-7 AUMs that make up the rest of the Animal Unit. In other words, for every loss in the number of AUMs typically represented by a grazing season, the net loss to the local economy is actually 12 AUMs … because there is no alternative forage, private or federal, to make up the loss from a federal grazing decision. So, that head of livestock completely disappears from that livestock grazer’s operation and from the local economy.

We do not see this calculation present in any of the economic analyses, despite having been presented by Modoc County during the DEIS development.
quantitative models Impact analysis for Planning (IMPLAN) and National Renewable Energy Laboratory’s Jobs and Economic Development Impact model (JEDI, for renewable energy analysis) where quantitative data is available.

Comment: Adequate attention was not given to the potential detrimental Social and Economic impacts presented by all of the proposed alternatives. Elko County has provided a comprehensive economic impact study prepared by Dr. George Leaming in 2011 entitled “THE IMPACT OF FEDERAL LAND POLICIES ON THE ECONOMY OF ELKO COUNTY, NEVADA. Other economic impact studies were prepared and provided by Dr. Thomas R. Harris entitled ANALYSIS OF IMPACTS OF PUBLIC LAND GRAZING ON THE ELKO COUNTY ECONOMY, JARBRIDGE AND MOUNTAIN CITY MANAGEMENT AREA: PART VII: ECONOMIC IMPACTS OF FEDERAL GRAZING IN ELKO COUNTY and ESTIMATED ECONOMIC IMPACTS OF THE CATTLE RANCHING AND FARMING SECTOR ON THE ELKO COUNTY ECONOMY. None of these reports were referenced or acknowledged in the DEIS.

Comment Number: NVCASG-14-0083-15
Comment Excerpt Text:
Ch: Exe. Sum, Sec: ES.10, Pg. No.: xxv

Text Referencing: Environmental Consequences - The purpose of the environmental consequences analysis in this LUPA/EIS is to form the scientific and analytic basis for comparing the alternatives (including the No Action Alternative) and their possible impacts on the human environment.

Comment: The human environment includes Social, Cultural and economics. The DEIS does not extensively or comprehensively address these negative impacts due to lost resources. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) Elko County asks that a full economic impact study conducted and authored by a third party contractor be produced prior to the development of the FEIS / LUPA.

Comment Number: NVCASG-14-0083-17
Comment Excerpt Text:
Ch: 1, Sec: 1.6, Pg. No.: 18

Text Referencing: Development of Planning Criteria - The BLM and Forest Service will address socioeconomic impacts of the alternatives. Socioeconomic analysis will use the input/output quantitative models IMPLAN and the National Renewable Energy Laboratory’s Jobs and Economic Development Impact model (JEDI) (for renewable energy analysis) where quantitative data is available.

Comment: The BLM / USFS should re-evaluate the socioeconomic studies of this DEIS in the development of the FEIS /LUPA. The implied impacts of this issue warrant the need for a full comprehensive economic impact study. Elko County asks that a full economic impact study conducted and authored by a third party contractor be made prior to the development of the FEIS / LUPA. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11)

Comment Number: NVCASG-14-0083-22
Comment Excerpt Text:
Ch: 2, Sec: 2.5, Pg. No.: 15

Text Referencing: Management Common to All Alternatives

Comment: Elko County suggests that an additional Management Common to all Alternatives action should recognize the need to include an Economic, Cultural and Social Impacts in a comprehensive economic impact study. Elko County asks that a full economic impact study conducted and authored by a third party contractor be made prior to the development and included of the FEIS / LUPA. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11)
Comment Number: NVCASG-14-0083-39
Comment Excerpt Text:
Ch: 4, Sec: 4.3.5, Pg. No.: 30

Text Referencing: Greater Sage-Grouse and Greater Sage-Grouse Habitat Alternative B - Impacts from Livestock Grazing Management Under Alternative B, the same number of acres would be open to livestock grazing as under Alternative A, with the same number of acres of modeled nesting habitat affected within the sub-region. Agencies, in coordination with permitees, would prioritize a number of management actions in PPMAs to incorporate GRSG habitat objectives and management considerations into livestock grazing management, though there would be no change to the acreage open for grazing or available AUMs unless an allotment is retired from grazing.

Comment: Additional restriction of livestock grazing would not fulfill the Multiple Use mandate of FLPMA 1976. Removal of livestock grazing would expand fire fuels and promote larger and more costly wildland fires. This proposal is excessive and will serve to distress local and regional economies. This proposal would have negative nationwide repercussion concerning the consumer cost of beef and beef products. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11)

Comment Number: NVCASG-14-0083-40
Comment Excerpt Text:
Ch: 4, Sec: 4.3.5, Pg. No.: 31

Text Referencing: Greater Sage-Grouse and Greater Sage-Grouse Habitat Alternative B - Impacts from Leasable Minerals Management, Management under Alternative B would close 12,693,500 acres of PPMAs to leasing. Within modeled nesting habitat, there would be 10,522,300 acres of PPMAs.

Comment: This proposal would cause financial damage to the local and regional economies. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) Currently the footprint of human disturbance caused by this use is extremely minimal. This would curtail and restrict exploration that contributes to all local and regional economies.

Comment Number: NVCASG-14-0083-41
Comment Excerpt Text:
Ch: 4, Sec: 4.3.5, Pg. No.: 32

Text Referencing: Greater Sage-Grouse and Greater Sage-Grouse Habitat Alternative B - Impacts from Salable Minerals Management Alternative B closes 12,693,500 acres of PPMAs to mineral material sales (10,522,300 acres of PPMAs in modeled nesting habitat).

Comment: This proposal is excessive and will serve to destroy the current healthy and viable local and regional economies. It would create a direct negative impact to future and existing net proceeds paid to the State of Nevada and Elko County. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) As per Table 4.11 Elko County is 100% affected. Will the Federal Government augment the loss of revenue to the State and Local governments?

Comment Number: NVCASG-14-0083-42
Comment Excerpt Text:
Ch: 4, Sec: 4.3.6, Pg. No.: 36

Text Referencing: Greater Sage-Grouse and Greater Sage-Grouse Habitat Alternative C - Impacts from Livestock Grazing Management Under Alternative C, livestock use would be closed on about 17,589,700 acres of PPMA (portions of PPMA are unallotted). About 94 percent of the modeled GRSG population in the sub-region would be affected, and anywhere from 88 to 100 percent of each sub-population.

Comment: Removal of livestock grazing would not fulfill the Multiple Use mandate of FLPMA 1976. Removal of livestock grazing would expand fire fuels and promote larger and more costly wildland fires. This proposal is excessive and will serve to devastate...

**Comment Number: NVCASG-14-0083-45**
**Comment Excerpt Text:**
Ch: 4, Sec: 4.3.9, Pg. No.: 50

Text Referencing: Greater Sage-Grouse and Greater Sage-Grouse Habitat Alternative F - Impacts from Locatable Minerals Management

Comment: This proposed management action it will serve to distress the local and regional economies. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) It would create a direct negative impact to future and existing net proceeds paid to the State of Nevada and Elko County. As per Table 4.11 Elko County is 100% affected. Will the Federal Government augment the loss of revenue to the State and Local governments?

**Comment Number: NVCASG-14-0083-50**
**Comment Excerpt Text:**
Ch: 4, Sec: 4.4.6, Pg. No.: 65

Text Referencing: Vegetation and Soils Alternative C - Impacts from Land Uses and Realty Management. Under Alternative C, additional lands would be acquired to be managed by federal land management agencies. The impacts on vegetation and soils would be the same as those identified under Alternative A where lands are designated as ACEC's.

Comment: Elko County is opposed to any net loss of private lands to further public land management. Private lands acquired by the federal government are removed from the tax base and create a loss in revenue. Elko County is currently 72% federally manage and Nevada is well over 80% federally managed. An increase would not promote health and viable economies. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) Elko County does not favor any more implementation of ACEC's, WSA's or Wilderness areas.

**Comment Number: NVCASG-14-0083-68**
**Comment Excerpt Text:**
Ch: 4, Sec: 4.19.2, Pg. No.: 242

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts Recreation - BLM Special Recreation Permits and Forest Service Special Use Permits that are in PPMAs and PGMAs could be modified in some alternatives. This could result in a loss of commercial revenue to recreation service providers, as well as loss of permit-generated fee revenue for the BLM and Forest Service as managing agencies. However, for several reasons, the BLM predicts that any losses would be relatively small.

Comment: Elko County disagrees with this statement and assessment. The BLM / USFS DEIS / LUPA has minimalized the severe local, state and regional economic impacts to the recreation industry. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11) Alternatives B, C, D & F all restrict recreational use in some manner and manage the PPMA's as WSA's and Wilderness. These types of management practices do relate to a direct loss of revenue to economies. Elko County would request that the BLM / USFS to have a detailed study prepared by a third party contractor to supply an impartial full economic impact study based on the proposed alternatives actions.

**Comment Number: NVCASG-14-0083-69**
**Comment Excerpt Text:**
Ch: 4, Sec: 4.19.2, Pg. No.: 243

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts Recreation - For all of Alternatives B through F, the net economic effect on
recreational activity is not possible to quantify, but would likely be very small.

Comment: Elko County questions the statement and asks for quantifiable data that supports this opinion. The BLM / USFS DEIS / LUPA statement has minimalizes the severe local, state and regional economic impacts to the recreation industry. (The Impact of Federal Land Policies on the Economy of Elko County, Nevada, George Leaming Report 12/2010) (Harris Technical Report UCED 2006/07-11)

Comment Number: NVCASG-14-0083-70
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.: 243

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts Recreation - Alternative B—The restrictions on BLM SRPs and Forest Service SUAs documented in Section 4.18, Recreation, may result in modifications for some types of permitted uses (e.g., OHV races) on PPMAs, potentially resulting in fewer opportunities for this type of event. As noted above, the OHV area designation change on PPMAs (from open to limited) may result in small changes in patterns of OHV travel in the study area, but public lands recreation specialists do not anticipate any changes in recreational use.

Comment: What report was prepared and referenced that quantifies and supports this statement? Was the Recreation specialist that provided this information a third party disinterested person or a BLM /USFS Employee? Elko County disputes this assessment and request that the FEIS / LUPA not include the statement or analysis. The county would encourage the BLM /USFS to enlist a third party contractor to review and develop a comprehensive detailed economic impact study for use in the FEIS / LUPA.

Comment Number: NVCASG-14-0083-71
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.: 243

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts Recreation - Alternative D—Under Alternative D, BLM SRPs and Forest Service SUAs could be restricted for some types of permitted uses (e.g., OHV races) on PPMAs and PGMAs, which may (but would not necessarily, for the reasons noted above) result in reduced economic activity associated with these events. There would be no anticipated change in economic impacts with respect to the OHV area designation change on PPMAs/PGMAs, because public lands recreation specialists do not anticipate any changes in recreational use.

Comment: What report was prepared and referenced that quantifies and supports this statement? Was the Recreation specialist that provided this information a third party disinterested person or a BLM /USFS Employee? Elko County disputes this assessment and request that the FEIS / LUPA not include the statement or analysis. The county would encourage the BLM /USFS to enlist a third party contractor to review and develop a comprehensive detailed economic impact study for use in the FEIS / LUPA.

Comment Number: NVCASG-14-0083-72
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.: 248

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts, Impacts from Management Actions Affecting Land and Realty and Travel Management - Management actions that affect development of infrastructure could have important hindering effects on the growth of economic activity in the area. Limitations on new ROWs for power lines, pipelines, and access routes or restrictions to
route construction and to travel on existing roads could increase the cost of new economic investments or make them no longer economically viable.

Comment: Elko County has provided several documents concerning the economic components to the regional economy for the BLM / USFS consideration in the development of the DEIS / LUPA. A study prepared by Dr. George Leaming in 2011 entitled “The Impact of Federal Land Policies on the Economy of Elko County, Nevada. This study directly relates to lands and realty actions of the federally managed public lands. Elko County asks that the BLM / USFS revisit the study prior to the development of the FEIS / LUPA.

Comment Number: NVCASG-14-0083-73
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.: 250

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts, Summary of Economic Impacts Alternative B - In Alternative B, the reductions are due partly to anticipated reductions in oil exploration and development (about 40 percent of earnings and employment) and partly to geothermal exploration and development (about 60 percent), and therefore would occur primarily in Elko, Churchill, Humboldt, Lander, and Washoe Counties in Nevada.

Comment: Elko County does not fully agree with this assessment. The assessment does not fully address the extent of the implied economic impacts. Loss of livestock grazing was not included in the assessment. The statement is not complete and does not additionally consider loss of recreation opportunities, future mineral extraction, mineral / oil / gas exploration and renewable energy potentials. The statement does not recognize ancillary economic components such as residential, commercial and industrial development as a component to all private and public land uses. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse. Elko County would request that the BLM / USFS to have a detailed study prepared by a third party contractor to supply an impartial full economic impact study based on the proposed alternatives actions or utilize existing information provided by Elko County Public Land Use & Natural Resource Management Plan, December 2010 and Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012 and existing economic studies offered therein of what impacts will come from Alternatives B, C, D, and F. The County would also request that the State of Nevada Alternative E be fully offered as the preferred alternative.

Comment Number: NVCASG-14-0083-74
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.: 251

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts, Summary of Economic Impacts - The analysis shows that the reductions in economic output, employment and earnings would be greatest under Alternatives C and F, and there would also be reductions in Alternatives B and D. The reductions in Alternative C would correspond to approximately 0.5 percent of total 2010 employment, and 0.4 percent of total earnings, in the study area. Reductions in Alternative F would correspond to approximately 0.3 percent each of 2010 employment and 2010 earnings in the study area. Corresponding percentages could not be calculated for output; since baseline output could not be calculated for the counties of the study area (it is available only at the state level).

Comment: Elko County states that the DEIS / LUPA Summary does not fully or comprehensively address the Economic impacts to short and long term economies in the study area. The DEIS / LUPA offers minimal impact data to specific uses and loss of public land resources and focuses on earning. The economic impacts to the region and local areas are far more extensive and include not only loss of economy but loss of quality of life features including but not limited to education, recreation, housing and constituent general quality of life. Elko County adamantly urges the BLM / USFS to request obtain or generate professional third party information and data that
truly reflects the extent of the full impacts that will come from Alternatives B, C, D, and F. Elko County would request that the BLM / USFS to have a detailed study prepared by a third party contractor to supply an impartial full economic impact study based on the proposed alternatives actions or utilize existing information provided by Elko County Public Land Use & Natural Resource Management Plan, December 2010 and Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012 and existing economic studies offered therein. The County would also request that the State of Nevada Alternative E be fully offered as the preferred alternative.

Comment Number: NVCASG-14-0083-75
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.:250
Text Referencing: Socioeconomics and Environmental Justice Economic Impacts, Summary of Economic Impacts Alternative C - In Alternative C, two-thirds or more of the reductions would be due to reductions in livestock grazing (68 percent of earnings, 73 percent of output and 82 percent of employment reductions); thus, the impacts would occur primarily in Modoc County, California, and the Nevada counties of Pershing and Nye, with additional impacts – due to reduced geothermal development – in Churchill, Humboldt, Lander, and Washoe Counties in Nevada.

Comment: The County fails to understand why Elko County was not included in the list of potential greatest impacts. Elko County is home to 40% of all GRSG habitat in the State of Nevada and stands to lose all of the habitat areas to livestock grazing should the management practices of Alternative C be implemented in the FEIS / LUPA. How would this action not impact Elko County? (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012) Elko County would request that the BLM / USFS to have a detailed study prepared by a third party contractor to supply an impartial full economic impact study based on the proposed alternatives actions or utilize existing information provided by Elko County Public Land Use & Natural Resource Management Plan, December 2010 and Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012 and existing economic studies offered therein of what impacts will come from Alternatives B, C, D, and F. The County would also request that the State of Nevada Alternative E be fully offered as the preferred alternative.

Comment Number: NVCASG-14-0083-76
Comment Excerpt Text:
Ch: 4, Sec: 4.19.2, Pg. No.: 250

Text Referencing: Socioeconomics and Environmental Justice Economic Impacts, Summary of Economic Impacts Alternative D - In Alternative D, the reductions are entirely due to anticipated reductions in geothermal exploration and development, and therefore would occur primarily in Churchill, Humboldt, Lander, and Washoe Counties in Nevada.

Comment: Elko County does not agree with this assessment. The assessment does not fully address the extent of the implied economic impacts. Loss of livestock grazing was not included in the assessment. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012) The statement is not complete and does not additionally consider loss of recreation opportunities, future mineral extraction, mineral / oil / gas exploration and renewable energy potentials. The statement does not recognize ancillary economic components such as residential, commercial and industrial development as a component to all private and public land uses.

Comment Number: NVCASG-14-0086-11
Comment Excerpt Text:
The economic effects of removing cattle to complete sage-grouse habitat management projects have not been sufficiently considered and analyzed in this EIS. If we are unable to graze one of our allotments for 3
years, we will be forced to sell livestock. This will result in firing some employees since we will not have work for them. The economic impact to individual ranches in this case, and the people working on them, would be significant.

Comment Number: NVCASG-14-0086-3
Comment Excerpt Text:
the only response BLM has had to excess numbers of wild horses is to cut domestic livestock grazing. This was not analyzed in the socioeconomic impacts, resulting in a failure to follow NEPA guidelines. When you consider that wild horse populations double every four years (http://www.blm.gov/nv/st/en/prog/wh_b/gathers.htm) it should be evident that control of excess wild horses and burros should be at the top of the list for management actions.

Comment Number: NVCASG-14-0086-5
Comment Excerpt Text:
The requirements for pre-and post-treatment rest (Action-D-VEG-19 and -20) are extensive and not sufficiently accounted for in the economic analysis of implementing alternative D. The EIS states some reductions in economic activity would likely result from implementation of these actions, but “some reduction” does not adequately address a minimum of 3 years’ rest on a grazing allotment. If the entire allotment is closed, this would dramatically impact our economic viability. Since no options currently exist for forage banks or other grazing resources, livestock would likely be sold to get through the closure period and the re- stocking effort would be a huge financial undertaking.

Comment Number: NVCASG-14-0091-58
Comment Excerpt Text:
Page 577, Table 3-79 and supporting text

It is confusing as to how ERS “publishes annual gross receipts for cow-calf operations.” Please include descriptions describing what the gross receipts entail. Further, the BLM estimate of $50.24 per AUM in 2010 dollars is counter to research in Nevada.

The total economic impacts, which include the industry impacts and value added impacts, totaled to $53.40 per AUM in 2000 according to the RCI report. Yet, the document says that one AUM in 2010 dollars is less at $50.24. If the Consumer Price Index were applied to the Nevada specific report from 2000, the value is much greater than $50.24 in 2010 (let alone today, in 2013). Additionally, high beef prices and drought conditions have increased the value of AUMs in recent years. We argue that the value of AUMs to the producer and local economy combined are today, closer to $100/AUM when applying robust analysis and building in inflation and current conditions. Revise accordingly.

Comment Number: NVCASG-14-0091-59
Comment Excerpt Text:
Page 579 and Appendix O-5, Table 3.79, Appendix O Table O-3

The economic analysis for livestock grazing discusses actual and active permitted use of AUMs. This analysis concludes that the 12-year average of actual use is 62% of permitted use. However the DEIS analysis does not address the reason for differences in actual and active grazing use. This difference can be caused by numerous factors such as current regulations, including existing grazing restrictions, fire and drought closures, vacant allotments, economic market conditions, etc. Many of these contributing factors do not represent items controlled by the permittee, nor should the difference between actual and active livestock use be viewed as a voluntary or discretionary action by the permittee. This economic analysis does not disclose why there is difference in actual and active use and implies that this relationship may be voluntary or a discretionary of choice for the affected permittees. This second conclusion is not accurate and misleading. Both items need be clarified and fully disclosed in this DEIS.

Comment Number: NVCASG-14-0091-84
Comment Excerpt Text:
4.19.2, Table 4.31

The economic impacts of Alternatives C, D, and E are exactly the same and appear to not differ from Alternative A (No Action) which is not factual. A
review of Table 2.5., Description of Alternative Actions, reveals that there are substantial differences in the Alternatives with respect to Fluid Minerals. For example, these alternatives differ with respect to mineral leasing and winter habitat NSOs, especially in the checkerboard area. This will result in different economic impacts.

Comment Number: NVCASG-14-0091-85  
Comment Excerpt Text:  
Page 838, 4.19.2

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.

Comment Number: NVCASG-14-0109-18  
Comment Excerpt Text:  
Table 3.79 indicates that there is a decline of 1.6 million AUMs between active permitted livestock use and the 12-year average actual or billed use. Using the lower cattle-based economic values from Table O-4, this grazing reduction equates to an estimated annual loss across the sub-area of $49 million in direct livestock production, $98 million in total economic output, $36 million in labor earnings, and 1,037 jobs. These existing economic effects are not disclosed under the description or evaluation of Alternative A in this DEIS.

Comment Number: NVCASG-14-0112-1  
Comment Excerpt Text:  
if you close off the public lands and deny access that our local power company would have to remove any overhead lines that go through the breeding grounds and bury them underground. This would be extremely time consuming and costly. The cost to do this could not be absorbed by the power company. Therefore this expense would have to be passed on to the consumer at a much higher rate. The average consumer could not afford that kind of an increase.

Comment Number: NVCASG-14-0118-1  
Comment Excerpt Text:  
Economic studies should be based on permitted numbers not actual use. By using actual use numbers as a baseline, it suggests permittees have voluntarily taking cuts in livestock use and will have no need for them in the future nor are they trying to return to permitted numbers. Thus by using actual use the authors created a false impression of no economic impact on many of the alternatives including the "Preferred Alternative".

Comment Number: NVCASG-14-0120-21  
Comment Excerpt Text:  
BLM wholly fails to analyze the effects increased restrictions on mineral development will have on the state and local economy. Further, by failing to include specific information on mitigation, BLM could not have possibly met the requirement for the detailed social and economic analysis required for land use planning. HESI's Nevada mining operations alone contributed nearly $75 million directly to the Nevada economy in 2013 through its mining contracts and construction of mining-related facilities, and its operations contribute in many indirect ways though salaries for HESI employees and contractors. Overly restrictive seasonal prohibitions and unsupported BMPs and regulations could have a drastic effect on these operations and Nevada's state and local economy.

Comment Number: NVCASG-14-0144-21  
Comment Excerpt Text:  
Table 4.33 Only discusses the current change in income and output. The analysis also needs to discuss the potential in lost opportunity in employment and income as a result of proposed management actions under the various alternatives.

Page 250 2nd Paragraph. Does it include net proceeds of mines tax?
Comment Number: NVCASG-14-0148-11
Comment Excerpt Text:
the socio-economic model was insufficient, underestimating by more than half the value of livestock grazing to communities.

Comment Number: NVCASG-14-0160-1
Comment Excerpt Text:
Table 97 PILT Distributions to Counties in Study Area, 2010 tabulates distribution of some $18 million to the counties in the study area. What is the amount by which the Federal government intends to increase these payments for implementation of Alternative D, which will clearly limit significant amounts of land uses that currently are financial resources for support of rural communities? Minerals exploration, for example, spent more than $150 million in Nevada during the 2010-2011 field season; those dollars will no longer be expended in Nevada should Alternative D be implemented. Where is the analysis of those impacts?

Comment Number: NVCASG-14-0166-2
Comment Excerpt Text:
EIS that requires new and existing power lines within Preliminary Priority Management Areas (PPMAs) and Preliminary General Management Areas (PGMAs) to be buried. As stated in NV Energy’s Scoping Letter dated March 13, 2012, this has the potential to directly impact Nevada customers resulting in increased cost, reduced reliability and longer outages.

Comment Number: NVCASG-14-0166-8
Comment Excerpt Text:
MidAmerican expends significant financial resources to avoid sensitive environmental resources when siting transmission lines. When decisions are made in the middle of the project, forcing the lines to be rerouted, and the cost of this rework is then passed on to customers.

Comment Number: NVCASG-14-0167-1
Comment Excerpt Text:
…the extremely high cost and difficulty of application of these proposed habitat management plans would place an undue burden on the mining industry

Comment Number: NVCASG-14-0167-2
Comment Excerpt Text:
the DEIS lacks a meaningful socioeconomic analysis of the impact of the proposed withdrawal of lands from mineral development which would result in a significant taking of private property, in some instances, and large reduction in the State’s and our Nation’s mineral resource production

Comment Number: NVCASG-14-0171-12
Comment Excerpt Text:
Unfortunately, the County finds this DEIS's economic analysis to suffer from the same flaw that most do. The potential losses are portrayed in a much broader context than the environmental impacts. It is unacceptable, as well as in violation of the National Environmental Policy Act (NEPA), to display these results in a way that does not accurately reflect the actual harm that could come from this decision at the local level. While it is statistically accurate to say that the losses are insignificant because they represent a small portion of a larger economic "pie," it does not fully describe the impacts to the regional economy, the local community impacts or the effect on individual livelihoods.

In Northeastern California, virtually all the livestock operators depend on their federal grazing allotments for an irreplaceable portion of their annual forage. The analysis does nothing but downplay the potential impact if the alternative selected significantly reduces grazing. Given the loss of many other historic uses (timber harvest, hunting, etc.) of federal lands in these counties which are primarily federally owned, grazing has assumed a larger and larger portion of the private sector of the local economy. There must be an accurate and complete description of the potential impacts. This is not done for any of the alternatives.

Comment Number: NVCASG-14-0171-9
Comment Excerpt Text:
The DEIS consistently understates the socioeconomic impacts of all the alternatives described. The entire planning area for this DEIS is without unutilized forage. There is no alternative forage for Animal Unit Months (AUMs) lost by federal agency grazing
decisions. Consequently for every loss of the number of AUMs typically represented by a grazing season (5 for a grazing season of May-September), the net loss to the local economy is 12 AUMs because there is no alternative forage to make up the loss of AUMs through the federal grazing decision. Therefore, that head of livestock disappears from that livestock grazer's operation and from the local economy. It appears this calculation is not present in any of the economic analysis despite twice being presented during the DEIS development by Modoc County. Similar calculations are available for example in the Sage Steppe Ecosystem Restoration EIS (2008), the Devil’s Garden Wild Horse Territory Plan Environmental Assessment (2013) and the Warner Mountain Range Project Environmental Assessment (2001).

The analysis does nothing to describe the potential losses to the property value of the base property when grazing reduction might occur. Grazing permits add substantial value to the base property to which the permit is attached. The value is greater than the individual value of the AUMs because the grazing associated with the permit is part of a bigger economic unit. (personal communication Gordon Dick, ranch broker). Regardless of the fact that the land management agencies do not recognize the fair market value that the grazing permit has (although the IRS is quick to tax the capital gain when sold), permits are regularly sold prior to being waived and then transferred. The AUMs represent a portion of the rancher’s investment and therefore a portion of his /her net worth. Reductions in the AUMs available to graze consequently impacts his/her wealth and consequently that reduction ultimately rebounds through the local economy and needs to be captured in this analysis.

The potential loss of property value has a direct impact on local government. The rural counties that are affected by this loss already struggle with having the vast majority of their land base off limits to property taxes due to federal ownership. It is unacceptable to not display this impact as part of the analysis. In addition, livestock grazers in California pay possessory interest tax on their permits AUMs. While mentioned in the text, the effect on this government funding by various potential decisions was not analyzed and needs to be. These rural governments operate on shoestring budgets and unfettered funding, regardless of the amount is vitally important to maintaining critical services.

The County agrees that in several of the alternatives, the projected loss of AUMs does not drop the permitted number of AUMs below the recent historic actual use. While it is appropriate to describe that situation, it is not acceptable to disregard the opportunity costs involved with that "paper" loss of AUMs. There are many reasons why actual use is significantly lower than permitted use including drought, fire, market conditions and loss of forage through invasive species encroachment to name just a few. Most of these conditions are not under the control of the livestock operator.

However, one of the limiting factors that cause actual use to be only about two thirds of permitted use can be existing restrictions on grazing. If that is the case, then the contention in the DEIS that proposals in the alternatives that reduce grazing cause no economic impact if the reduction does not exceed the actual use would be completely inaccurate. If the obstacle to utilizing more AUMs is the current restrictions, then it is very likely that the new restrictions would reduce the actual use even further. This potential flaw must not remain in the analysis and the information must be collected and accurately described.

Comment Number: NVCASG-14-0175-3
Comment Excerpt Text:
Alternative A

Alternative A is not a no action alternative. It is a reflection of a reduction in actual use compared to permitted use of 62% (Table 3.79). The economic effect of current regulatory mechanisms has resulted in a loss of 1.6 million AUM's, thus creating a total economic output loss of ninety eight million dollars, thirty six million dollars in labor earnings, and 1037 jobs. (Table 3.79) These existing economic effects are
not disclosed under the description or evaluation of Alternative A in this DEIS.

**Comment Number: NVCASG-14-0188-3**

**Comment Excerpt Text:**
The social and economic costs (direct and indirect) that will result from restricting each type of disturbance and implementing the required design features for projects should be clearly articulated. This analysis should be completed on a "per acre" basis to ensure economic loss is relative to land disturbance.

**Comment Number: NVCASG-14-0188-33**

**Comment Excerpt Text:**
Table 2.8, Socioeconomic and Environmental Justice - Alternative D

There is no discussion relative to the economic loss of locatable minerals exploration and development, yet in Table 2.8 Section Locatable Mineral (p. 346), the LUPA/DEIS notes that additional design features can result in "reduced access to new or existing mines," and "reduced efficiency and increased operational costs that make potential locatable mineral development economically infeasible." These statements are contradictory.

**Comment Number: NVCASG-14-0188-35**

**Comment Excerpt Text:**
Page 197, Values Associated with Populations of Sage-Grouse

The Draft LUPA/DEIS, Section 1.5.4. at 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 Draft LUPA/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.

**Comment Number: NVCASG-14-0188-38**

**Comment Excerpt Text:**
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 Draft LUPA/DEIS is not adequate to allow the public to discern the real difference among alternatives.

**Comment Number: NVCASG-14-0188-44**

**Comment Excerpt Text:**
It is presumptuous to assume that mineral production would remain consistent when it is acknowledged elsewhere in the LUPA/DEIS that development is sensitive to costs and many of the alternatives include additional restrictions and design features that are likely to increase mining costs. This assumption is presented throughout the economic analysis and the potential reductions are not adequately disclosed relative to loss of output, employment and earnings. Each action alternative proposes measures ranging from complete withdrawal of mineral access to application of BMPs/Design Features for locatable mineral projects. These proposals will create economic consequences that are not adequately disclosed to the public.

**Comment Number: NVCASG-14-0193-10**

**Comment Excerpt Text:**
In general we think that the analysis of economic impact as outlined in Chapter 4 (Section 4.19.2., p. 245) may be overly simplistic as well as incomplete. The economic impacts of Alternatives C, D, and E are identical and not different than Alternative A (No Action); however, a review of Table 2.5., Description of Alternative Actions, reveals that there are substantial differences in the Alternatives with respect, for example, to locatable minerals, and therefore it would follow that the economic impacts should also be different for each. We would suggest a much more robust analysis of the economic impacts...
from each alternative - according to the disclosure requirements associated with the National Environmental Policy Act (NEPA), reviewers of this DEIS should request that realistic, discrete, quantifications of changes in uses and activities in sage-grouse habitat areas, and their associated economic impacts, be clearly disclosed.

Comment Number: NVCASG-14-0193-11
Comment Excerpt Text:
One specific example includes the representation that the Proposed Action will not decrease current grazing levels. In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. We view these as restrictive utilization levels, and, coupled with the KMA approach found in the most recent agency RMPs, believe this will substantially reduce currently permitted grazing and will potentially render much of the ranching on public lands as uneconomical. Additionally, Tables 4.30 and 0-2 are used to conclude that the expected grazing reductions from Alternatives B, D and E will not adversely affect current grazing levels or result in induced economic effects in the dependent local economies. This conclusion is unsubstantiated as the 12-year average actual use could also be interpreted to approximate the effects associated with the current regulatory and economic pressures that are beyond the control of the affected ranchers. Based on this understanding, the conclusion that the added regulatory mechanisms implemented for sage-grouse conservation under the Alternatives B, D and E will not further reduce actual livestock use beyond current documented levels is unsubstantiated and discretionary action by the involved ranchers. This inference is incorrect since the difference between active and actual livestock is the result of many factors including: existing grazing restrictions, fire and drought closures, vacant and unassigned allotments, economic market conditions, etc. Many, if not most, of these contributing factors do not represent items directly controlled by the rancher. As such, the difference between active and actual use cannot be viewed as a voluntary or discretionary action by the involved permittees.

In addition to this disclosure issue, the difference between active and actual livestock use can be used to measure the economic effects resulting from current regulatory mechanisms under Alternative A. Table 3.79 indicates that there is a decline of 1.6 million AUMs between active permitted livestock use and the 12-year average actual or billed use. Using the lower cattle-based economic values from Table 0-4, this grazing reduction equates to an estimated annual loss across the sub-area of $49 million in direct livestock production, $98 million in total economic output, $36 million in labor earnings, and 1,037 jobs. These existing economic effects are not disclosed under the description or evaluation of Alternative A in this DEIS.

Alternatives B, D, E. Tables 4.30 and 0-2 are used to conclude that the expected grazing reductions from Alternatives B, D and E will not exceed the 12-year average actual (or billed) livestock use documented for the planning area. Based on this difference the DEIS concludes these alternatives will not adversely affect current grazing levels or result in induced economic effects in the dependent local economies. This conclusion is unsubstantiated as the 12-year average actual use could also be interpreted to approximate the effects associated with the current regulatory and economic pressures that are beyond the control of the affected ranchers. Based on this understanding, the conclusion that the added regulatory mechanisms implemented for sage-grouse conservation under the Alternatives B, D and E will not further reduce actual livestock use beyond current documented levels is unsubstantiated and...

Comment Number: NVCASG-14-0195-11
Comment Excerpt Text:
Table 3.79 disclosed that the 12-year average for billed or actual livestock use only represents 62 percent of the active livestock use permitted in the planning area. The DEIS does not disclose the reasons for the difference between actual and active livestock use and, through the lack of disclosure, infers this difference may represent a voluntary or...
unsupported in this DEIS. The goals, objectives, and actions proposed in Alternative D, the Preferred Alternative, will most certainly result in further reductions to actual livestock use.

Comment Number: NVCASG-14-0196-3
Comment Excerpt Text:
The socioeconomic analysis in the DEIS is insufficient. It ignores the potential substantial negative direct and indirect impacts in Alternatives B, C and F from proposed mineral withdrawals and proposed elimination of livestock grazing. It also should consider the impacts to the energy, recreation, hunting and any other potentially affected industries

Comment Number: NVCASG-14-0198-8
Comment Excerpt Text:
The Alternatives in the Draft EIS will cause significant socioeconomic harm to the mineral exploration industry, as well as to the communities within which we work, the Nevada counties which contain both the largest concentrations of sage-grouse and the largest concentrations of mineral potential, the state of Nevada, and the federal government itself. However, an analysis of these potential economic impacts is largely missing from the documents, or if mentioned at all, downright misleading. For example, Alternatives Band C would withdraw between 12 and 17 million acres from mineral entry yet the economic impacts of this action are identified as "the same as" the other alternatives or as "impossible to analyze". This approach is unacceptable. Mineral exploration and development are the key economic drivers in the Nevada counties which contain much of the sage-grouse habitat in Nevada. The BLM must do better

Comment Number: NVCASG-14-0199-11
Comment Excerpt Text:
This analysis should be completed on a "per acre" basis to ensure economic loss is relative to land disturbance. The magnitude of expected impacts to GRSG populations should also be incorporated into this analysis.

Comment Number: NVCASG-14-0199-12
Comment Excerpt Text:
Additionally, by requiring Design Feature 1, the DEIS estimates and economic loss of X dollars (X dollars/acre). It is likely that many potential development projects will not be able to proceed due to required design features, ROW requirements, mitigation costs, etc. This should also be addressed and disclosed.

Comment Number: NVCASG-14-0199-14
Comment Excerpt Text:
The DEIS Fails to Take a Hard Look at Economic Impacts:
The DEIS states that "[o]verall, economic activity associated with management of locatable minerals would be the same for Alternatives A, C, D, and E, and may be lower under Alternatives Band F depending on site-specific and operator-specific conditions." DEIS, Ch. 4 at 246 (848). This implies that the mining operations would not be affected by the increased costs and restrictions imposed by the management actions identified in Alternatives C, D, and E that are in addition to current management actions.

That conclusion is incorrect and suffers from a number of flaws. First, it is inconsistent with the DEIS’s recognition that "[mineral operations are sensitive to costs, especially when prices are depressed." DEIS, Ch. 4 at 189 (781). Thus, the increased costs associated with the sage-grouse conservation restrictions imposed under all of the action alternatives will discourage exploration and could have significant impacts on the economic feasibility of an existing or proposed mining operation.

Second, it is inconsistent with the DEIS’s acknowledgment that Alternative D would restrict the 95 pending plans of operations and 100 notices of exploration within the Nevada and Northeastern California sub-region, and could cause them to be rejected, withdrawn, or closed. DEIS, Ch. 5 at 67 (915). The fact that some of these plans and notices
could be rejected, withdrawn, or closed under Alternative D, but not under Alternative A, undermines the conclusion that the economic impacts from management actions affecting locatable minerals would be the same under Alternatives A and D.

Third, it completely ignores the fact that, under Alternative C, 17,732,900 acres would be recommended for withdrawal from mineral entry, see, e.g., DEIS, Ch. 5 at 65 (913), which would result in very significant reduction in economic activity associated with locatable minerals. The Final LUPA/EIS must provide a more accurate analysis of the alternatives' economic impacts from management actions affecting locatable minerals.

**Comment Number: NVCASG-14-0199-18**

Comment Excerpt Text:
Likewise, the DEIS concludes that the designation of ACECs "would not result in measurable or systematic social or economic impacts that would differ by alternative." DEIS, Ch. 4 at 239 (831). This statement is incorrect and completely lacking in support as the extensive designation of ACECs proposed under Alternatives C and F would result in severe restrictions on public-land uses in those areas, with significant associated economic impacts. The Agencies must perform a quantitative economic analysis of the recommended withdrawals and disclose the far-reaching economic impacts that the designation of ACECs under Alternatives C and F would cause.

**Comment Number: NVCASG-14-0199-26**

Comment Excerpt Text:
Tribes in Nevada have a substantial interest in economic development, jobs, and taxes that support local services. The DEIS fails to identify, consider, and evaluate how these interests might be impacted, particularly by alternatives that include large recommended mineral withdrawals that could directly and adversely impact Tribal interests.

The impact analysis for tribal interests also contains multiple references to impacts being unknown because a particular alternative is silent on specific goals and objectives for a particular management category. The repeated conclusion that impacts to tribal interests are unknown due to a lack of goals and objectives fails to constitute a hard look at such impacts, and is inconsistent with the remainder of the DEIS, which was able to identify impacts on other resources despite the lack of goals and objectives for some alternatives. This is unacceptable where BLM has a long history of consultation with Tribes and Nevada and has specifically identified and discussed in dozens of site-specific EISs the information that is referenced as "unknown."

**Comment Number: NVCASG-14-0199-55**

Comment Excerpt Text:
Table 2.8, Socioeconomic and Environmental Justice (Page 352-353) - Alternative D:

There is no discussion relative to the economic loss of locatable minerals exploration and development, yet in Table 2.8 Section Locatable Mineral (p. 346), the DEIS notes that additional design features can result in "reduced access to new or existing mines," and "reduced efficiency and increased operational costs that make potential locatable mineral development economically infeasible." These statements are contradictory and represent inadequate and incomplete analysis.

**Comment Number: NVCASG-14-0199-57**

Comment Excerpt Text:
Page 197, Values Associated with Populations of Sage-Grouse:

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.
Substantive Comments on the Nevada and Northeastern California Greater Sage-Grouse Draft LUPA/EIS

Comment Number: NVCASG-14-0199-70
Comment Excerpt Text:
Page 244, Section 4.19.2. Economic Impacts, Table 4.31:

The economic impacts of Alternatives C, D, and E are exactly the same and appear to not differ from Alternative A (No Action) which is not factual. A review of Table 2.5., Description of Alternative Actions, reveals that there are substantial differences in the Alternatives with respect to Fluid Minerals.

Comment Number: NVCASG-14-0199-71
Comment Excerpt Text:
Chapter 4.19.2 Economic Impacts (Page 245) - Impacts from Management of Locatable and Salable Minerals Paragraph 3, First Sentence

It is presumptuous to assume that mineral production would remain consistent when it is acknowledged elsewhere in the DEIS that development is sensitive to costs and many of the alternatives include additional restrictions and design features that are likely to increase mining costs. This assumption is presented throughout the economic analysis and the potential reductions are not adequately disclosed relative to loss of output, employment and earnings. Each action alternative proposes measures ranging from complete withdrawal of mineral access to application of BMPs/Design Features for locatable mineral projects. These proposals will create economic consequences that are not adequately disclosed to the public. Further, implementation of even basic GRSG regulations will increase permitting requirements for exploration and development of minerals. These economic impacts are also ignored.

Comment Number: NVCASG-14-0200-10
Comment Excerpt Text:
The land use restrictions and prohibitions in all of the action alternatives including Alternative D, the Preferred Alternative, threaten key economic drivers in northern Nevada including but not limited to ranching, mining, hunting, and recreation because so much of this area is comprised of BLM-administered public land. Consequently, the action alternatives will severely restrict economic use and development of the public lands in northern Nevada for years to come. The DEIS must be revised to include a detailed evaluation of the short- and long-term economic impacts to Nevada counties and to the State of Nevada that would result from the action alternatives.

Comment Number: NVCASG-14-0200-4
Comment Excerpt Text:
BLM’s Preferred Alternative, Alternative D, will cause substantial, long-term adverse economic impact to the State of Nevada because it severely restricts and, in some cases, prohibits use and development of public lands with Preliminary Priority Habitat (PPH) and Preliminary Priority Management Areas (PPMA). As discussed in detail below, the DEIS fails to take a hard look at the nature and magnitude of this socioeconomic harm and as such must be rejected as meeting the basic requirements of an environmental analysis prepared pursuant to the National Environmental Policy Act ("NEPA") and its implementing Council on Environmental Quality ("CEQ") regulations at 40 CFR 1500 - 1508.

Comment Number: NVCASG-14-0200-9
Comment Excerpt Text:
The economic impact analysis for locatable minerals in Section 4.19.2 is fraught with errors and also fails to take a hard look at the impacts associated with withdrawing lands from mineral entry as proposed in Alternatives B, C, and F. The analysis is completely lacking any quantitative analysis. The DEIS must evaluate the economic impacts on multiple levels that include impacts to individual claim owners, large and small companies that own and develop mining claims, Nevada counties, the State of Nevada, the U.S. Department of the Interior and the Nation given the increased dependence on foreign minerals this will yield.

Comment Number: NVCASG-14-0201-14
Comment Excerpt Text:
The purpose of this comment letter is to focus on the elements of the Draft LUPA/DEIS that directly affect NOGA’s members. However, our members
are indirectly or directly impacted by regulations that impact mining, energy development, grazing, and other legitimate uses of public lands. The loss of income from these other land uses impacts the state and local economies. This was not adequately analyzed in the Draft LUPA/DEIS. The last/current recession demonstrated how vital these land uses were in Elko County. While much of the rest of the state suffered high unemployment rates and high foreclosure rates, those rural counties that rely on natural resources were much less impacted. Regulations and restrictions that hinder these industries put all of our members at risk.

Comment Number: NVCASG-14-0201-27
Comment Excerpt Text:
Table 2.5. Description of Alternative Actions, Alternative C, SD 1:

BLM and Forest Service are required to use "best science" in their analysis. There is no data or science presented in the Draft LUPA/DEIS that sage-grouse populations are greater in existing ACECs than elsewhere on public lands. Therefore, the proposed action of designating millions of acres as ACECs to protect sage-grouse and sage-grouse habitat is completely without basis. We are strongly opposed to the addition of ACEC designations under the false guise of conserving sage-grouse and sage-grouse habitat. This is unnecessary and unacceptable to our members.

The economic impacts of this action element are inadequately analyzed in Chapter 4. Such designations will impose economic hardships on our members and this is not mentioned in the Environmental Consequences, Section 4.19.

Comment Number: NVCASG-14-0201-9
Comment Excerpt Text:
3.1. Approach used in the Draft LUPA/DEIS

The general approach of the Draft LUPA/DEIS is based on how threats to sage-grouse as identified by the USFWS and by the COT report could be addressed by applicable BLM or Forest Service land management programs in order to strengthen regulatory mechanisms the USFWS will be reviewing as part of their listing decision. The NTT report followed a similar process, a program by program analysis of how each BLM or Forest Service program may result in impacts to sage-grouse or sage-grouse habitat. However, in each of these approaches there is no perspective provided with respect to the relative importance of a land management program specific impact. Consequently, the alternative development (at least Alternatives B, D, and F) clearly focus on program level actions.

The alternatives all try to identify how each BLM or Forest Service program includes, involves, or is related to a threat to sage-grouse and then provide recommendations for modifying the program to eliminate or reduce the threat, regardless of the magnitude of the impact of the threat to sage-grouse or their habitat. Consequently, there are likely to be changes made in various programs that will individually have minor benefits to sage-grouse or their habitat, and likely will cumulatively have minor benefits to sage-grouse and their habitat. However, actions such as road closures can have significant impacts on NOGA members’ ability to conduct their business and have real economic impacts. These types of socioeconomic impacts were not adequately addressed in the Draft LUPA/DEIS.

This approach contrasts with a process that would seek to determine the magnitude or scale of the various threats, prioritize the threats, and then focus on ways to address the major threats (i.e., "fixes"). The next step would be to then determine which programs need to be modified to incorporate the "fixes" and how they need to be modified in order to reduce the major threats.

Comment Number: NVCASG-14-0205-33
Comment Excerpt Text:
The socioeconomic impact analysis needs to be re-written to analyze the economic matrices of counties and states before and after implementation of each alternative. The source of tax revenues, direct and
indirect jobs, and the related goods and services need to be identified. The sources of funding for schools, churches, fire districts, emergency services, hospitals, county and state roads, etc. need to be listed. The true and complete impacts to those sources need to be analyzed in detail.

BLM’s own Mineral Assessment data needs to be incorporated into the EIS. This glaring omission is noteworthy since over $6 billion in annual revenues from Nevada’s mineral industry are being ignored in order to falsely portray impacts as less significant than they really are.

Comment Number: NVCASG-14-0205-34
Comment Excerpt Text:
BLM and USFS presented impacts (i.e. environmental consequences) by resource and alternative in the EIS, however the EIS fails to include any detailed or meaningful analysis of the impacts to resources under any of the action alternatives, especially the socioeconomic impacts of withdrawing lands from locatable, leasable and saleable mineral development, livestock grazing, ROWs, etc.

Comment Number: NVCASG-14-0205-56
Comment Excerpt Text:
242-243, 4.19.2
“Although management activities included in the proposed alternatives could affect recreational activities (e.g., OHV use in dispersed areas), the effects are not projected to be substantial... change. On both BLM and Forest Service lands, agency recreation specialists predict the alternatives will not result in measurable impacts on recreation visitor days... For all of Alternatives B through F, the net economic effect on recreational activity is not possible to quantify, but would likely be very small.

Comment:
These statements are speculative, unsubstantiated, and are not based on common sense or logic. Closing up to 35% of the federal land to OHVs (PPH and PGH acres) would reduce opportunities to hunt, fish, rock hound, tour, bird watch, mountain biking, hike, and otherwise enjoy public land. Almost all lands in Nevada are managed by the federal government (over 83+ %). Direct losses due to people recreating elsewhere if 35% of public lands are closed to vehicles will have significant economic impacts to hotels, restaurants, gas stations, private campgrounds, etc. Indirect impacts include the loss of revenue from OHV, 4x4 truck, gasoline, camping, hunting rifles, and other recreation equipment sales, lost jobs in these industries, as well as lost taxes from sales and wages. The loss of revenue to Nevada Department of Wildlife will also need to be assessed if roads are closed to hunters.

Comment Number: NVCASG-14-0205-57
Comment Excerpt Text:
244, 4.19.2
“Based on the restrictions identified for the management alternatives, BLM oil and gas specialists projected that the number of wells and volume of production would be the same for Alternatives A, C, D, and E. In Alternatives B and F, management actions would restrict exploration and development activity such that no new wells would be drilled (BLM 2013f).”

Comment:
Per page 4-31, management under Alternative B would close 12,693,500 acres of PPMAs to leasing. Within modeled nesting habitat, there would be 10,522,300 acres of PPMAs. There are dollar figures that can be associated with closing over 26 million acres to fluid mineral leasing. The federal government has the oil and gas potential for Nevada lands mapped as a GIS layer (see Mineral Assessment Reports for each District) and they need to add that information. The economic loss of the opportunity to develop oil and gas on the 26 million acres of closed land must be calculated in dollars and revealed in the EIS. The full costs to society of every proposed fluid lease closure as well as every saleable and leasable mineral/material closure must be fully analyzed and disclosed.
Comment Number: NVCASG-14-0205-60
Comment Excerpt Text:
The EIS also fails to include the actions of other federal agencies that remove lands from public access and use indefinitely or in perpetuity, and the adverse impacts that such land withdrawals have on the economies of local communities and governments.

Comment Number: NVCASG-14-0205-64
Comment Excerpt Text:
The EIS contains no estimate of costs to communities associated with increased demand for community social services, police and fire departments, first responders, local hospitals, etc. as tax revenues decline under all alternatives except Alternative A. Similarly, how our governments are to deal with the hundreds of millions of dollars in annual lost tax revenue is not explained.

Comment Number: NVCASG-14-0205-65
Comment Excerpt Text:
- The EIS ignores the potential negative impact to agriculture from restrictions.
- Potential negative impacts on mining – one of Nevada’s most important industries – are similarly dismissed without any serious consideration in the EIS. The fact that BLM’s own 2012 Mineral Assessment states that the mining industry brings in over $6 billion annually to the Nevada economy was for some reason omitted from the EIS.

Comment Number: NVCASG-14-0224-43
Comment Excerpt Text:
This analysis not only fails to adequately review the economic and social impact that could result from dramatic changes in public land management, the oil and gas economic value is significantly underestimated because it fails to include lease rentals, bonuses, and royalties paid to the state and federal treasuries.

Comment Number: NVCASG-14-0224-44
Comment Excerpt Text:
each alternative fails to portray the costs of implementation. We question how members of the community can understand the true impact of an alternative when the BLM/FS have not identified the costs to implement them. This is a serious, and likely, fatal flaw. We recommend that the BLM/FS clearly identify their implementation costs of the individual alternatives.

Comment Number: NVCASG-14-0230-1
Comment Excerpt Text:
The DEIS does not fully disclose the effects of Alternatives B, D and E on permitted livestock or the resulting indirect effects on local communities and economies. As such, the analysis of these alternatives in the DEIS is not in compliance with NEPA analysis and disclosure requirements.

Comment Number: NVCASG-14-0236-3
Comment Excerpt Text:
Section 4.19.2: The potential economic impact of all alternatives must be carefully considered in this decision making process. For example, very little attention is given to metallic locatable minerals through the use of broad statements and assumptions. The result is that impacts are generally discussed as similar across alternatives. The EIS must use the appropriate level of quantitative data and peer-reviewed conclusions to determine potential impacts and analyze them not only at the planning level but require this on the management level (case-by-case).

Comment Number: NVCASG-14-0240-2
Comment Excerpt Text:
I have participated in the preparation of two county level input-output studies. In both instances, the actual data collected on the ground has shown that a severe disruption to an area industry cannot be overcome by tourism, hunting or conservation. The severity of the disruption to local and state economies outlined in four of the six alternatives is not adequately addressed. The final document must recognize that Nevada and northern California cannot sustain this blanket reduction in their livestock, mineral and tourism industries.
Comment Number: NVCASG-14-0253-3
Comment Excerpt Text:
While evaluating the ramifications of possible reduction of livestock grazing use, consideration should take into account the linkage between private lands and federal land permits. In order to maintain business operations, possible conversion of private land holdings may result from not being able to make use of federally-managed lands. In areas where private lands and federally-managed lands are found in alternating sections or where private lands make up a significant portion of large tracts of habitat, this increase in fragmentation would undoubtedly be detrimental to rangelands and will further fragment the habitat of the greater sage grouse.

Comment Number: NVCASG-14-0259-11
Comment Excerpt Text:
Draft LUPA/EIS (Chapter 4, page 134) discusses the potential socio-economic impacts on individuals and the community at large due to the implementation of the Draft LUPA/EIS (i.e. increased operators’ costs, costs for implementing required management actions, decrease in AUMs, and range improvement construction/modification costs). However, the analysis is too simple for the complexity of the issues. For instance, the document states that the short-term impacts (specifically the increased cost to permittees/lessees) would result in long-term benefits, such as improved livestock distribution from improved range management. The BLM and USFS failed to acknowledge that the short-term impacts may be so great, that many permittees/lessees will not be able to withstand the financial burden of the requirements long enough to experience the long-term benefits.

SNWA encourages the BLM and USFS to develop a more in-depth analysis for the impacts of socio-economics. Based on BLM socio-economic guidelines and checklists, we suggest including information about 1) populations in the planning area, 2) employment, income, and subsistence (i.e. employment, personal income, economic diversity, regional economic organization, and subsistence activities), and 3) attitudes and meanings (significance of proposed land management actions).

Comment Number: NVCASG-14-0262-3
Comment Excerpt Text:
In addition to this disclosure issue, the difference between active and actual livestock use can be used to measure the economic effects resulting from current regulatory mechanisms under Alternative A. Table 3.79 indicates that there is a decline of 1.6 million AUMs between active permitted livestock use and the 12-year average actual or billed use. Using the lower cattle-based economic values from Table 0-4, this grazing reduction equates to an estimated annual loss across the sub-area of $49 million in direct livestock production, $98 million in total economic output, $36 million in labor earnings, and 1,037 jobs. These existing economic effects are not disclosed under the description or evaluation of Alternative A in this DEIS.

Comment Number: NVCASG-14-0262-5
Comment Excerpt Text:
In Table 2.7 the Proposed Action (Alternative D) proposes to deviate from moderate grazing levels in areas not achieving the sage-grouse habitat standards defined in Table 2.6. It becomes readily apparent that implementation of these restrictive utilization levels, coupled with the KMA approach found in the most recent agency RMPs, will substantially reduce the currently permitted grazing and will potentially render much of the ranching on public lands as uneconomical. Contrary to NEPA requirements, this foreseeable impact was not disclosed in Section 4.9 of the DEIS. Further, since the KMA concept is included in both of the two RMPs under development in Nevada it is reasonable to conclude that it represents a growing agency trend at least in Nevada. This trend and its ramifications were not disclosed as a reasonably foreseeable action in the cumulative effects analysis in Section 5.8 or Table 5.1. This lack of disclosure in 6... this DEIS is not consistent with NEPA requirements or agency handbook and manual instructions pertaining to cumulative effect analyses.
Comment Number: NVCASG-14-0263-3
Comment Excerpt Text:
Chapter 5: The counties that contain the bulk of GSG habitat are significantly dependent upon utilization of natural resources for their economic well-being. These uses include mining, energy production, recreation, and livestock grazing. Several times in Chapter 5 it is stated that there are potential negative impacts to these uses, including rendering some operations unviable. How can these potential adverse economic impacts be quantified? How can the potential adverse impacts to local communities be accurately quantified? Failure to include these quantified impacts is a deficiency in this DEIS.

Comment Number: NVCASG-14-0265-8
Comment Excerpt Text:
Although the DEIS / LUPA addresses public lands generated economic components, the GRSG DEIS / LUPA did not specifically address private local, state and regional economic components and impacts as required by NEPA.

Comment Number: NVCASG-14-0288-2
Comment Excerpt Text:
The LUP focuses its portrayal of the socio-economic impacts on the entire planning area but does not adequately review the effects of the proposed land use restrictions on specific areas, including individual counties. Thus, the LUP undermines the true impact of its application to the social structure of local communities and to the economy of the western economy.

Comment Number: NVCASG-14-0291-1
Comment Excerpt Text:
Should an EIS Alternative be selected that withdrawals all or a portion of our mining claims from future development, we request that we be compensated for the economic losses. The EIS should include an extensive and detailed socioeconomic study identifying direct, indirect, cumulative, and financial impacts to WLC (as well as to other industries affected by the withdrawal of lands from mining).

Comment Number: NVCASG-14-0306-10
Comment Excerpt Text:
The DEIS fails to take a hard look at the nature and magnitude of this socioeconomic harm and as such must be rejected as meeting the basic requirements of an environmental analysis prepared pursuant to NEPA and its implementing Council on Environmental Quality (“CEQ”) regulations at 40 CFR 1500 - 1508.

Comment Number: NVCASG-14-0306-12
Comment Excerpt Text:
The DEIS has not taken a hard look at the mineral reliance impacts associated with each alternative and does not adequately inform the public of these impacts. The DEIS must be revised to discuss this critically important issue. The public must be given an opportunity to review and comment upon a revised DEIS.

Comment Number: NVCASG-14-0306-13
Comment Excerpt Text:
The economic impact analysis for locatable minerals in Section 4.19.2 is fraught with errors. Consequently it fails to properly examine the impacts associated with withdrawing lands from mineral entry as proposed in Alternatives B, C, and F. The analysis is completely lacking any quantitative or even semi-quantitative analysis. The DEIS must evaluate the economic impacts to the following entities: individual claim owners, large and small companies that own and develop mining claims, Nevada counties, the State of Nevada, and the U.S. Department of the Interior.

Comment Number: NVCASG-14-0306-17
Comment Excerpt Text:
In the case of minerals, the evaluation must thoroughly examine the adverse impacts to state and local governments due to reduced economic activity that would result from withdrawing lands from mineral entry. This analysis must quantify the likely loss of jobs and the reduction in sales taxes, use taxes, property taxes, and NV Net Proceeds of Minerals (“NPOM”) tax revenue. BLM must consult with Nevada state officials to obtain appropriate data from the state prior to performing this analysis.
According to the 2012 – 2013 NPOM report prepared by the NV Department of Taxation, Nevada counties received $127,274,036 in NPOM tax revenue and the State’s General Fund received $128,371,997. The DEIS must use this data to evaluate the economic impacts to local and state government that would result from withdrawing lands from mineral entry.

**Comment Number: NVCASG-14-0306-19**

*Comment Excerpt Text:*  
Because mineral deposits discovered today have the potential to become future mines, mineral exploration in the planning area is essential to creating and maintaining a robust pipeline of projects that can become future projects that create high-paying jobs, generate revenue for state and local governments, and help meet the Nation’s needs for domestic minerals. Unfortunately, a discussion of this important issue is missing from the DEIS except that the document asserts that such an analysis is not possible. This assertion is incorrect. The DEIS must be revised to evaluate the impacts to a wide range of stakeholders (e.g., individuals, companies, counties, and the State of Nevada) that would result from reduced mineral exploration due to the massive to land withdrawals in Alternatives B, C, D, and F.

**Comment Number: NVCASG-14-0309-7**

*Comment Excerpt Text:*  
In accordance with its multiple use mission, the BLM must consider land uses other than grazing in its calculation of the economic and social values of each alternative, including administrative costs and environmental impacts to water, wildlife, plants, recreation, potential species loss, intrinsic land value, and beauty.

**Comment Number: NVCASG-14-0333-2**

*Comment Excerpt Text:*  
The economic analysis relative to Elko county provided in the DLUP/DEIS is most inadequate. In Chapter 4, there is discussion of mineral revenues and their impacts on states and counties. Under the discussion of mineral revenues, the statement is made that: "Local government tax revenues may however, be substantially affected in specific areas that would experience dramatic reductions in economic activity." (emphasis added). In the bullet points that follow this statement, it notes that Elko County would only be impacted "because of reduced oil and gas exploration and production". What about the impacts due to a potential reduction in mining exploration and production? Although Elko County does not currently have many producing mines, the potential for exploration and future mining activities is great, and the amount of revenue brought into the county as a result of these activities is and will be, significant. Considering that this fact is completely overlooked brings into question the other information presented in the DLUPNDEIS that I am less familiar with.

**Comment Number: NVCASG-14-0344-32**

*Comment Excerpt Text:*  
Page 197, Values Associated with Populations of Sage-Grouse: The Draft LUPA/DEIS, Section 1.5.4. at 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 Draft LUPA/DEIS so the public can determine what level of revenue is generated for NDOW by hunting sage-grouse 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.

**Comment Number: NVCASG-14-0344-43**

*Comment Excerpt Text:*  
Page 244, Section 4.19.2. Economic Impacts, Table 4.31: The economic impacts of Alternatives C, D, and E are exactly the same and appear to not differ from Alternative A (No Action) which Noble believes is not reality. A review of Table 2.5., Description of Alternative Actions, reveals that there are substantial differences in the Alternatives with respect to Fluid Minerals. For example, these alternatives differ with
respect to mineral leasing and winter habitat NSOs, especially in the checkerboard area. This will result in different economic impacts.

**Comment Number: NVCASG-14-0347-4**  
**Comment Excerpt Text:**  
The livestock industry of Nevada works diligently to create environmentally stable, economically viable operations and one such contributing component is the ability to graze on private and public land. While evaluating the ramifications of possible reduction of livestock grazing use, consideration should take into account the linkage between private lands and federal land permits. In order to maintain business operations, possible conversion of private land holdings may result from not being able to make use of federally-managed lands. In areas, where private lands and federally-managed lands are found in alternating sections or where private lands make up a significant portion of large tracts of habitat, this increase in fragmentation would undoubtedly be detrimental to rangelands and will further fragment the habitat of the greater sage grouse.

**Comment Number: NVCASG-14-0358-3**  
**Comment Excerpt Text:**  
the difference between active and actual livestock use can be used to measure the economic effects resulting from current regulatory mechanisms under Alternative A. Table 3.79 indicates that there is a decline of 1.6 million AUMs between active permitted livestock use and the 12-year average actual or billed use. Using the lower cattle-based economic values from Table 0-4, this grazing reduction equates to an estimated annual loss across the sub-area of $49 million in direct livestock production, $98 million in total economic output, $36 million in labor earnings, and 1,037 jobs. These existing economic effects are not disclosed under the description or evaluation of Alternative A in this DEIS.

**Comment Number: NVCASG-14-0366-3**  
**Comment Excerpt Text:**  
Economic Impact Analysis: Conspicuous by its absence, "mining" is completely omitted in Appendix "0" — Economic Impact Analysis Methodology. Although there are apparently 27 IMPLAN economic sectors, only livestock grazing, geothermal exploration and development, and oil and gas appear important enough for discussion, but not "mining." Mining is a major economic sector in northern Nevada. The EIS needs to include a section on "Minerals Exploration and Mining" in Appendix "0". Also, the EIS needs to add discussion on mining's present-day contributions to the economies of the rural counties of Nevada.

**Comment Number: NVCASG-14-0367-19**  
**Comment Excerpt Text:**  
More specifically, the incremental socioeconomic impacts of the proposed action and each alternative should be evaluated in the cumulative effects section of the EIS. Therefore, the final EIS should address the local, regional, and national socioeconomic effects related to wind energy on:

1) Employment;  
2) Economic Development; and  
3) Taxable Income.

**Comment Number: NVCASG-14-0370-2**  
**Comment Excerpt Text:**  
The socioeconomic analysis for the sage grouse LUP/DEIS is inadequate and biased. For the analysis to be adequate the massive imbalance in the non-market valuation as well as the potential direct impacts to the local communities in the planning area need to be included in the comparisons of the alternatives. The comparisons of the alternatives contain many general statements as to the possible effects on habitat. There should be similar statements in the alternative comparisons as to the direct and non-market valuation effects of various alternatives.

### 17.3 CUMULATIVE IMPACT ANALYSIS

**Comment Number: NVCASG-14-0003-42**  
**Comment Excerpt Text:**  
This DLUPA/DEIS is part of multiple NEPA documents, including revisions for Wyoming, Idaho, Montana, and Utah. AEMA maintains that the
cumulative impact to locatable minerals from the combined land withdrawals, segregations, and de facto withdrawals currently in place, as well as the future land withdrawals proposed in dozens of RMP revisions will have an inadequately defined and significant adverse effect on the hard rock mining industry nationwide. The nationwide impacts must be thoroughly analyzed; otherwise BLM’s analysis is significantly flawed and incomplete. AEMA further contends that the direct, indirect, and cumulative impact analysis is inadequate and lacks convincing data as well as rationale, as described above. BLM must resolve the above issues and re-issue a draft of this LUPA to allow for public comment. BLM must also expand the analysis to look at the cumulative impacts nationwide on such important economic factors as increased unemployment, decreased domestic mineral and energy production, and increased reliance on foreign sources of minerals and energy.

**Comment Number: NVCASG-14-0015-21**
**Comment Excerpt Text:**
Because the Draft LUPA/EIS fails to take fully into account the potential for inadequate agency funding, it also fails to give proper recognition to the importance of non-federal funds and resources to carry out sage-grouse conservation actions.

**Comment Number: NVCASG-14-0083-5**
**Comment Excerpt Text:**
Although the DEIS / LUPA addresses public lands generated economic components, the GRSG DEIS / LUPA did not specifically address private local, state and regional economic components and impacts as required by NEPA.

**Comment Number: NVCASG-14-0169-10**
**Comment Excerpt Text:**
The significant economic engine that is metal, non-metallic and all mining throughout the range of the GRSG in Idaho, Utah and Nevada is described and attached hereto as Exhibit 8 for each state. The economic calculus for the proposed LUPA must be accounted for not only across the tristate area but in all of the Agency plans in the GRSG range in the context of the Statement of Purpose and Need, if the conservation measures proposed are aimed at avoiding the ESA listing of the GRSG range-wide.

**Comment Number: NVCASG-14-0188-45**
**Comment Excerpt Text:**
Section 5.13.2 states that under Alternatives B, D, E, and F locatable mineral activity is expected to decrease. If this activity decreases there will be direct impacts to jobs from mining and exploration companies. There will also be indirect job losses by contractors that do business with the mining and exploration companies. There is no projection in Table 5.8 for these job losses.

**Comment Number: NVCASG-14-0199-17**
**Comment Excerpt Text:**
Because the DEIS fails to take fully into account the potential for inadequate agency funding, it also fails to give proper recognition to the importance of non-federal funds and resources to carry out sage-grouse conservation actions.

**Comment Number: NVCASG-14-0205-51**
**Comment Excerpt Text:**
“ROW/SUA exclusion areas would prohibit all development of ROWs, with some exceptions provided, while ROW/SUA avoidance areas would consider on a case-by case basis whether a ROW or Forest Service SUA would be allowed. This flexibility may be advantageous where federal and private land-ownership areas are mixed and exclusion areas may result in more widespread development on private lands if government managed lands could not be used. Land tenure adjustments or withdrawals made in GRSG habitat could reduce the habitat available to sustain GRSG populations, unless provisions were made to ensure that GRSG conservation remained a priority under the new land management regime. Land exchanges designed to decrease fragmentation of GRSG habitat would help GRSG populations (NTT 2011, p. 12).”
Comment:

Discuss the detailed economic effects of ROW/SUA exclusion areas, land tenure adjustments, mineral withdrawals, NSO and other restrictions, etc. to Nye County employment as well as all other counties in the planning area. Include lost revenue from geology studies, claim staking, plan of operation studies, and mining. Include the lost opportunity taxes; fire, school and hospital revenues; equipment sales, maintenance and rentals and all other factors in Chapter 4. Include the true current situation and impacts to locatable, saleable and fluid minerals, as well as renewable and nonrenewable energy resources not already listed.

For every acre of land proposed for ROW/SUA exclusion areas, land tenure adjustments, mineral withdrawals, NSO and other restrictions, the EIS needs to itemize all costs to society. The EIS needs to determine mineral potential and discuss it in Chapter 3 and detail all consequences in Chapter 4, as required by NEPA and CEQ guidelines.

Mineral entry withdrawals are normally permanent. The impacts of these withdrawals need to be analyzed for each alternative. Include the revenue to BLM that would be lost due to location and maintenance fees on claims ($66 million in revenues to BLM in 2012); revenues and jobs lost to geologists and surveyors that locate, stake and file said claims (over $100 million per year); revenues and jobs lost to those employed to perform exploration drilling on mining claims (over $1 billion per year); jobs lost by people who manufacture, sell and maintain drill rigs used in mining (over $2 billion per year); jobs lost to people who write plans of operation; jobs lost to federal employees that record mining claims or review plans of operation; jobs lost to companies that would otherwise mine the minerals (this can be estimated from the mineral assessment data), jobs lost to BLM and state employees that inspect mines, and so forth. The direct and indirect losses to service industries, local and state government, fire stations, hospitals, schools and so forth needs to be assessed. Also include the national security risks associated with said withdrawals. Once the mining know-how and exploration and mining equipment are gone, they cannot be retrieved without significant time and costs to society. The entire mining cycle in the US needs to be analyzed and the true impacts need to be revealed.

The same needs to be done for fluid minerals, saleable minerals, etc.

Comment Number: NVCASG-14-0205-53
Comment Excerpt Text:
62. 4.4.5

“Although lands may be listed as closed, there may not be a resultant change in vegetation or soil conditions…Although lands may be listed as withdrawn and/or closed, there may not be a resultant change in vegetation or soil conditions.”

Comment:

These concepts need to be carried through all aspects of the EIS consequences. The economic impacts of closing and/or withdrawing millions of acres of land that may not even result in changes in vegetation or soil conditions needs to be assessed. The fact that industries could do more good for sage-grouse habitat than the federal government will do through their inaction (as demonstrated to date) needs to be assessed.

Comment Number: NVCASG-14-0205-58
Comment Excerpt Text:
the continued impacts of existing land withdrawals associated with the Nevada Test and Training Range (NTTR), the Nevada National Security Site (NNSS), and other federal projects are completely absent from the analysis.

Comment Number: NVCASG-14-0205-59
Comment Excerpt Text:
The chain of events from losing productive private property, often tied to a federal permit, to development and subsequent loss of wildlife habitat, needs to be assessed. The loss of AUMs, ounces of gold, BTUs of energy, access to water resources,
correlates to permanent hard dollar losses to our economy. These economic losses need to be quantified in sufficient detail for the agencies to make informed decisions. The EIS should address the economic losses at all levels, including the loss of income to the manufacturers and sellers of farm equipment, mining equipment, drill rigs, piping, work vehicles, etc.

Comment Number: NVCASG-14-0205-61
Comment Excerpt Text:
The cumulative impact of the additional legislative measures being added to the impacts caused by the sage-grouse EISs also needs to be analyzed. The wilderness bill proposed for Nevada alone would cost private landowners over $2.3 billion in development fees and result in the permanent loss of millions of acres of land to productive use. The land does not qualify as wilderness but would politically be labeled as wilderness in the name of sage-grouse. What other states have similar wilderness bills in the making? What is the cumulative impact to the economy as politicians push the envelope further? The Reid–Heller Wilderness Bill is a connected action to the sage-grouse EISs and therefore, must be analyzed. The cumulative impact of the wilderness land withdrawals coupled with the development fees must be addressed. The proposed wilderness lands need to be mapped and revealed as part of the cumulative impact assessment for the EIS. The Wilderness Bill impacts are reasonably foreseeable and therefore NEPA requires their analysis.

18. Soil

18.1 Impact Analysis

Comment Number: NVCASG-14-0308-40
Comment Excerpt Text:
Livestock trampling impacts to biological soils crusts are of particular significance considering the spread of cheatgrass throughout the species’ habitat which is both decreasing habitat quality and increasing fire risks. Fire and grazing was positively associated with nonnative abundance in all vegetation types with adequate sample sizes to evaluate these factors (Merriam et al., 200743). Biotic crust species richness and cover were inversely related to cover of cheatgrass (Ponzetti, et al., 200744). Direct experimentation has shown that lichen-dominated biological soil crust can inhibit cheatgrass germination (Deines et al., 200745). Disturbance is a reliable indicator of alien dominance in vegetation composition, and livestock grazing is a significant disturbance to desert ecosystems (Brooks and Berry, 200646).

19. Travel Management

19.1 Range of Alternatives

Comment Number: NVCASG-14-0032-1
Comment Excerpt Text:
Between March 1 and May 15, prohibit OHV events from using routes that pass through an active lek. Impose a time of day restriction (after 10 a.m.) for routes that pass within ¼ mile of an active lek.

Comment Number: NVCASG-14-0050-16
Comment Excerpt Text:
i. Management inside SGCAs in sage grouse habitat

- All travel must be on designated open roads and trails, subject to seasonal restrictions.
- Seasonal restriction should include the periods of courtship, nesting and early brood raising, as well as times when the grouse are on wintering habitats.
- No new trail construction within 7.6 km of active leks.
- Close existing trails and roads to achieve an open road and trail density not greater than 1 km/km².135
- During travel management planning evaluate the closure of secondary and primary roads in the SGRA.
- Seasonally within 7.6 km of active leks.
- Allow no commercial or special use permitted activities in SGRAs unless there is
a demonstrated beneficial affect for the grouse.

ii. Management outside SGCAs in sage grouse habitat

- All travel must be on designated open roads and trails, subject to seasonal restrictions.
- Seasonal restriction should include the periods of courtship and nesting, as well as times when the grouse are on wintering habitats.
- No new trail construction within 6.4 km of active leks.
- Seasonally prohibit camping within 6.4 km of active leks.

Comment Number: NVCASG-14-0094-5
Comment Excerpt Text:
Chapter 4.11, Page 748-751.....Please keep in mind that new road construction might be needed for the welfare of the people based on state and local planning organizations. We need to allow that while taking all measures to preserve, enhance, and protect the sage-Grouse and its habitat.

Comment Number: NVCASG-14-0143-3
Comment Excerpt Text:
Many of these roads lead to old pioneer grave sites. Also a lot of our people have their loved ones ashes buried in these remote sites only accessed by these roads and trails. This is part of the Custom and Culture of the western US. The roads for the most part existed before the creation of BLM/USFS and therefore fall under RS2477 and are under the Counties jurisdiction and control.

Comment Number: NVCASG-14-0150-2
Comment Excerpt Text:
Need to add a category of OHV use that is allowed (Open) that does not affect GRSG or GRSG habitat. OHV use would categorize all motorized travel. Snow cats or snowmobiles have very little or no impact to habitat with adequate snow depths. By having areas limited, it could impact access to mountain top communication sites or other remote sites. Travel via snow cat requires departing from where the road should be to avoid various snow drifts or other hazards. These hazards may include known avalanche chutes, large snow drifts, snow cornices or snow depths that put the equipment into branches of trees that would normally be clear on existing accesses or roadways.

Comment Number: NVCASG-14-0150-3
Comment Excerpt Text:
Established speed limits on public roadways need to follow the MUTCD (Manual of Uniform Traffic Control Devices). Failure to follow these guide lines could open the BLM up to liability or unenforceable speed limits.

Comment Number: NVCASG-14-0151-14
Comment Excerpt Text:
Alternative: D, Section: Goal D-CTTM 1, Page Number: 113
Review Comment: The County believes that the BLM MUST maintain access to public lands. It is unclear as to how “reasonable access” will be defined, or who will develop the definition.

Comment Number: NVCASG-14-0151-20
Comment Excerpt Text:
Alternative: D, Section: Action D-CTTM 4, Page Number: 248
Review Comment: The document is not specific if potential future road closures, and/or seasonal closures will be developed through a separate public planning process or not. This needs to be clarified.

Comment Number: NVCASG-14-0171-18
Comment Excerpt Text:
Access
We understand the concern many land managers and the environmental community have over the construction of roads. As previously stated, the Sage Steppe Ecosystem Restoration Strategy EIS lays out a
four decade window for treating over one million acres. In order to implement this treatment in the most efficient and cost effective way, it is essential that temporary roads be constructed. This Strategy prohibits new permanent roads, but in order to treat these acres for the long term benefit of Sage Grouse habitat, it is necessary to remove much of the juniper through chipping. This requires temporary roads. The DEIS must contain the option of temporary roads in order for these treatments to take place.

Comment Number: NVCASG-14-0171-36
Comment Excerpt Text:
Comprehensive Travel and Transportation Management --- Table 2-5, Action CTTM 1

Permitted uses need to continue to have the need to travel off road when necessary to perform the tasks necessary to comply with their responsibilities of their permits. Coordination with permittees, incorporated into Annual Operating Plans or similar agreements, could describe conditions placed on this travel during key times of Sage Grouse activities. Actions requiring off road travel have great benefits to Sage Grouse including juniper treatments, maintaining and enhancing water development, meeting grazing prescriptions among them.

Comment Number: NVCASG-14-0192-11
Comment Excerpt Text:
4.11 Travel and Transportation Management. pp. 748-751. (pp. 156-159)

Alternative A would be preferred; the Department would be impacted by access to our mountain top communication sites. Travel via snow cat requires departing from where the road should be to avoid various snow drifts or other hazards. This should have no impact or very limited impact to GRSG habitat. Additionally, if the BLM stands firm with 0 acres open it could impact our employees’ safety and the public safety if communications are lost for NDOT, Law Enforcement and EMS personnel.

Comment Number: NVCASG-14-0201-23
Comment Excerpt Text:
Table 2.5. Description of Alternative Actions, Alternative B, CTTM 4:

This action element proposes that all roads in PPMAs be evaluated for consideration of permanent or seasonal closure. As stated above, our members are opposed to permanent road closures. The approach taken in this action element is contrary to the multiple-use mandate of FLPMA; this approach is a single-species management approach. A multiple-use approach would consider relocating a portion of a road if it is located near a lek or in some seasonal habitat. The evaluation should be about how that portion of the road can be relocated to avoid a potential impact, not on the need to close the road. Access is critical to our members and others that use public lands. Road closures prevent access, road relocations maintain access.

Comment Number: NVCASG-14-0201-24
Comment Excerpt Text:
Table 2.5. Description of Alternative Actions, Alternative B, CTTM 5:

This action element proposes that all roads in PPMAs be evaluated for consideration of permanent or seasonal closure. As stated above, our members are opposed to permanent road closures. The approach taken in this action element is contrary to the multiple-use mandate of FLPMA; this approach is a single-species management approach. A multiple-use approach would consider relocating a portion of a road if it is located near a lek or in some seasonal habitat. The evaluation should be about how that portion of the road can be relocated to avoid a potential impact, not on the need to close the road. Access is critical to our members and others that use public lands. Road closures prevent access, road relocations maintain access.
shows that the agencies value their need for access far above what they value the public need for access. We make our living from facilitating the public use of public lands and the discrimination and denigration of our work through these types of double standards is unacceptable. The agencies are allowed to use the roads for their work, but we are not allowed to use the roads for our work.

Comment Number: NVCASG-14-0201-25
Comment Excerpt Text:
Table 2.5. Description of Alternative Actions, Alternative D, CTTM 6:

This action element indicates that in PPMAs and PGMAs there would be no new roads except those needed by the agencies and those needed to accommodate valid and existing rights. The BLM and Forest Service issue our members SRPs and RSUAs. Would these constitute a valid and existing right? Again, the analysis in the document is not clear as to how these action elements will be applied.

Comment Number: NVCASG-14-0201-26
Comment Excerpt Text:
Table 2.5. Description of Alternative Actions, Alternative B, CTTM 8:

This action element proposes no upgrading of existing access that would result in the change in category of a road or trail. The use of water bars, sediment basins, and other environmental protection measures would be excluded under this element. All trails and roads should be subject to the type of maintenance that prevents erosion and environmental damage. This should not be prevented because adding water bars to a "two track" road may upgrade it to a "road." This demonstrates that the agencies are so twisted around the regulations that they lose track of the importance of preventing erosion, which is likely to create more impact to sage-grouse habitat than upgrading a road's status. This further demonstrates that the approach used in developing the alternatives was focused on single-use, not multiple-use.

These comments also apply to Action D, C’ITM8, and Action F, CTTM 8.

Comment Number: NVCASG-14-0201-28
Comment Excerpt Text:
if an existing road that passes through one of the proposed ACECs is recommended for closure, this would effectively close access to the area beyond the ACEC. NOGA recommends that any road closure proposal involve local input with maps that clearly show which roads currently exist and which roads are recommended for closure. Such a process has to be transparent and look at options for maintaining access to areas beyond the ACECs. Access to remote areas is critical to NOGA members. If the review of the travel management plans is not part of the proposed actions (i.e., part of this analysis and not a future action), then any mention of road closures relative to ACECs should be eliminated from the Final LUPA/EIS.

Comment Number: NVCASG-14-0201-5
Comment Excerpt Text:
NOGA objected to the "no upgrading of existing routes that would change route category", but this is in the Draft LUPA/DEIS. Road maintenance is necessary to prevent hazards and erosion. Such maintenance should not be eliminated because a road may get upgraded.

Comment Number: NVCASG-14-0202-2
Comment Excerpt Text:
2. Reduced road closures.

NREA utility members strongly oppose the permanent or seasonal closure of any road currently used to access its infrastructure. All action alternatives include the potential to permanently or seasonally close roads throughout the planning area. Seasonal or permanent road closures may limit NREA utility member's ability to quickly and efficiently access their distribution and transmission infrastructure as an essential service for maintenance and emergency repairs. As an essential service, the utility should be granted emergency access all roads open or closed at any time for the continued benefit of the general public, in order to inspect, repair, modify, replace or protect equipment and or structures.
At a minimum, NREA utility members request that a clause be placed into all alternatives that would allow closed roads to be accessed in an emergency situation, such as a transmission or distribution line failure, or a wildfire threatening a power line.

**Comment Number: NVCASG-14-0202-9**

*Comment Excerpt Text:*

10. Alternative B (Chapter 2, page 216) states "... in PPMAs, travel management should evaluate the need for permanent or seasonal road or area closures." Seasonal or permanent road closures may limit NREA's ability to quickly and efficiently access their distribution and transmission infrastructure as an essential service for maintenance and emergency repairs. As an essential service, the utility should be granted emergency access to all roads open or closed at any time for the continued benefit of the general public, in order to inspect, repair, modify, replace or protect equipment and/or structures.

**Comment Number: NVCASG-14-0259-3**

*Comment Excerpt Text:*

The Draft LUPA/EIS does not make it clear if the travel and transportation restrictions proposed will be more restrictive than existing BLM and USFS plans. SNWA requests a direct comparison.

**Comment Number: NVCASG-14-0268-3**

*Comment Excerpt Text:*

The Summit Lake Paiute Tribe completed a Long Range Transportation Plan in 2011 which currently has a proposal to reroute two sections of road necessary for public safety which could be within priority sage grouse habitats. These road projects or realignments were planned before this DEIS was drafted. The DEIS should recognize tribal transportation plans and projects approved prior to the DEIS.

**Comment Number: NVCASG-14-0285-86**

*Comment Excerpt Text:*

We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

For Priority Habitats:

- Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).
- Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH.
Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment). 69

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12% cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in
conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment).

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).
**Comment Number: NVCASG-14-0345-2**

Comment Excerpt Text:
Snow cats or snowmobiles have very little or no impact to habitat with adequate snow depths. By having areas limited, it could

impact access to mountain top communication sites or other remote sites. Travel via snow cat requires departing from where the road should be to avoid various snow drifts or other hazards. These hazards may include known avalanche chutes, large snow drifts, snow cornices or snow depths that put the equipment into branches of trees that would normally be clear on existing accesses or roadways. Additionally, if travel management does not consider this open category, it could impact operator and public safety if communications are lost for First Responders, Law Enforcement and EMS personnel. Example — "Motorized travel would be limited to existing routes in PPMAs and PGMAs where GRSG or GRSG habitat would be affected."

**19.2 BEST AVAILABLE INFORMATION BASELINE DATA**

**Comment Number: NVCASG-14-0082-1**

Comment Excerpt Text:
Determining the recreational losses is especially hard because the Federal Government has finalized the Forest Service Travel Management Plan which closed, on paper, hundreds of miles of roads, but no acceptable map has been provided so that the losses to travel on the National Forest can be evaluated.

**Comment Number: NVCASG-14-0125-12**

Comment Excerpt Text:
Travel management is discussed at length in the DEIS, but there was no indication of which field offices currently have a Travel Management Plan.

**Comment Number: NVCASG-14-0346-10**

Comment Excerpt Text:
Lyon and Anderson (2003) suggested that light traffic disturbance (1-12 vehicles/day) during the breeding season might reduce nest-initiation rates and increase distances moved from leks during nest-site selection.

Also see acoustic impacts (Slickley and Patricelli 2012)

**19.3 IMPACT ANALYSIS**

**Comment Number: NVCASG-14-0083-65**

Comment Excerpt Text:
Ch: 4, Sec: 4.10.5, Pg: 154
Text Referencing: Recreation Alternative B - Impacts from Comprehensive Travel and Transportation Management. Under Alternative B, the OHV area designation would change 8,878,900 acres from open to limited in PPMAs. The restriction on cross-country travel may impact some motorized recreation, such as OHV exploration which depends on unrestricted travel. Opportunities for non-motorized recreation, such as hiking, horseback riding, and hunting, in a more natural or primitive setting may be expanded and enhanced.

Comment: Elko County would request the scientific data that was used to develop this statement and assessment. In our evaluation 9 million acres of limited to roads only access would impact recreational activities. Game retrieval, open space exploration, mineral exploration and many other cross country OHV uses would be affected as well. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012) Elko County would ask that this proposed management action be re-evaluated and not included in the FEIS / LUPA.

Ch: 4, Sec: 4.10.6, Pg: 155
Text Referencing: Recreation Alternative C - Impacts from Comprehensive Travel and Transportation Management. Under Alternative C, the OHV area designation would change 12 million acres from open to limited in PPMAs. The restriction on cross-country travel may impact some motorized recreation, such as OHV exploration which depends on unrestricted travel. Opportunities for non-motorized recreation, such as hiking, horseback riding, and hunting, in a
more natural or primitive setting may be expanded and enhanced.

Comment: Elko County would request the scientific data that was used to develop this statement and assessment. In our assessment 12 million acres of limited to roads only access would impact recreational activities. Game retrieval and open space exploration, mineral exploration and many other cross country OHV uses would be affected as well. (Elko County Public Land Use & Natural Resource Management Plan, December 2010) (Elko County, Nevada Greater Sage Grouse Management and Conservation Strategy Plan, September 19, 2012) Elko County would ask that this proposed management action be re-evaluated and not included in the FEIS / LUPA.

Comment Number: NVCASG-14-0144-16
Comment Excerpt Text: Under the no-action alternative, there are lands open to motorized vehicle travel. It is our understanding from BLM that in the future little or no lands will be open for cross country vehicle travel. If we are treating travel management conditions in the same manner as climate change, should BLM be forecasting less vehicle and travel related impacts because lands will most likely be designated limited or closed? Please explain. Should Table 4.8 be adjusted to include this forecasted future condition?

19.4 MITIGATION MEASURES

Comment Number: NVCASG-14-0032-3
Comment Excerpt Text: Adopt and promote an invasive species related prevention/education program based on the tenets at - http://playcleango.org/

20. TRIBAL INTEREST

20.1 CONSULTATION REQUIREMENTS

Comment Number: NVCASG-14-0268-2
Comment Excerpt Text: In an effort to be engaged in the NEPA process, the Summit Lake Paiute Tribe became a Cooperating Agency for this DEIS. However this process was rigidly controlled and did not provide the opportunities for input that the Tribe expected. As a Cooperating Agency, the Tribe outlined several concerns in Chapters 2 and 3 of the Administrative Draft Environmental Impact Statement in documents dated June 25, 2013. Previous to that, the Tribe submitted comments on Alternative D as a Cooperating Agency on May 8, 2013. The Tribe is pleased to see that the comments from May 8, 2013 were acknowledged in Table 3.66 (page 539) of the DEIS. However, these concerns were not specifically addressed throughout the rest of the document. As they are still of great concern to the Tribe

Comment Number: NVCASG-14-0401-3
Comment Excerpt Text: The Federal Tribal Consultation Right is an ongoing issue; the Tribe requests a Nation to Nation and Government to Government consultation with the NV-BLM to have meaningful Consultation on matters related to Sage Grouse.

20.2 IMPACT ANALYSIS

Comment Number: NVCASG-14-0015-19
Comment Excerpt Text: Tribes in Nevada have a substantial interest in economic development, jobs, and taxes that support local services. The Draft LUPA/EIS fails to identify, consider, and evaluate how these interests might be impacted, particularly by alternatives that include large recommended mineral withdrawals that could directly and adversely impact Tribal interests.

The impact analysis for tribal interests also contains multiple references to impacts being unknown because a particular alternative is silent on specific goals and objectives for a particular management category. The repeated conclusion that impacts to tribal interests are unknown due to a lack of goals and objectives fails to constitute a hard look at such impacts, and is inconsistent with the remainder of the Draft LUPA/EIS, which was able to identify impacts on other resources despite the lack of goals and objectives for some alternatives. This is unacceptable
where BLM has a long history of consultation with Tribes and Nevada and has specifically identified and discussed in dozens of site-specific EISs the information that is referenced as “unknown.”

**Comment Number: NVCASG-14-0091-83**

Comment Excerpt Text:
Page 816, 4.17.8

Stating that "permitting mineral developments could be leading to decreases in GRSG populations" is a biased statement when other known threats (i.e. livestock grazing, climate change, travel/roads) also impact GRSG. These types of general statements, and a lack of scientific basis, appear on several alternatives within this section.

**Comment Number: NVCASG-14-0199-26**

Comment Excerpt Text:
Tribes in Nevada have a substantial interest in economic development, jobs, and taxes that support local services. The DEIS fails to identify, consider, and evaluate how these interests might be impacted, particularly by alternatives that include large recommended mineral withdrawals that could directly and adversely impact Tribal interests.

The impact analysis for tribal interests also contains multiple references to impacts being unknown because a particular alternative is silent on specific goals and objectives for a particular management category. The repeated conclusion that impacts to tribal interests are unknown due to a lack of goals and objectives fails to constitute a hard look at such impacts, and is inconsistent with the remainder of the DEIS, which was able to identify impacts on other resources despite the lack of goals and objectives for some alternatives. This is unacceptable where BLM has a long history of consultation with Tribes and Nevada and has specifically identified and discussed in dozens of site-specific EISs the information that is referenced as "unknown."

**Comment Number: NVCASG-14-0238-29**

Comment Excerpt Text:
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.

**Comment Number: NVCASG-14-0268-1**

Comment Excerpt Text:
The Reservation (Summit Lake Indian Reservation) is surrounded by federally-managed lands. When these lands become subject to the conservation actions suggested in an EIS, the Tribe stands to suffer as a consequence. Tribal members live and work on the Reservation, and the extreme restrictions placed on surrounding federal lands negatively affect their ability to do so by limiting transportation options, reducing opportunities for subsistence hunting and gathering of traditional medicines, restricting access to important traditional and cultural areas, and eliminating possibilities for future expansion of the Reservation boundaries for conservation priorities and economic development.

**Comment Number: NVCASG-14-0268-4**

Comment Excerpt Text:
Sage grouse are a culturally important species to Great Basin tribes. The DEIS should ensure that tribal members are still allowed to engage in traditional practices involving sage grouse, such as visiting leks to observe strutting and mating behavior.
21. **Vegetation Sagebrush**

21.1 **Range of Alternatives**

**Comment Number: NVCASG-14-0050-15**

Comment Excerpt Text:
At higher and cooler elevations, changes in fire frequency and intensity have come at the expense of sagebrush ecosystems in a different manner. Under pre-European settlement conditions, wildfires and indigenous planned fires kept pinyon pine and western junipers (“PJ”) confined to areas where fires would not typically reach – mainly rocky terrain where the fuels needed to carry the fire were patchy and disjunct. Once modern settlers arrived in the mid-1880s this pattern changed. Heavy livestock grazing initially greatly reduced the fine fuels needed to carry fires, and later active human intervention suppressed fires to prevent their spread. As a result, PJ species were able to establish seedlings in grass and shrubland areas where formerly fires would have eliminated them. This then was the beginning of the woodland expansion into sage grouse habitat that continues today.123 124 Prior to 1860 two-thirds of the landscape was treeless and occupied by sagebrush-steppe communities. Today, less than one-third of the landscape remains treeless and more than 90 percent of the trees have established since the 1860s. These data support the need for active management in tree removal. In the absence of disturbance, woodlands will continue to expand, mature, and close.125 [Miller, Richard F.; Tausch, Robin J.; McArthur, E. Durant; Johnson, Dustin D.; Sanderson, Stewart C. 2008. Age structure and expansion of piñon-juniper woodlands: a regional perspective in the Intermountain West. Res. Pap.RMRS-RP-69. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 15 p.]


Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.

122 Ibid.

Management Prescriptions:

i. Management inside of SGCAs in sage grouse habitat

Restoring sage grouse habitat that is degraded or fragmented might be useful tool for the benefitting the species. However, these programs are likely to be both difficult and expensive, and may take centuries to achieve a complete restoration of a functioning system of sagebrush habitats within a landscape mosaic. The obvious and best way to provide for the species at least in the short to intermediate term is to protect the remaining existing habitat, which is the intent of the Center’s proposed conservation reserve system outlined in Section 2.

- Where it will achieve sage grouse habitat objectives, passive restoration approaches should be favored over active methods.
- Any vegetation treatment plan must include pretreatment data on wildlife and habitat condition, establish non-grazing exclosures, and include long-term monitoring of treated areas.
- Ensure that vegetation treatments create landscape patterns which most benefit sage-grouse. Only allow treatments that are demonstrated to benefit sage-grouse and retain sagebrush height and cover consistent with sage-grouse habitat objectives (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve sage-grouse habitat).
- Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.
- Restrict activities in SGCAs that facilitate the spread of invasive species, including recreational and commercial use by off-road vehicles.

Prioritize restoration in seasonal habitats that are thought to be limiting sage-grouse distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

- Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.
- Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage-grouse habitat and conserve habitat quality for the species.
- Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.
- In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed “fire condition class”, where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types, but are places where trees have been an important stand component for several hundred years.
• In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

• Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.

ii. Management outside SGCAs in sage grouse habitat

• Where it will achieve sage grouse habitat objectives, passive restoration approaches should be favored over active methods.

• Identify and prioritize sage-grouse habitat for restoration projects based on environmental variables that improve chances for project success.\textsuperscript{129}

• Restrict activities in SGCAs that facilitate the spread of invasive species. Prioritize restoration in seasonal habitats that are thought to be limiting sage-grouse distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).

• Do not use prescribed fire as a tool in low elevation areas where the potential for cheatgrass invasion is above low.

• Retain sagebrush canopy cover at or above what is expected for that ecological site, consistent with sage-grouse habitat objectives unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of priority sage-grouse habitat and conserve habitat quality for the species.

• Aggressively monitor and control invasive vegetation in sagebrush steppe ecosystems. Rapidly restore burned or disturbed habitat to minimize or prevent the incursion of invasive plants.

• In areas of PJ, avoid treating the areas of persistent woodlands. Persistent woodlands are an ecological condition, irrespective current observed “fire condition class”, where site conditions and disturbance regimes are inherently favorable for PJ, and where trees are a major component of the vegetation unless recently disturbed. These woodlands do not represent twentieth century conversion of formerly non-wooded vegetation types, but are places where trees have been an important stand component for several hundred years.\textsuperscript{130}

• In areas where sagebrush is prevalent or where cheatgrass is a concern, utilize mechanical methods rather than prescribed fire.

• Apply appropriate seasonal restrictions for implementing management treatments consistent with the types of seasonal habitats present.


Reducing the extent and influence of roads and trails can be incorporated into near-term and long-term plans for consolidating.

131 DEIS, Chapter 3.7.


Cooper Ornithological Union, p. 203–252.

Comment Number: NVCASG-14-0083-30

Comment Excerpt Text:
Ch: 2, Sec: 2.8.2, Pg. No.: 131

Text Referencing: Table 2.5; Action D-VEG 19

Comment: Elko County asks what is BLM's justification for this management action? Provide a citation if this action is to remain in the alternative.

Comment Number: NVCASG-14-0083-31

Comment Excerpt Text:
Ch: 2, Sec: 2.8.2, Pg. No.: 131

Text Referencing: Table 2.5; Action D-VEG 20

Comment: Add to this action "unless grazing is part of the vegetation treatment design" to match the language in Action DVEG 20.

Comment Number: NVCASG-14-0084-3

Comment Excerpt Text:
Chapter 2, Section 2.8.2. Table 2.5; Action D-VEG 19

The ECACD is does not believe there is justification for this management action. If there is one, what is it? This Action needs to include a citation that can be referenced by others if the Action is to remain in the alternative. Otherwise, delete it.

Comment Number: NVCASG-14-0086-6

Comment Excerpt Text:
Action-D-VEG-23 proposes to manage lotic riparian habitats in conjunction with adjacent terraces and/or valley bottoms as natural fuel breaks to reduce the size and frequency of wildfires. If an area is not meeting (or not making progress toward) sagegrouse
objectives, however, an average stubble height requirement of 4-6 inches and rest/deferment during growth periods is proposed (Action-D-LG-2 and Table 2.7). These are contradictory in that the required rest will allow a buildup of fuel loads. Further contradiction exists in requirements for tall forb habitats and proposed seeding of sagebrush throughout the region.

Comment Number: NVCASG-14-0086-7
Comment Excerpt Text:
The stubble height standard provided in Table 2.6 is also inappropriate. It is necessary to take climatic conditions, adjacent vegetation composition, season of use and other variables into account when interpreting utilization and residual studies because the relationship between utilization levels and plant condition is not always clear (Sharp, Sanders and Rimbey 1994).

Comment Number: NVCASG-14-0091-2
Comment Excerpt Text:
While many of the objectives speak to managing for ecological site potential, the State and Transition Model (STM) for any given Ecological Site Description (ESD) defines a range of vegetation characteristics in any given state. Also, “site potential” is not defined in the context of ESD and/or STM for any of the objectives. Is the site potential definition in the DEIS synonymous with “reference state” of the ecological site? If so, what if the current state of any give site has crossed a threshold into a degraded stable state in which there is no current restoration pathway known?

Comment Number: NVCASG-14-0091-32
Comment Excerpt Text:
Action B-VEG 5:

It is important to use native seeds where appropriate and conducive to success. However, it is essential that use of non-native species can be used when they support habitat objective or specific needs of certain areas (i.e. highly disturbed/fire-damaged habitats) that have a low probability of rehabilitation under sole use of native species.

Comment Number: NVCASG-14-0091-4
Comment Excerpt Text:
While the DEIS acknowledges pinyon-juniper (PJ) encroachment and speaks to vegetation management of these issues, there is limited and general focus on the need to also address sagebrush and other shrub encroachment (such as rabbitbrush into meadows) and senescence (such as single age and decadent stands of sagebrush). If ESDs are followed, the areas, density, and cover of brush would be able to be targeted to approach ecological potential. Many of the vegetation/habitat objectives focus on values of sagebrush cover without consideration of site potential and conditions (state). Further, there is no effort in the DEIS to address utilization of biomass from PJ as a means to incentive treatments and return dollars to the economy. Please include.

Comment Number: NVCASG-14-0091-64
Comment Excerpt Text:
It is interesting to note that James A. Young and Charles Clements, USDA ARS Range Scientists, are not cited in this section as relates to cheatgrass, as they are widely recognized by many as possibly the most knowledgeable and experienced authorities on this issue as relates to cheatgrass and other invasive species in Nevada and the Great Basin, and have recently published a book entitled Cheatgrass. We strongly recommend citing their work as part of this DEIS effort.

Comment Number: NVCASG-14-0125-4
Comment Excerpt Text:
Action-D-VEG-23 proposes to manage lotic riparian habitats in conjunction with adjacent terraces and/or valley bottoms as natural fuel breaks to reduce the size and frequency of wildfires. However, Action D-LG 2 demands that any area not meeting (or not making progress toward) sage grouse objectives will face a rest and deferment period and/or limited grazing. These are contradictory in that the required rest will allow a buildup of fuel loads. Further contradiction exists in the requirements for tall forb habitats and proposed seeding of sagebrush throughout the region.
Comment Number: NVCASG-14-0125-8
Comment Excerpt Text:
Action D-VEG-CC 6 should be removed or needs to be greatly expanded. Nothing in this DEIS explains how BLM/USFS proposes to "build resiliency into restoration and enhancement seed mixes to anticipate climate change effects." There is nothing measurable, manageable or attainable about that proposed action.

Comment Number: NVCASG-14-0132-16
Comment Excerpt Text:
Action D-Veg ISCE-3. It is unclear from the DEIS whether this Action is intended to occur only within restoration areas, or throughout the rangeland. This should be clarified. Further, at least as pertains to perennial grass rangelands, this universal directive to “seed sagebrush” may not be appropriate, and the agencies may want to use such perennial grasslands as part of the fuel-break/greenstrip program foreseen by the DEIS. This proviso should be added to this Action item.

Comment Number: NVCASG-14-0132-17
Comment Excerpt Text:
Action D-Veg ISCE-2. It is unclear what is meant by the animals being “intensely managed”.

Comment Number: NVCASG-14-0132-25
Comment Excerpt Text:
Action D-VEG 32. The agencies should NOT permit encroachment of sagebrush into non-native seedings. Non-native seedings should be treated the same as lotic habitats and their associated benches and valley bottoms, as described by Action D-VEG 23. These seedings should be made part of the fuel-break/greenstrip program foreseen by the DEIS. This is particularly the case if they are “adjacent to GRSG habitat” as stated at D-Veg 32.

Comment Number: NVCASG-14-0151-18
Comment Excerpt Text:
Alternative: D, Section: Action D-VEG-ISCE 4, Page Number: 173

Review Comment: The County fully supports treatment of PJ in Sage-grouse habitat, as conifer encroachment is the County’s #1 threat to Sage-grouse. However, the statement “treatment design should focus on addressing the most limiting habitat component” should be removed. In some cases, treatment of Phase I PJ around leks may provide the biggest cost-benefit even if nesting habitat isn’t limiting because it maintains a favorable site condition and is more preventative in nature as a treatment. In some cases, treatment in Phase II or III PJ may be most appropriate to provide connectivity. Treatment priority should be developed in close coordination with local working groups to ensure the biggest “bang for the buck” based on site specific information.

Comment Number: NVCASG-14-0151-19
Comment Excerpt Text:
An action should be added to encourage the treatment of Phase I, II and III PJ in wilderness areas, including the use of chainsaws where ecological site potential, current condition, and state and transition modeling indicate a need for treatment. In Lincoln County, much of the most resilient sage-grouse habitat is found at upper-elevation where Wilderness has been designated. There is the potential that these high value habitats could be lost due to the expansion (i.e. lek abandonment – see Baruch-Mordo et al. 2013) and infill (fuels increase, predation and loss of perennial understory), even though such areas have been “protected” from other anthropogenic threats – which also make them durable for proactive sage-grouse treatments. As such, lop and scatter treatment should be allowed for implementation without the need for a minimum tool analysis.

Comment Number: NVCASG-14-0151-2
Comment Excerpt Text:
The County recommends that the BLM accelerate its process of treating PJ in priority habitat in the following ways:

- Allow treatment of Phase I and early Phase II expansion PJ stands within three miles of active leks, and within brood rearing habitat to occur immediately under a Categorical Exclusion;
• Amend Wilderness Area Management Plans in Priority and General Sage-grouse Habitat to allow for lop and scatter treatment of PJ (with chainsaws);

• Provide monetary and staff resources to the Ely District Office for planning and implementation of PJ treatments in Phase II and Phase III PJ in or adjacent to, priority Sage-grouse habitat and encourage development of Stewardship Contracting with potential biomass utilization companies who can help implement larger acres of treatment in a cost-effective manner.

These actions are consistent with a recent study in Oregon, which found that low levels of Conifer encroachment can significantly impact Sage-grouse (Baruch-Mordo et al. 2013). These actions will also help to alleviate the threat of catastrophic wildfire and loss of perennial herbaceous understory. This will best alleviate the threats of wildfire and invasive species within Lincoln County.

Comment Number: NVCASG-14-0171-30
Comment Excerpt Text:
Habitat Vegetation Management--- Table 2-5, Action VEG 15

There must be a provision for temporary roads, kept to a minimum, to allow for juniper treatments to improve habitat. This has already been blessed by the Service in the Sage Steppe Ecosystem Restoration Strategy. We suggest language like that in E VEG ISCE 9 as acceptable regarding temporary roads.

Comment Number: NVCASG-14-0188-14
Comment Excerpt Text:
Page 195, Alternative B, Action B-LG 2

Incorporation of sage-grouse habitat objectives within all BLM and Forest Service grazing allotments within PPMAs by itself will not make any on-the-ground change in habitat conditions. The means to achieve these habitat objections have to become part of the allotment grazing plan, which must include vegetation management and livestock grazing management modifications. Modifying grazing without modifying the vegetation, or modifying the vegetation without modifying the grazing, cannot achieve the habitat objectives.

Comment Number: NVCASG-14-0188-16
Comment Excerpt Text:
Page 198, Alternative B, Action B-LG 7

While this action element seems to be dead on, it is not clear if "manage for vegetation composition and structure consistent with ecological site potential and within the reference state" is to be achieved only by changes in livestock management, or through vegetation treatments; if the former, then this will result in a train wreck. Ecological site potential is a target or goal; it is not sustainable without periodic inputs of energy (i.e., disturbance) to modify the vegetation. The reference state is not a "steady state" condition; it is a condition that occurs for some period of time on the landscape and is subject to modification due to plant-plant interactions (i.e., competition) and plant-animal interactions (e.g., herbivory), among other change vectors. Once this condition is achieved, it cannot be maintained in perpetuity by grazing management. Thus, while the objective of this action element may be laudable, the achievement of this objective is not likely to occur, and certainly is not going to last if grazing management is the only management tool to be used.

Page 198, Alternative 0, Action D-LG 8

The comment above for Action B-LG 7 is applicable to this action element. The only actions in this element are livestock management related. This alone cannot achieve the objective of Action B-LG 7.

Page 198, Alternative E, Action E-LG 8

The comment above for Action B-LG 7 is applicable to this action element. The only actions in this element are livestock management related. This alone cannot achieve the objective of Action B-LG 7.
Substantive Comments on the Nevada and Northeastern California Greater Sage-Grouse Draft LUPA/EIS

Comment Number: NVCASG-14-0188-27
Comment Excerpt Text:
Table 2.5 - O-VEG3

Please include a process for modifying habitat objectives for restoration/rehabilitation projects based on new information, monitoring, alternative science, and revisions to Ecological Site Descriptions (ESD), soil surveys, etc. Many of these tools were created to use at large-scales. Use of these tools to regulate at a project-scale require the ability to modify habitat objectives based on refinements to ESD, soil surveys, site descriptions, current state, etc.

Comment Number: NVCASG-14-0195-17
Comment Excerpt Text:
Alternative Number: D, Section: Table 2.8, Page Number: 381

Comment: While there is strong pressure to revegetate with native species, to do so is extremely difficult if not impossible in cheatgrass affected areas due to cheatgrass adaptation to outcompete natives. A strategy to revegetate with early germinating introduced species (i.e., crested wheatgrass, forage kochia, streambank wheatgrass) that compete with cheatgrass is imperative. Once invasion by cheatgrass is curbed through this process, the range can be revegetated to native species using sound science with a much greater chance of success. Close coordination with the USDA ARS Great Basin Rangeland Research Unit at Reno is important due to their ongoing research in Great Basin revegetation. (Fransler, et. al. 2010, Hulet, A. et. al. 2010, and Young, et. al. 2009)

Comment Number: NVCASG-14-0199-46
Comment Excerpt Text:
Table 2.5 (Page 123) - D-VEG5:

Please provide a source or reference for the 35% utilization rate.

Comment Number: NVCASG-14-0199-47
Comment Excerpt Text:
Table 2.5 (Page 124) - D-VEG5:

Please consider a statement encouraging the DEIS to seek out opportunities to implement this type of research with private land partners, especially those adjacent to large tracts of BLM/FS administered lands and within PPMA/PGMA.

Comment Number: NVCASG-14-0199-48
Comment Excerpt Text:
Table 2.5 (Page 124) - B-VEG 5:

It is important to use native seeds where appropriate and conducive to success. However, it is essential that use of non-native species can be used when they support habitat objective or specific needs of certain areas (i.e. highly disturbed/fire-damaged habitats) that have a low probability of rehabilitation under sole use of native species.

Comment Number: NVCASG-14-0199-49
Comment Excerpt Text:
Table 2.5 (Page 141) - D-VEG-ISCS 2:

Please provide a source or reference for the 35% utilization rate.

Comment Number: NVCASG-14-0201-3
Comment Excerpt Text:
NOGA commented that the use of Ecological Sites Descriptions and State and Transition Models were going to be used to identify seasonal habitats, guide habitat management, and influence fire rehabilitation efforts. However, there is little emphasis on using Ecological Site Descriptions and State and Transition Models with respect to habitat management in the Draft LUPA/DEIS. In fact, there is very little discussion of habitat management with respect to the existing habitat that is in need of vegetation treatments. The emphasis in the Draft LUPA/DEIS is to preserve and protect the existing stands of
sagebrush, with no regard to the value of these stands to provide quality habitat for sage-grouse.

Comment Number: NVCASG-14-0205-45
Comment Excerpt Text:

16. 4.3.2

“The cheatgrass fire cycle causes GRSG habitat loss and degradation on an annual basis. Currently, due to the extent of the threat, there are no management actions that can effectively alter this trend, and fires are estimated to reduce GRSG habitat within the Great Basin by 58 percent in the next 30 years (Miller et al. 2011).”

Comment:

Delete the above sentences. This is the crux of the problem and it is unacceptable for the agencies to ignore it. The highlighted portions of the sentence are untrue, as explained below.

Insert: Fire is a primary threat to GRSG populations and habitat where increasing exotic annual grasses, primarily cheatgrass, are resulting in sagebrush loss and degradation (USFWS 2010a, p. 13,932). Under all actions proposed in the EIS, including the No Action Alternative, the BLM and US Forest Service will take immediate, aggressive actions to reverse the cheatgrass fire cycle with existing known tools listed below as well as develop new science and management tools to eradicate cheatgrass. In the alternative, the agencies will dispose of the land and allow private landowners who know the value of proper vegetative management and have the financial incentives to return the land to productive use.

The BLM and US Forest Service understand that restricting mining, grazing, oil and gas and other energy development, roads, etc. will not truly help the sage-grouse. Instead, providing incentives to these industries will create the economic engines to drive habitat restoration and reverse the cheatgrass fire cycle.

Incorporate the following information throughout the EIS:

Cheatgrass can be controlled mechanically, biologically, chemically or by applying fire under controlled conditions. The best results come from a combination of some or all of these techniques. The key to eradicating cheatgrass is diligence – once you begin the process you must be persistent and continue follow-up treatments for up to four or five years (or however long it might take because cheatgrass seeds may survive in soils this long).

Mechanical Treatments

Hand pulling – during spring and fall; repeat when new plants appear; effective in small areas only.

Disking/tilling (live plants) – spring and fall before the seed heads turn purple; repeat when new plants appear; use disk, rototiller, spike-tooth harrow, etc.

Disking/tilling (seeds) – once in late spring before seeding with desirable species in the fall; bury seeds at least three inches deep to prevent germination.

Mowing – not recommended as a long-term control technique as seed may be produced by mown plants.

Biological Treatments

Livestock grazing – graze, very heavily, twice early in spring (approximately three weeks apart) when the grass is green but prior to seed formation; repeat for at least two years.

Chemical Treatments

A few chemical formulations exist, such as Plateau or Roundup that may control or even eradicate cheatgrass. No one herbicide will control all weed species. Combinations of herbicides may be required for control. For more assistance with chemical cheatgrass control, contact your county weed office or your local University Extension office.

Controlled Burning Treatment – late spring and summer; controlled burning has associated risks which should be addressed in a prescribed burn plan. If not done correctly, prescribed burns may escape...
control and become wildfires, produce smoke that impairs visibility on highways or impacts individuals with respiratory problems, and may cause damage to desirable vegetation. Consultation with a prescribed fire/controlled burn specialist is recommended when developing a prescribed burn plan.

Comment Number: NVCAGS-14-0213-2
Comment Excerpt Text:
Chapter 2, Section 2.8.2, Table 2.5: Action C-VEG 12, pages 127-128

The Owyhee CD is opposed to this action. In general, water troughs are recognized as range improvements. Their removal would not be beneficial to sagebrush ecosystem and wildlife in general.

Comment Number: NVCAGS-14-0213-3
Comment Excerpt Text:
Chapter 2, Section 2.8.2, Table 2.5; Action C-Veg 13, page 128

The Owyhee CD strongly disagrees with this action. Due to past experiences with blatant failures, excluding the option of introduced species may inhibit successful restoration. For example, Forage Kochia and crested wheat are more competitive against cheat grass than native species, thus, reducing the chances of a cheat grass monoculture.

Comment Number: NVCAGS-14-0238-10
Comment Excerpt Text:
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.

Comment Number: NVCAGS-14-0278-10
Comment Excerpt Text:
EIS Section: Table 4-2

Chapter & Page: p 141

Comment: "Action D-VEG-ISCE 2: Targeted early season grazing would be allowed to suppress cheatgrass (Bromus tectorum) or other vegetation that are hindering achieving GRSG objectives in PPMAs and PGMAs. Sheep, cattle, or goats (where permitted) may be used as long as the animals are intensely managed and removed when the utilization of desirable species reaches 35%.

Targeted grazing to achieve a vegetation management objective is fine but why put a seasonal condition on when it can be used, and why a growing season constraint when language clearly demonstrates there is concern about the effect on perennial species. Limited research has shown the efficacy of fall grazing (Schmelzer 2009, Schmelzer et al. 2014) when perennial species are dormant. For grazing in any season, adequate control of cheatgrass will require the use temporary, nonrenewable (TNR) access to forage, especially in wet years. There is no mention of TNR as a management tool in this document. As a management tool, TNR access for forage should be approved in the highest level NEPA document possible.

Comment Number: NVCAGS-14-0278-11
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: p 141

Comment: "Action D-VEG-ISCE 3: In perennial grass, invasive annual grass, and conifer-invaded cover types, restore sagebrush steppe with sagebrush seedings where feasible"

What evidence exists' that "sagebrush seedings" can be successful in cover types where annual grasses or conifers are the ecological dominants. Only after these two invasive life-forms are controlled can sagebrush be seeded with any hope of success, and even then hope may be the operative word. This action, as written, has the potential to waste a lot of limited resources.

Comment Number: NVCAGS-14-0278-12
Comment Excerpt Text:
EIS Section: Table 4-2, Chapter & Page: p 143

Comment: "Remove or reduce biomass to meet fuel and GRSG habitat objectives (see 143 Table 2-6)."
This statement as written does not allow sagebrush cover to be reduced below 10% on any area inhabited/used by sage-grouse, and on some sites not below 20% sagebrush and less than 40% total shrub cover (Table 2-6). The purpose of a fuel break is to reduce the risk of catastrophic fire. You sacrifice shrub cover (heavier fuels) on a small part of the management unit to reduce the risk of one catastrophic fire taking out everything. At a shrub cover of 10%, let alone 20% or more, there are very abundant fuels.

Comment Number: NVCASG-14-0278-14
Comment Excerpt Text:
[Table 4-2, p 163] Item 6 and 7. Natives are nice but they seldom work in the 8-10 inch precipitation zones (e.g., Bollinger 2007), particularly the lower end near 8 inches. There needs to be acknowledgement that non-native species are appropriate if the goal is sufficient resiliency to preclude the widespread establishment of invasive annual grasses. The EIS should not have language that precludes this option.

Comment Number: NVCASG-14-0278-2
Comment Excerpt Text:
Table 2-6 in Chapter 2, page 323. The table states there is objective to have at least 10 percent sagebrush cover on all sites, and often as much as 40 percent total shrub cover. The continuous presence of sagebrush on all sites, where sagebrush potentially could grow has never existed and never can exist. The table fails to incorporate natural, large scale disturbance regimes from both Aroga moths (defoliators) and planned and unplanned burning from native Americans. The latter activity is well documented in McAdoo et al. 2013. Burning by native Americans would have resulted in small to large patches of perennial grassland intermingled with other patches of sagebrush-bunchgrasses in various stages of plant succession, with varying amounts of sagebrush cover. Throughout the document the authors need to include the natural variability that exists in time and space so their analysis are more accurate.

Comment Number: NVCASG-14-0278-21
Comment Excerpt Text:
EIS Section: Table 4-2, Chapter & Page: p 201
Comment: Action B-LG 12(and similar language used throughout the document on riparian areas and uplands about meeting reference state conditions - e.g., Page 124, Alt C; Page 198 Alts Band F: Page 200 Alt B and F): Where riparian areas and wet meadows meet PFC or meet standards using other similar methodology (Forest Service only), strive to attain reference state vegetation relative to the ecological site description

With respect to Ecological Site Descriptions, the reference state is composed of a suite of community phases that represent the historical range of variability due to successional dynamics following disturbances. The community phase used to define an ecological site is termed the reference community phase (Caudle et al 2013, Page 13) and typically is a mid to early late seral stage because it must contain the full complement of species that historically occupied the site. The statement above (and others throughout the EIS) appear to be using the term "reference state" when "reference community phase" is the concept being discussed.

Comment Number: NVCASG-14-0278-6
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: p 121
Comment: Alt D states: "Promote the maintenance of large intact sagebrush communities." There phrase intact sagebrush community is vague and has very different meanings to different people. It should be defined so all readers and implementers of this document can work on the same page. An intact sagebrush community does not mean sagebrush is present. Intact means the community can progress through successional stages from completely perennial herbaceous species immediately following a fire or other disturbance to a shrub-perennial herbaceous phase that has sufficient perennial herbaceous species in the understory to "restart or renew" the secondary succession process following a
typical disturbance (fire, Aroga moths, disease, etc.). Such sites have their ecological processes intact, with or without the presence of sagebrush at a specific point in time, and as the EIS notes in several locations, provide the best opportunity to exclude invasive annual grasses. A large dense stand of sagebrush that lacks an adequate understory of perennial herbaceous species is not an intact or functional community. Once the sagebrush is lost, and loss is inevitable at some point in time, the site will become occupied by an invasive or noxious weed. Communities/landscapes need to maintain "intact" ecological processes, which is more than the mere presence of sagebrush.

Comment Number: NVCASG-14-0278-7
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: p 123

Comment: Alt D states: "Restoration of all GRSG habitat objectives in areas affected by wildfire and the continuing cheat-grass fire cycle." The concern here is with areas truly affected by the cheatgrass fire cycle. These sites generally are areas less than 5,000 to 5,500 feet in elevation in the valley bottoms and piedmont/alluvial fans. These sites generally never were high quality nesting and early brood (let alone late brood) rearing habitat because of their aridity (7-10 inches precipitation) and highly variable spring precipitation. These two factors resulted in low and highly variable forb production, and forbs are a critical diet component during these periods. Sage-grouse became abundant on these sites as early homesteaders spread water and created meadows: many of which subsequently disappeared between 1950 and 1980. Areas that truly have become affected by the cheatgrass fire cycle have no potential to become nesting, early or late brood rearing habitat. At this time the technology and plant materials do not exist to overcome the competitive ability of cheatgrass and re-establish habitat suitable for sage-grouse.

Comment Number: NVCASG-14-0278-8
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: p 127

Comment: Alt B states: "In fire prone areas where sagebrush seed is required for GRSG habitat restoration, consider establishing seed harvest areas that are managed for seed production (Armstrong 2007) and are a priority for protection from outside disturbances." While this idea has merit there are some intricate details that must be considered. Most catastrophic fires have occurred in a dry year after a wet year. Seed production in sagebrush is moisture dependent and often close to zero in dense stands in dry years, which is when it may be needed most.

Comment Number: NVCASG-14-0278-9
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: p 135

Comment: The EIS states the following vegetation management action: "Restore herbaceous understory in brush dominated areas to meet habitat objectives (see Table 2-6)."

This action has tremendous merit but the language in many locations of the EIS would prevent this outcome from occurring in many locations. On the more arid sites that cover millions of acres competition for water is tremendous. For a resilient perennial herbaceous component to be reestablished there must be at least some, and in many instances complete reduction of the shrub component for the herbaceous component to become established or expand from its current baseline. Table 2-6, however, wants at least 10% shrub cover everyplace all of the time, and often much more than 10% cover, all of the time. There is language under every alternative the virtually eliminates the potential to reduce shrubs/sagebrush in sagebrush occupied areas. These are competing actions that will result in gridlock and make this action unobtainable. This needs to be rectified. Without an abundant perennial herbaceous component a site is doomed to eventual transition to one ecologically dominated by invasive annual grasses.
There are many locations throughout this document with similar wording or intent (e.g., Chapter 2, Page 143, Action D and its bullets). This comment is applicable to all of those statements.

Comment Number: NVCASG-14-0285-83
Comment Excerpt Text:
Minimizing the use of herbicides and pesticides inside sage grouse habitats, and using them as a last resort, is also a good approach for sage grouse Priority Habitats. We are concerned that aerial applications of herbicides and pesticides are reasonably foreseeable in the planning area. Insects are an important food source for sage grouse; this is particularly true during the early brood rearing phase. Insecticide application could not only sicken or kill grouse directly, but it could also deprive them of an important food source. Aerial herbicide and pesticide applications should be precluded within one mile of sage grouse habitats to avoid inadvertent poisoning of sage grouse. BLM notes that the northeastern California RMPs already have restrictions on herbicide application in certain sage grouse habitats. DEIS at 59. What are they, how are they working, and how should they be adopted/adapted for use throughout the planning area under the Plan Amendment? Although the use of Plateau in heavily cheatgrass-infested areas might be allowed in cases where sage grouse are not using the treated habitats, aerial spraying of herbicides and insecticides over or within one mile of sage grouse habitats should not be allowed. Hand spraying might be accomplished by deliberately driving grouse off by teams on foot prior to treatment, and by treating from backpack units rather than aerial or truck/ATV application.

Comment Number: NVCASG-14-0285-86
Comment Excerpt Text:
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F. For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership
patterns 68 within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12% cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).
Do not use fire in precipitation zones < 12”, except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment).

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12”, except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

Comment Number: NVCASG-14-0308-15
Comment Excerpt Text:
The preferred alternative would “In PPMAs and PGMAs, manage for vegetation composition and structure consistent with ecological site potential to achieve GRSG seasonal habitat objectives (see Table 2-6).” DEIS Objective D-LG 1. But nowhere does the
LUPA/DEIS establish that meeting the GRSG habitat objectives in Table 2-6 will indeed conserve sagegrouse or sage-grouse habitat in the planning area. Worse, despite the DEIS recognizing the need to manage for at least 18 cm of residual grass/forbs (Table 3.1. Characteristics of Sagebrush Rangeland Needed for Productive GRSG Habitat. DEIS Chapter 3 at 11) Table 2-6 is missing a minimum standard for vegetation. The habitat objectives must include vegetation height requirements for nesting and brood-rearing habitats. The minimum height should be 18 cm for uplands, and 15 cm for riparian stubble height measured across the flood plain.

**Comment Number: NVCASG-14-0308-35**

**Comment Excerpt Text:**
Fences facilitate pinyon-juniper encroachment into sage-grouse habitat by providing perch sites for songbirds within sage-brush; rows of juniper seedlings can often be seen along fences where birds perch (Evans, 1988 page 1232). Without removing fences removal of pinyon-juniper may also facilitate raven predation on sage-grouse by opening line of sight from fence posts. Ravens also benefit from juniper reduction. Howe et al. 201433 found that ravens strongly avoided juniper woodlands and showed some selection for nonnative vegetation near nest sites. Evidently then, Action D-VEG 30 should require the removal of all fences in these treatment areas if it is to both “improve” habitat and minimize predation opportunities.

Sage-grouse select nest sites and brood sites away from avian predators (Dinkins et al.)

201234); so, by opening up fences and facilitating raven perching, pinyon-juniper treatments could paradoxically result in less nesting habitat being available for sage-grouse. It is an important management consideration to avoid negatively influencing sage-grouse nesting habitat to maintain nest dispersion to reduce predation (Holloran and Anderson, 200535).

**Comment Number: NVCASG-14-0328-8**

**Comment Excerpt Text:**
To help meet the COT objective fully, Alternative D should include:

1. A commitment to make a goal of obtaining no net gain in P J encroachment into GRSG habitat, and/or annual acreage projections of P J removal.

2. The stated objective of removing all conifers within 1000 meters of a lek or other important seasonal habitat

3. An old-growth exception to the conservation measure should be included; if the lek is within 1000 meters of an old growth pinyon-juniper stand the old growth should be retained for its value to the ecosystem and other species. Please include a management decision that describes the factors that will be used to determine what constitutes old growth juniper.

**Comment Number: NVCASG-14-0345-3**

**Comment Excerpt Text:**
There is no alternative in the Draft LUPA/DEIS that combines vegetation management and livestock management with the common goal of improving or maintaining the integrity of ecological sites.

**Comment Number: NVCASG-14-0345-4**

**Comment Excerpt Text:**
Page 195, Alternative D, Action D-LG 2

There is an erroneous assumption in this action element that changes in grazing practices, time of use, etc. will improve conditions for sage-grouse. This is not likely the case where sagebrush is the dominant plant on the landscape and the goal is to achieve greater abundance of perennial grasses and forbs. Once sagebrush has established on a site and reached canopy cover values of between 12 and 20 percent, this plant is capable of out-competing perennial grasses and forbs for limited nutrients and water. Only with changes in the shrub canopy can greater abundance of perennial grasses and forbs be achieved. Abusive grazing enhances the competitive advantage of sagebrush, but the removal of livestock grazing
cannot reverse a biological and ecological condition that is not the result of livestock grazing.

**Comment Number: NVCASG-14-0345-5**

**Comment Excerpt Text:**

Page 198, Alternative B, Action B-LG 7

While this action element seems to be dead on, it is not clear if "manage for vegetation composition and structure consistent with ecological site potential and within the reference state" is to be achieved only by changes in livestock management, or through vegetation treatments. Ecological site potential is a target or goal; it is not sustainable without periodic inputs of energy (i.e., disturbance) to modify the vegetation. The reference state is not a "steady state" condition; it is a condition that occurs for some period of time on the landscape and is subject to modification due to plant-plant interactions (i.e., competition) and plant-animal interactions (e.g., herbivory), among other change vectors. Once this condition is achieved, it cannot be maintained in perpetuity by grazing management.

**Comment Number: NVCASG-14-0346-12**

**Comment Excerpt Text:**

Chapter: 2, Section: Table 2.5, Page Number: 165

Comment: Under Alternative D, Action D-VEG 28: In PPMAs and PGMAs, where riparian extend is limited by shrub encroachment, consider fuels treatments including prescribed burning or other means to increase edge... We are not aware of any literature suggesting these methods would be successful in accomplishing this, especially with respect to sage-grouse habitat enhancement. Prescribed burning and mowing treatments that would reduce shrub cover, especially within Wyoming big sagebrush habitats, have actually been found to be detrimental in many cases (see Beck et al. 2009. Beck et al. 2012 and Davies et al. 2012)

**Comment Number: NVCASG-14-0346-13**

**Comment Excerpt Text:**

Chapter: 2, Section: Table 2.5, Page Number: 173

Comment: Under Alternative D, Action D-VEG-ISCE 2. The action calls for "targeted early season grazing would be allowed to suppress cheatgrass ..." Treatment trials have indicated the targeted fall grazing may be a more appropriate approach (Perryman, pers. comm.). Consideration of temporary non-renewable (TNR) permits might assist in targeting these actions, but use of these has to be clearly tied to sage-grouse conservation goals and objectives (Table 2.6).

**Comment Number: NVCASG-14-0346-16**

**Comment Excerpt Text:**

Chapter: 3, Section: Figure 3-5, Page Number: 412

Comment: The first paragraph on page 412 discusses risk to cheatgrass invasion. The second sentence states "of note is the low risk for the Nevada portion of the Northeast California/Northwest Nevada, North Central, and Northeastern subpopulations ..." This statement seems somewhat misleading as Figure 3-5 shows that the majority of the Northeast California/Northwest Nevada subpopulation as being at high risk to cheatgrass establishment. In some cases this has already manifested itself. e.g., the Buffalo/Skedaddle PMU

### 21.2 BEST AVAILABLE INFORMATION BASELINE DATA

**Comment Number: NVCASG-14-0051-7**

**Comment Excerpt Text:**

All of the alternatives in (Section 4.3.2 pg. 607) of the DEIS states that “fire is the primary threat to GRSG populations and habitat … in the western half etc……. (per Baker2011)”, and later in that section states “fire is a primary threat to GRSG populations and habitat…etc. (USFWS 2010a)”. We agree with “the” or “a” primary threat, as stated above, correct? It is interesting to note that James A. Young and Charles Clements, USDA ARS Range Scientists, are not cited in this section as relates to cheatgrass, as
they are widely recognized by many as possibly the most knowledgeable and experienced authorities on this issue as relates to cheatgrass and other invasive species in Nevada and the Great Basin, and have recently published a book entitled Cheatgrass. We strongly recommend citing their work as part of this DEIS effort.

**Comment Number: NVCASG-14-0091-33**  
**Comment Excerpt Text:**  
Action D-VEG-ISCS 2

Please provide a source or reference for blanket 35% utilization rate.

**Comment Number: NVCASG-14-0095-3**  
**Comment Excerpt Text:**  
Text of the LUPA/EIS refers to NRCS Ecological Site concepts and then fails to actually use the technical basis provided by Cooperative Soil Survey, Ecological Site Description, and evaluation of plant communities in terms of Seral Status and State or Transition. Please correct your LUPA/DEIS by discarding landscape descriptions that are based on GAP and RE-GAP in favor of USDA NRCS ecological sites.

**Comment Number: NVCASG-14-0099-1**  
**Comment Excerpt Text:**  
We would like to see the final plan incorporate some of the excellent work and suggestions generated from the Western Association of Fish and Wildlife Agencies (WAFWA) in their report on Wildlife and Invasive Species in the West: Challenges that Hinder Current and Future Management and Protection of the Sagebrush –Steppe Ecosystem.

**Comment Number: NVCASG-14-0125-7**  
**Comment Excerpt Text:**  
Clary and Lenininger (2000) determined that there was little research to support the linkage between stubble height and riparian function. Therefore, stubble height "as an annual indicator of grazing use in riparian areas should only be used where existing science suggests that it is appropriate and should be used in combination with longer-term monitoring or vegetation and channel parameters" (Bryant, et al. 2006). They further state "although stubble height is easy to use, it is not a resource objective and therefore inappropriate as a prescriptive standard in grazing permits and land use plans." (emphasis added). The 6-inch stubble height proposed in this DEIS is arbitrary and not based on site-specific criteria and, as such, should not be implemented.

**Comment Number: NVCASG-14-0148-2**  
**Comment Excerpt Text:**  
The RAC recommended referencing work by James Clements of the Agriculture Research Service on cheat grass.

**Comment Number: NVCASG-14-0171-17**  
**Comment Excerpt Text:**  
The County is concerned that this strategy has been mixed up with the pinyon juniper issues in most of Nevada. The document needs a through searching for the places where pinyon-juniper is mentioned and the distinction between the Western Juniper treatments of North eastern California and Northwestern Nevada are clearly and distinctly separated from those of pinyon-juniper.

**Comment Number: NVCASG-14-0172-1**  
**Comment Excerpt Text:**  
MCFB’s members that graze federal permits understand that the Public Rangeland Improvement Act provides them with the opportunity to consult, cooperate and coordinate with the agencies as standards and guidelines that affect their grazing permits are developed. However we also realize that most of the public and many of your local staff do not know this. As a large portion of this EIS involves potential impacts to how livestock will be grazed in Sage Grouse country, we believe it is a good preventative action to clearly state that any and all of the proposed changes Juniper into the Sage Steppe Ecosystem. We point out, as an aside, that this is different than the pinyon-juniper discussion throughout the EIS which need to be clearly separated from Western Juniper issues.
Comment Number: NVCASG-14-0238-33  
Comment Excerpt Text:
4-13 (605)

Third bullet. (VDDT is first presented in Chapter 3 p 3-26 but provides no real explanation.)

I was unable to find detailed methods and output on the VDDT modeling. As this modeling effort is critical to the analysis and conclusions 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 conclusions were reached.

Comment Number: NVCASG-14-0259-9  
Comment Excerpt Text:
The goal of restoration toward site potential and desired plant communities, specifically Ecological Site Descriptions (ESD) as expressed in measures Action D-VEG 1 (Chapter 2, page 121), Action C-Veg 4 (Chapter 2, page 124), and Action F-VEG-ISM 1 (Chapter 2, page 137) is beneficial for GRSG. However, for any given area the US Department of Agriculture Natural Resources Conservation Service can list multiple potential ESDs, which are not spatially explicit and incorporate little to no site-specific ground truthing. ESDs need to be field verified to ensure an appropriate assessment of land condition and target plant community.

Comment Number: NVCASG-14-0262-1  
Comment Excerpt Text:
Alternative F provides the direction to manage sage-grouse habitat based on the "reference state." See Action F-LG 7 in Table 2.5. Managing for a reference state is essentially managing for pre-settlement conditions in the absence of any disturbances or ecological changes. A pristine "reference state" is not attainable in most sites that comprise priority sage-grouse habitat and may not even produce the sage-grouse habitat that is desired for improved sage-grouse conservation. The presence of invasive weeds, altered fire cycles, variable climate and vegetation change (i.e. Pinyon-Juniper encroachment) coupled with altered land use patterns makes a "reference state" nearly impossible to achieve and extremely expensive to attempt.

Comment Number: NVCASG-14-0278-13  
Comment Excerpt Text:
EIS Section: Table 4-2, Chapter & Page: p 149, 199, 209

Comment: At two locations on each page the EIS states: Action B-VEG-D 1: During drought periods, prioritize evaluating effects of the drought in PPMAs relative to their needs for food and cover. Since there is a lag in vegetation recovery following drought (Thurow and Taylor 1999; Cagney et al. 2010), ensure that post-drought management allows for vegetation recovery that meets GRSG needs in PPMAs.

Neither document states what the EIS says they do.

Thurow states: "Physiological stress may occur more quickly if the vegetation has low energy reserves as a result of having been subjected to intense grazing pressure prior to a dry period. The amount, vigor, and quality of vegetation is correlated with the condition of the range. Therefore, agricultural drought on sites in poor condition is likely to be manifesting more frequently and more severely than on sites in good condition."

The Cagney paper uses the term drought five times in the paper. Two of those are in section headings. Only once does it discuss drought management in the context of vegetation management or response. That statement says: "Drought, insects, heavy browsing or disease can serve to reduce the sagebrush canopy. An extended series of dry winters and wet springs can also disrupt a stable state and promote an increase in bunchgrasses".

Neither paper states there is a lag time in vegetation recovery following drought, nor do they present information that suggests a lag time in recovery. Thurow even has a qualifier that poorly and well managed rangelands respond differently to drought, which the EIS does not acknowledge. Cagney's paper
states that a combination of winter drought and spring precipitation can actually increase bunchgrasses, which only works to improve site resilience once a catastrophic disturbance occurs.

The other time that Cagney mentions drought with respect to vegetation management is to state:

Appendix A contains a reference to Smith’s recommendations regarding drought management.

Smith (2007) actually states: Deferring grazing solely for drought recovery is not warranted if the grazing program provides periodic deferment during the critical growing period.

**Comment Number: NVCAGS-14-0285-75**
**Comment Excerpt Text:**
For each alternative, BLM has undertaken a VDDT modeling analysis based on vegetation impacts to measure potential impacts; these impacts for each alternative are described with a comparison to Alternative A (current management). See, e.g., DEIS at 621, 632. How does each alternative compare with present conditions?

**Comment Number: NVCAGS-14-0308-37**
**Comment Excerpt Text:**
Action D-VEG-ISCE 8: In Phase II and III pinyon and/or juniper stands in PPMAs and PGMAs:

- Remove or reduce biomass to meet fuel and GRSG habitat objectives (see Table 2-6).
- Take appropriate action to establish desired understory species composition, including seeding and invasive species treatments.
- In areas with a sagebrush component, select a treatment method that maintains or improves sagebrush and shrub cover and composition.

Comment: Yet again, the plan provides little guidance to what this action actually means. The appropriate action to take “to establish desired understory species composition, including seeding and invasive species treatments” would appear to be long term removal of livestock. Table 2-6 does not provide either biomass or fuel objectives. Any felled vegetation should be left in place to facilitate habitat recovery.

**Comment Number: NVCAGS-14-0309-12**
**Comment Excerpt Text:**
DEIS Sec 3.22 describes climate “is both a driving force and limiting factor for biological, ecological and hydrological processes … Changes in temperature and precip. have resulted in vegetation and cover changes and fire effects. This describes drought in 7 of the past 10 years. It also describes cumulative increases in annual grass, early shrub (rabbit brush), and trees. The DEIS does not examine the historical record (including BLM’s own General Land Office records) to understand if trees are recolonizing sites from where they were removed during periods of large scale early mining deforestation, or promiscuous burning by sheepherders/grazers. See Wilson 1941, Zeier 1987, Lanner The Pinyon Pine 1981, Young and Svecjar 1999, Lanner and Frazier 2012. The DEIS mis-represents the scale and magnitude of the deforestation.

**Comment Number: NVCAGS-14-0309-30**
**Comment Excerpt Text:**
There is not a current baseline of the degree and severity of cheatgrass, medusahead, bulbous bluegrass and other flammable invasive weed infestations at present in areas of plant understories. The mid-2000s NV and Great Basin Ecoregional Assessments and Peterson 2006 cheatgrass mapping work in NNV, SW ID, E OR area has long been available to BLM. WWP has provided it to BLM on many occasions, and it is ignored. The recent cheatgrass mapping that is shown in the NV DEIS is not portrayed in Idaho mapping. This appears to be a range-wide layer, perhaps associated with the most recent Rapid Ecological Assessment in Nevada that Idaho BLM must map and employ. Nevada’s recent REA, while failing to address livestock grazing in a state where grazing has large-scale negative impacts, surpasses the minimal older REA that covers portions of Idaho.
Comment Number: NVCASG-14-0309-41
Comment Excerpt Text:
In both Nevada and Idaho, BLM states it is needed to “identify and incorporate appropriate conservation measures into LUPs to conserve, enhance and restore GRSG habitat by reducing, eliminating, or minimizing threats to habitat”. DEIS ES-4. This omits any mention of populations.

Understanding populations is essential. We are concerned that the agency will overwhelmingly focus on treatments of “habitat” - i.e. killing woody vegetation and treatments to increase grass at the expense of sage and microbiotic crusts, such as reducing the “decadent” sage that BLM’s use of NRCS Ecological site models is promoting. These models with flawed disturbance intervals are being used to define the sagebrush ecosystem characteristics and promote treatments.

Comment Number: NVCASG-14-0309-9
Comment Excerpt Text:
In the GRSG Scoping process, we raised concerns about agency use of Vegetation Management Zones (MZs) for tracking or analyzing sage-grouse habitats and populations, and many other concerns. The floristics-based Management Zones (MZs) lump separate populations together. The MZs segregate habitat based on general vegetation types. The MZ concept distracts from taking a hard look at habitat changes in relation to local population status, and thwarts tracking of population declines in functioning natural populations. For example, the Great Basin core subpopulations which spans the Stiver et al, WAFWA 2006 “Vegetation Zones” mentioned in Connelly et al. 2004. As agencies began using MZs (and FWS too in portions of the GRSG WBP Finding) we had foreseen the NRCS and agency range staff spinning off elaborate state and transition models justifying massive treatments based on deviations from an idealized “floristics” model. The NTT references the MZ lumping scheme and modeled Ecosites.

Comment Number: NVCASG-14-0346-17
Comment Excerpt Text:
Chapter: 3, Section: 3.2.3, Page Number: 416

Comment: The first sentence beginning the last paragraph on the page states that "current vegetation treatments are resulting in an improving trend." This statement should be cited if possible. Is this statement referring to vegetation trends towards increasing sagebrush cover or sage-grouse population trends? At this time, we are unaware of adequate research or monitoring to support this if the sentence is referring to sage-grouse population trends

Comment Number: NVCASG-14-0346-18
Comment Excerpt Text:
Chapter: 3, Section: 3.2.3, Page Number: 419

Comment: Within the paragraph describing subpopulations within Management Zone IV, there is a statement suggesting that "current vegetation treatments are resulting in an improving trend". This statement should be cited if possible, or examples provided. Again, is the statement referring to vegetative trends, or sage-grouse population trends? This is a somewhat misleading statement either way because no other Management Zone in the Great Basin, or possibly the range of the species has exhibited as much sagebrush loss as Management Zone IV, primarily due to wildfire.

Comment Number: NVCASG-14-0346-20
Comment Excerpt Text:
Chapter: 3, Section: 3.2.3, Page Number: 431

Comment: Fourth paragraph, first sentence states that "natural fire return intervals in Wyoming big sagebrush appear to range from 10 to 110 years or more". This seems too short for Wyoming big sagebrush communities and is more in line with mountain big sagebrush fire return intervals. Bukowski and Baker (2013) found that historic fire rotations in Wyoming big sagebrush communities were between 171-342 years.
21.3 Impact Analysis

Comment Number: NVCASG-14-0050-14
Comment Excerpt Text:
At lower elevations and in the more arid portions of the sage grouse range, the catastrophic spread of cheatgrass, aided and abetted by the impacts from over-grazing and changes in fire frequency and intensity has led to a lasting, if not permanent changes in ecosystem states. Repeat fires that eliminate or reduce shrubs, natives, and forbs; disturb soils and biological crusts; and release nutrients have allowed cheatgrass and other introduced annuals to replace the native shrub and herb layers. The resultant landscape is largely composed of introduced annuals, and is more susceptible to annual weather patterns and varies greatly from year to year, depending on moisture availability. Long term changes in climate that facilitate or enhance invasion and establishment by invasive annual grasses further exacerbate the fire regime and accelerate loss of sagebrush habitats.122 [Miller, R. F., S. T. Knick, D. A. Pyke, C. W. Meinke, S. E. Hanser, M. J. Wisdom, and A. L. Hild. 2011. Characteristics of sagebrush habitats and limitations to long-term conservation. Pp. 145–184 in S. T. Knick and J.W. Connelly (editors). Greater Sage-Grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.]

Comment Number: NVCASG-14-0083-47
Comment Excerpt Text:
This section does not present the opportunities for "minimize" or "mitigate" stated in the Nevada Plan. When avoidance is not feasible, then actions can be taken to minimize and then mitigate impacts from minerals exploration and development.

Comment Number: NVCASG-14-0091-70
Comment Excerpt Text:
Page 663, 4.4.8 Alternative E

Comment Number: NVCASG-14-0308-39
Comment Excerpt Text:
Livestock are well-known vectors for invasive, non-native, or noxious species colonization on public lands. There is clear evidence that livestock grazing promotes invasive weed infestations through a variety of mechanisms (Belsky and Gelbard, 2000). Livestock grazing has been found to be a factor in the proliferation of non-native plants by livestock transporting seeds on their coats, feet, and in their guts into uninfested sites (Belsky and Gelbard 2000; Jones, 2001) and livestock are much effective transporters of invasive weed seeds than native ungulates (Bartuszevige and Endress, 2008), livestock preferentially graze native plant taxa over non-native taxa (Fleischner, 1994; Belsky and Gelbard, 2000; Jones, 2001), livestock create patches of bare, disturbed soils that act as non-native-plant seedbeds (Belsky and Gelbard, 2000; Jones, 2001), livestock create patches of nitrogen-rich soils, which favor nitrogen-loving non-native species (Belsky and Gelbard, 2000), livestock reduce concentrations of soil mycorrhizae required by most western native taxa (Belsky and Gelbard, 2000), and livestock accelerate soil erosion where all other Alternatives do not reduce herd sizes.
that buries non-native seeds and facilitates their germination (Belsky and Gelbard, 2000). Livestock promote the spread and colonization of alien plants, which can increase fire frequencies.

Comment Number: NVCASG-14-0308-40
Comment Excerpt Text:
Livestock trampling impacts to biological soils crusts are of particular significance considering the spread of cheatgrass throughout the species’ habitat which is both decreasing habitat quality and increasing fire risks. Fire and grazing was positively associated with nonnative abundance in all vegetation types with adequate sample sizes to evaluate these factors (Merriam et al., 200743). Biotic crust species richness and cover were inversely related to cover of cheatgrass (Ponzetti, et al., 200744). Direct experimentation has shown that lichen-dominated biological soil crust can inhibit cheatgrass germination (Deines et al., 200745). Disturbance is a reliable indicator of alien dominance in vegetation composition, and livestock grazing is a significant disturbance to desert ecosystems (Brooks and Berry, 200646).

Comment Number: NVCASG-14-0308-43
Comment Excerpt Text:
Anderson and Inouye (2001)49 found that viable remnant populations of native grasses and forbs are able to take advantage of improved growing conditions when livestock are removed. They found further that despite depauperate and homogenous conditions of permanent plots in 1950, after 45 years of no livestock grazing, vegetation had been anything but static, clearly refuting claims of long-term stability under shrub dominance. Mean richness per plot of ALL growth forms increased steadily in the absence of domestic livestock grazing. Grasses and forbs increased significantly. This information should be integrated into the “No Grazing” or “Reduced Grazing” alternatives and, given these findings, the BLM should analyze the impacts of long-term authorized grazing and its impacts on sagebrush communities and obligates compared to the impacts of removing livestock and allowing these communities to recover naturally.

Comment Number: NVCASG-14-0308-44
Comment Excerpt Text:
The DEIS admits that over 10 million acres of the project area have a high potential for cheatgrass (DEIS Chapter 3 at 47). Although the Preferred Alternative includes, “Limit the expansion or dominance of invasive species and noxious weeds, including conifers, cheatgrass and medusa head” as part of Action D-VEG I (DEIS Chapter 2 at 121) it provides no guidance on how this will be achieved. The role of livestock grazing in causing infestations with cheatgrass and dangerous invasive species is ignored. The DEIS simply fails to take a hard look at the issue and fails to address these effects in a meaningful way.

Comment Number: NVCASG-14-0308-47
Comment Excerpt Text:
Removal of pinyon-juniper may also facilitate raven predation. Howe et al. (2014) found that ravens strongly avoided juniper and showed some selection for nonnative vegetation near nest sites. Sage-grouse select nest sites and brood sites away from avian predators (Dinkins et al. 2012); so, by opening up these fences and facilitating raven perching, the juniper treatments could paradoxically result in less nesting habitat being available for sage-grouse. It is an important management consideration to avoid negatively influencing nesting habitat to maintain nest dispersion to reduce predation (Holloran and Anderson, 2005).

Comment Number: NVCASG-14-0308-48
Comment Excerpt Text:
Unfragmented landscapes are much more resistant to invasive-species invasions than fragmented ones (Debinski and Holt, 200068; Knick and Rotenberry, 199769). Unfortunately, LUPA fails to make reestablishment of sagebrush cover and desirable understory plans the highest priority for restoration efforts. Instead, the agencies prioritize the removal of juniper in sage-grouse habitat anywhere in the project area, without requiring a benefit to sage-grouse. Juniper clearance is evidently a priority because it is a source of biomass and opens more forage to livestock.
Comment Number: NVCASG-14-0330-2
Comment Excerpt Text:
Table 2.8, page 358, Alternative A (No Action) describes the current management policies for GRSG habitat. It states: "Continued implementation of BLM vegetation and soil management policies and standards in sagebrush habitat would decrease invasive species, help re-establish native plants, reduce the risk of wildfire, and reduce juniper and pinyon pine, conifers, and annual grasses, leading to a long-term improvement in value and quantity of GRSG habitat." However, documentation was lacking within the Draft LUPA/EIS to support the conclusion that these policies will lead to long-term improvement of GRSG habitat. This information is needed to evaluate the Alternatives proposed.

Comment Number: NVCASG-14-0346-24
Comment Excerpt Text:
Chapter: 5, Section: 5.8, Page Number: 901-902
Comment: In explanations of the effects of Alternative A, B, C, D and F, a paragraph is inserted that states: "Increased forage levels due to reduced levels of grazing would result in increased fuel loads and increased frequency of wildfire on the landscape." Is there literature that supports this? Although this might seem like a reasonable assumption, there is a key element here that is not discussed, i.e., the increased resiliency within a landscape due to an increase in perennial bunchgrass cover and diversity. We offer the following from Reisner et al. 2013: "Grazing exacerbates Bromus tectorum dominance in one of North America's most endangered ecosystems by adversely impacting key mechanisms mediating resistance to invasion. If the goal is to conserve and restore resistance of these systems, managers should consider maintaining or restoring: (i) high bunchgrass cover and structure characterized by spatially dispersed bunchgrasses and small gaps between them; (ii) a diverse assemblage of bunchgrass species to maximize competitive interactions with B. tectorum in time and space; and (iii) biological soil crusts to limit B. tectorum establishment. Passive restoration by reducing cumulative cattle grazing may be one of the most effective means of achieving these three goals." So, the question becomes, is it better to graze herbaceous material to bare ground so that it does not burn? Or, the alternative, which is to manage grazing to induce a net increase in perennial bunchgrass cover and diversity and reduce gap space so that, when a fire does occur, the chances that the area gets converted to invasive annual grass is minimal.

21.4 Mitigation Measures

Comment Number: NVCASG-14-0091-77
Comment Excerpt Text:
Page 780, 4.14.2
Please provide a citation for the DEIS Assumptions, especially regarding the establishment of grass/forb and sagebrush vegetation on reclaimed lands. Otherwise, the information can be assumed to be inaccurate.

Comment Number: NVCASG-14-0188-4
Comment Excerpt Text:
Chapter 1 (Page xxiv) - E.S.8.4 Alternative D: The LUPA/DEIS states a list actions that may be used to mitigate natural disturbances. Preventative measures such as mowing sagebrush to stimulate new growth and inter-seeding bunchgrasses to improve the understory are underrepresented. A key principle that appears to be lacking is the need to increase resilience and health of sagebrush communities. An additional key principle that appears to be lacking is the need to break fuel source continuities in an effort and reduce the magnitude of wildfire.

Comment Number: NVCASG-14-0199-37
Comment Excerpt Text:
Page xxiv - E.S.8.4 Alternative D:
The DEIS states a list actions that may be used to mitigate natural disturbances. Preventative measures such as mowing sagebrush to stimulate new growth and inter-seeding bunchgrasses to improve the understory are underrepresented. A key principle that appears to be lacking is the need to increase resilience and health of sagebrush communities. An additional key principle that appears to be lacking is
the need to break fuel source continuities in an effort and reduce the magnitude of wildfire.

Comment Number: NVCASG-14-0258-1
Comment Excerpt Text:
there is no commitment from either the BLM or USFS that adequate monitoring data will be collected as it relates to these vegetative objectives (Table 2.6) or allowable use levels (Table 2.7) and subsequent allotment rangeland health evaluations will be completed in a timely manner for these allotments that are indicated to have both rangeland health categories of either 2, 3, and/or 5, and have designated PPH and/or PGH areas within the allotments.

Comment Number: NVCASG-14-0346-4
Comment Excerpt Text:
Section: 2.5.2
Page Number: 51
Comment: In paragraph two, it states that "disturbance monitoring will measure and track changes in the amount of sagebrush in the landscape and the anthropogenic footprint ..." It is important to provide some temporal perspective here. Will this type of monitoring commence in 2013, upon final EIS Record of Decision. RMP amendments? How long will monitoring last. etc.?

22. VEGETATION RIPARIAN

Comment Number: NVCASG-14-0086-4
Comment Excerpt Text:
The agencies' heavy reliance on the incomplete ESDs and the inadequate disclosure that the relevant variables were incomplete falls well short of NEPA's requirements. See Lands Council v. Powell, 395 F.3d 109, 1031–32 (9th Cir. 2004). The reliance on incomplete data coupled with contradictory objectives and actions renders the agencies' analysis of the environmental impacts of the alternatives, including the Preferred Alternative, calls into question the agencies' compliance with NEPA's "hard look" requirements.

22.1 RANGE OF ALTERNATIVES

Comment Number: NVCASG-14-0086-10
Comment Excerpt Text:
Action D-LG-10 is to “manage riparian areas and wet meadows for proper functioning condition...” This is also incorrectly referenced in Table 2.6 under brood rearing. Proper Functioning Condition (PFC) is NOT a desired condition (Bureau of Land Management 2003). It is a prerequisite to achieving a desired a condition and not an appropriate end goal. PFC is an assessment tool and should not be used except to determine if additional inventory/monitoring is needed on a riparian area.

Comment Number: NVCASG-14-0109-2
Comment Excerpt Text:
Ch. 2 p. 195 states that, if priority or general nesting habitat does not reach “habitat objectives,” grazing will be deferred or reduced. The “habitat objectives” include: o In riparian areas and wet meadows, stubble height requirements of 4 –6 inches. Many alpine meadow areas don’t reach 6 inches annually. A hard and fast number is again inconsistent with adaptive management and is most likely unattainable in many instances even with no livestock grazing. The use by wild horses year around is a substantial contributing factor.

Comment Number: NVCASG-14-0132-20
Comment Excerpt Text:
E, TMA-12.2. (See also B-LG 10, D-LG 10). This Action, as well as similar actions in Alternative D, call for riparian meadows to be in “proper functioning condition”. However, BLM has used the presence of non-native species, including dandelion, to rate such areas as less-than proper functioning condition. Dandelion, however, is a preferred forage species of sage-grouse. This is an internal conflict in the desired condition expressed by the DEIS. The corollary to the above is that “proper riparian functionality” of riparian areas often depends upon the domination of the site by deep-rooted sod forming grasses, which
preclude or severely limit the presence of forbs (which are desirable to sage-grouse).

**Comment Number: NVCASG-14-0132-8**

**Comment Excerpt Text:**
Table 2.6 is self-contradictory, because “meadows” and riparian streambanks generally have to be covered with deep-rooted sod-forming grasses in order to be considered PFC; however, those meadows and streambanks with such grass cover preclude or severely restrict the establishment and growth of forbs.

**Comment Number: NVCASG-14-0285-46**

**Comment Excerpt Text:**
Under NFMA, the Forest Service has a special duty to maintain the health of riparian areas:

Riparian areas. (i) The plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of riparian areas in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity, taking into account: … Aquatic and terrestrial habitats….”

36 C.F.R § 219.8(a)(3). The plan must establish widths for riparian management zones, to which the management outlined in the quoted section above will apply. 36 C.F.R. § 219.8(a)(3)(ii). This requirement has special significance with regard to sage grouse, which use riparian areas as brood-rearing habitats.

**Comment Number: NVCASG-14-0285-86**

**Comment Excerpt Text:**
We recommend the adoption of the following measures which are proposed for adoption in the Preferred Alternative of other BLM plan revisions or sage grouse amendments. Some of these are similar to the provisions of Alternatives B, C, and/or F.

For Priority Habitats:

Conduct restoration of roads not designated under travel planning (NW Colorado RMP Amendment).

Use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. Incorporate BMPs. Existing roads used to access valid existing rights; if unavailable, construct to minimum standard necessary. (HiLine RMP revision, North Dakota RMP Amendment).

Prohibit or bury powerlines within 0.6 miles of leks unless no SG declines can be demonstrated. Prohibit overhead transmission except within 0.5 mile of existing lines, corridor a maximum of 1 mile wide. Bury lines where possible. (Buffalo RMP revision).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to sage grouse. (North Dakota RMP Amendment).

Priority Habitat would be a priority in consideration of land acquisitions. Retain public ownership of PH. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns 68 within the priority sage-grouse habitat area; Under priority sage-grouse habitat areas with minority federal ownership, include an additional, effective mitigation agreement for any disposal of
federal land. As a final preservation measure consideration would be given to pursuing a permanent conservation easement. (North Dakota Plan Amendments).

Allow only heliportable geophysical exploration, with timing limitations applied. (North Dakota RMP Amendment, Bighorn Basin RMP Revision).

Apply Timing Limitation Stipulations to all Priority Habitat. (South Dakota RMP Amendment).

Timing Limitations should apply to surface disturbing and disruptive activities. (Lander RMP revision).

Find Priority Habitats unsuitable for coal leasing. (North Dakota RMP Amendment, HiLine RMP Revision, Northwest Colorado RMP Amendment).

Maximum 25% forage utilization for livestock grazing in each grazing allotment. (North Dakota RMP Amendment).

Incorporate sage grouse habitat objectives into permit renewals. Manage toward ecological site potential and toward reference state to achieve sage grouse objectives. (NW Colorado RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits GRSG. Design any new structural range improvements and location of supplements to conserve, enhance, or restore SG habitat through an improved grazing management system relative to SG objectives. Evaluate existing range improvements and location of supplements during AMP renewal process to make sure they conserve, enhance or restore SG habitat. (North Dakota RMP Amendment).

Authorize water developments only when no adverse effect to SG. Analyze springs, seeps, and pipelines to see if modifications are needed. (NW Colorado RMP Amendment).

Grazing allotments not meeting rangeland health standards and not making progress toward this goal will be closed. (Miles City RMP revision).

Develop specific objectives to conserve, enhance or restore PH based on ESDs and assessments. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other plans or agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. (North Dakota RMP Amendment). 69

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site’s capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Where riparian areas and wet meadows meet PFC, strive to move towards GRSG habitat objectives within capabilities of the reference state vegetation relative to the ESD. (North Dakota RMP Amendment).

Do not allow vegetation treatments with a potential to adversely affect sage grouse. Retain a minimum of 70% of ecological sites capable of supporting 12% cover in Wyoming big sage or 15% cover in mountain big sage. Manage a total disturbance cap of less than 30% lands not meeting these criteria. (NW Colorado RMP Amendment).

Evaluate role of existing seedings composed of introduced perennial grasses in and adjacent to Priority Habitat to determine if they should be restored to sagebrush or habitat of higher quality for sage grouse. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the Priority Habitat, then no restoration would be necessary. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (NW Colorado RMP Amendment).
Substantive Comments on the Nevada and Northeastern California Greater Sage-Grouse Draft LUPA/EIS

Rest grazing allotments 3 full years following fire; utilize grazing exclosures for monitoring; grazing excluded until woody and herbaceous plants achieve SG objectives. (Bighorn Basin RMP Revision).

Permanent retirement of grazing allotments will be considered on a willing-permittee basis. (Bighorn Basin RMP revision, Miles City RMP revision).

General Sage Grouse Habitats

Conduct restoration of roads, primitive roads and trails not designated in travel management plans. (North Dakota RMP Amendment).

Site and/or minimize linear ROW to reduce disturbance to sagebrush habitats. Maximize placement of power lines and transportation routes in existing ROWs. Power lines would be buried, eliminated, designed or sited in a manner which does not impact SG. ROWs would be allowed with appropriate mitigation and conservation measures identified within the terms of the authorization to minimize surface disturbing and disruptive activities. Co-locate new ROWs within existing ROWs where possible. (North Dakota RMP Amendment). 70

Allow new routes/realignments during site-specific travel planning if it improves GRSG habitat and resource conditions. Allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrading would have minimal impact on sage-grouse habitat, is necessary for motorist safety, or eliminates the need to construct a new road. (North Dakota RMP Amendment).

Only allow geophysical operations by heliportable drilling methods and in accordance with seasonal timing restrictions. (North Dakota RMP Amendment).

Find unsuitable for coal surface mining. (NW Colorado RMP Amendment).

High-profile structures exceeding 10 feet in height, would be eliminated, designed or sited in a manner which does not impact sage grouse. Permanent (longer than 2 months) structures which create movement must be designed or sited to minimize impacts to greater sage grouse. (North Dakota RMP Amendment).

Noise limited to no more than 10 dBA above ambient, where technologically feasible. (Buffalo RMP revision).

Bury new distribution lines within 1 mile of leks. (HiLine RMP revision).

Where riparian and wetland areas are already meeting standards they would be maintained in that condition or better. Where a site's capability is less than PFC, BLM would manage to achieve or move toward capability. Manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. (North Dakota RMP Amendment, Utah RMP Amendment).

Avoid all new structural range developments and location of supplements (salt or protein blocks) unless independent peer-reviewed studies show that the range improvement structure or nutrient supplement placement benefits sage grouse. (North Dakota RMP Amendment).

Do not use fire in precipitation zones < 12", except as last resort and where conditions allow and cheatgrass is a very minor component. (Northwest Colorado RMP Amendment).

Comment Number: NVCASG-14-0308-18

Comment Excerpt Text:
Action D-LG 10: Manage riparian areas and wet meadows for proper functioning condition (Forest Service may use other analysis) within PPMAs and PGMAs.

Comment: This Action would apparently be implemented during grazing permit renewals. The DEIS is not explicit about its timeframe for permit renewals and NEPA analyses which might not happen for ten, twenty, or more years. The DEIS should have
included a spreadsheet of the permit expirations for planning area allotments and the dates when the agencies plan to undertake analysis to demonstrate the degree to which this Action would be implemented. The LUPA/DEIS does not establish that managing riparian areas and wet meadows for proper functioning condition will conserve crucial greater sage-grouse brood-rearing habitat.

**Comment Number: NVCASG-14-0308-25**

**Comment Excerpt Text:**

Action D-LG 20: Salting and supplemental feeding locations, livestock watering and handling facilities (corrals, chutes, etc.) would be located at least 1/2-mile from riparian zones, springs, and meadows, or active leks in PPMAs and PGMAs. The distance can be greater based on local conditions.

Comment: This Action would apparently be implemented during grazing permit renewals. It is completely inadequate to protect crucial sage-grouse use areas. The most significant environmental predictor of lek persistence or abandonment is the level of anthropogenic disturbance within 3.1 miles of the lek (Knick and Hanser, 2011). The NTT Report at 20-21 notes that even a four mile buffer would be inadequate to protect nesting sage-grouse. The half mile distance is a small fraction of these recommended distances. The DEIS utterly fails to demonstrate that this proposed action will help conserve sage-grouse or their habitat.

**Comment Number: NVCASG-14-0379-2**

**Comment Excerpt Text:**

They further state “Although stubble height is easy to use, it is not a resource objective and therefore inappropriate as a prescriptive standard in grazing permits and land use plans” (emphasis added). The 6-inch stubble height proposed in this EIS is arbitrary and not based on site-specific criteria and as such should not be implemented.

### 22.2 **BEST AVAILABLE INFO BASELINE DATA**

**Comment Number: NVCASG-14-0091-13**

**Comment Excerpt Text:**

Regarding livestock grazing of meadows and riparian areas, 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 without any scientific reference: “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 in Nevada by Neel (1980), Klebenow (1982), and Evans (1986) concluded that cattle grazing can be used to stimulate forb production and that GRSG tended to prefer grazed meadows. These studies were all conducted in Nevada, focusing on livestock use of upland meadows frequented by sage-grouse. Also, in Chapter 4, p. 86, there is a statement that is incomplete and misleading:

“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 sagegrouse 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.

Comment Number: NVCASG-14-0278-22
Comment Excerpt Text:
EIS Section: Table 2-4, Chapter & Page: p 201
Comment: Action D-LG 13: In PPMAs and PGMAs, apply principles of prescriptive livestock grazing that control time and timing of grazing so that hot season use does not occur on an annual basis. (Comment below is also applicable to Action B-LG-13 on same page)

Annual, continuous (season long) hot season grazing may, but does not always (Lucas et al. 2004) result in adverse effects to riparian vegetation. Lucas et al. (2004) found that cattle grazing at light and moderate levels in the cool, warm and dormant seasons did not significantly impact cottonwood species. These authors concluded that “recommending blanket management applications (Bryant 1985, Clary and Webster 1989) for all riparian areas ignores their inherent complexity and individuality (Clary 1999, Green and Kauffman 1995). Virtually all riparian areas respond differently to similar disturbances (Clary 1995).” When unacceptable, ecological change is likely, prolonged hot season grazing in and across years should be avoided.

Comment Number: NVCASG-14-0285-62
Comment Excerpt Text:
There appear to be deficiencies in BLM’s riparian and wetland surveys across the planning area, and the DEIS does not present summary statistics for acreage of sage grouse habitat that is not meeting Properly Functioning Condition criteria. Please address this deficiency in baseline information, as riparian areas are crucial to sage grouse as brood-rearing habitats, and present this information in full in the FEIS.

Comment Number: NVCASG-14-0308-24
Comment Excerpt Text:
Action D-LG 19: Modify existing water development projects as needed or feasible to ensure riparian habitats in PPMAs and PGMAs are being maintained or improved.

Comment: This Action would apparently be implemented during grazing permit renewals but is unclear. It is also unclear what the language actually means. If a water development is problematic why would it be modified to ensure riparian habitats are maintained rather than improved? The final LUPA should modify this Action to include language from Action F-LG 15 “Analyze springs, seeps and associated water developments to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area within GRSG habitats. Make modifications where necessary, including dismantling water developments.” (DEIS Chapter 2 at 202) and language from Alternative B requiring mitigation measures to reduce potential impacts from West Nile virus as recommended by the NTT.

Comment Number: NVCASG-14-0308-36
Comment Excerpt Text:
Action D-VEG-ISCE 7: Manage pinyon and juniper stands in encroached sagebrush vegetation communities to meet GRSG habitat objectives as described in Table 2-6. In areas with a sagebrush component, select treatment methods that maintain sagebrush and shrub cover and composition.
Comment: This Action as written makes little sense. How can pinyon and juniper stands in encroached sagebrush vegetation not have a sagebrush component if this is really encroachment and not misidentification of a pinyon-juniper community? The language should be revised to Action D-VEG-ISCE 7: Manage pinyon and juniper stands in encroached sagebrush vegetation communities to meet GRSG habitat objectives as described in Table 2-6 using methods that maintain sagebrush and shrub cover and composition.

Comment Number: NVCASG-14-0309-39
Comment Excerpt Text:
The Planning area include the Battle Mountain, Carson City, Elko, Ely and Winnemucca BLM offices in Nevada and the Alturas, Eagle Lake and Surprise Field offices in California. It also includes the Humboldt-Toiyabe Forest, with often very similar Plans. In fact, as the result of litigation, the HT Forest Humboldt Plan riparian standards apply to some larger springs and seeps. Those standards must be expanded to all springs, seeps, meadows, small streams with sage-grouse habitat conservation in mind along with the existing aquatic species requirements. Bank/meadow trampling standards must be added. Amendment 2 specifically allows agencies to reduce standards of use to take into account resource damage (but the Forest is often loathed to do so). This process must provide significant new protections for HT (and BLM lands) riparian areas used by grouse, because right now under the Humboldt Plan, riparian areas with higher aquatic species values get more protective standards. This has resulted in smaller streams, spring, seeps being used as sacrifice areas to livestock. Given the already very damaged, head cutting, eroding small riparian areas in this arid Forest, this is a significant concern. Managing to get to PFC is a far too minimal objective.

22.3 IMPACT ANALYSIS

Comment Number: NVCASG-14-0091-71
Comment Excerpt Text:
The total analysis consists of one sentence: “Impacts on riparian areas and wetlands from leasable minerals management would be reduced under Alternative C in comparison to Alternative A.” There are no basis or tables for comparison of impacted acres under each alternative or discussion of how mitigation would be used to offset impacts in the DEIS.

Comment Number: NVCASG-14-0344-11
Comment Excerpt Text:
A significant inaccuracy throughout this DEIS is repeated statements that all oil and gas operations will use horizontal drilling technology in order to extract BLM fluid minerals under proposed NSOs. The application of horizontal drilling technology is particularly useful in areas with simple geology, stable geomechanics, and cooperative leases. In all other areas, vertical and direction drilling techniques are required to access the mineral rights.
Comment Number: NVCASG-14-0344-39
Comment Excerpt Text:
Page 84, Section 4.5.5. Alternative B, Impacts from Leasable Minerals Management:

The conclusion that "Management under Alternative B would result in fewer impacts on riparian habitats than Alternative A" is not supported in the analysis. Nowhere in the document is there disclosure of the acres of riparian habitat that are to be impacted under any of the alternatives. The conclusion is based on the different acreages of land open to mineral leasing under the alternatives, and therefore; the impacts to riparian areas must correspond to total acres open to leasing. The analysis assumes that if acreage is leased or available for mineral leasing, riparian areas will be disturbed or negatively impacted. This is extremely subjective. The Elko District has two LUPs that were approved in 1985 and 1986. These LUPs require all disturbance to be 400 feet or more from any riparian zone or named water way. Therefore, under Alternative A, riparian habitats are already adequately protected.

Comment Number: NVCASG-14-0344-40
Comment Excerpt Text:
Page 87, Section 4.5.6. Alternative C, Impacts from Leasable Minerals Management:

The total analysis consists of one sentence: "Impacts on riparian areas and wetlands from leasable minerals management would be reduced under Alternative C in comparison to Alternative A." There are no tables for comparison of impacted acres under each alternative, no discussion of how mitigation would be used to offset impacts in the DEIS.

Comment Number: NVCASG-14-0344-41
Comment Excerpt Text:
Page 89, Section 4.5.7. Alternative D, Impacts from Leasable Minerals Management:

Similar comment — there is no quantification of impacts, no discussion of acres of riparian areas that would be impacted under each alternative, and no quantification of "fewer impacts". The reader cannot compare alternatives based on terms such as "more", "fewer", "less", etc. The document should quantify impacts so the reader can discern how much more or how much less the impacts are between alternatives.

Comment Number: NVCASG-14-0351-17
Comment Excerpt Text:
What is not considered in the Draft EIS is how horse and burro grazing patterns differ from livestock. Yet scientific evidence indicates that there is a distinct and major difference in grazing patterns. See http://www.extension.org/pages/10296/horse-feedintz-behaviorft.UullGfTTmDi; and http://www.horses-and-horse-information.com/artielesi I 295grazini;shiml. The BLM has even noted that, unlike horses, the highest level of diet overlap exists between elk and cattle.


23. WATER

Comment Number: NVCASG-14-0091-31
Comment Excerpt Text:
Action D-SSS-DIS 1

Describe how water developments would be modified according to Nevada water law and valid existing rights, including RS 2339 rights of way.

Comment Number: NVCASG-14-0130-4
Comment Excerpt Text:
The FEIS must discuss this beneficial outcome of private stock water rights on public lands. To the extent that one or more of the Action Alternatives results in cancellation of grazing permits and attendant stock water rights from non-use, the adverse impact to this beneficial outcome to springs on public lands must also be discussed in the FEIS.

Comment Number: NVCASG-14-0130-5
Comment Excerpt Text:
The use of privately held water rights for irrigation purposes and their related provision of important habitat benefits to GRSG must be addressed in the FEIS.
Comment Number: NVCASG-14-0151-16
Comment Excerpt Text:
Alternative: D, Section: Action D-SSS-DIS-1, Page Number: 133

Review Comment: The BLM MUST recognize that water rights are considered private property within the State of Nevada. Therefore, any time the BLM discusses a goal, objective or action involving “water developments” it must state that any changes must be consistent with State Water Law and coordinated with the existing water rights holder.

Comment Number: NVCASG-14-0226-1
Comment Excerpt Text:
The preferred alternative poses a threat to my existing water rights by threatening my ability to make beneficial use thereof. Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

Comment Number: NVCASG-14-0240-1
Comment Excerpt Text:
The preferred alternative poses a threat to my existing water rights by threatening my ability to make beneficial use thereof. Management decisions by agencies must not interfere with California or Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

Comment Number: NVCASG-14-0253-1
Comment Excerpt Text:
Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

Comment Number: NVCASG-14-0259-16
Comment Excerpt Text:
Page A-17; 8th bullet: The following measure conflicts with Nevada water law and must be removed.
"Ensure that any water developments do not remove more than 50% of water from any spring or other surface water source. Water developments should make water available on the ground for wildlife use. All troughs should be outfitted with the appropriate type and number of wildlife escape ramps." The Nevada State Engineer has the authority to grant water rights and permit water use.

Comment Number: NVCASG-14-0322-1
Comment Excerpt Text:
The preferred alternatives (B) and (F) (see DEIS Action LG 15, pg.234) poses a threat to permittees existing water rights by threatening their ability to make beneficial use thereof. Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

Comment Number: NVCASG-14-0370-1
Comment Excerpt Text:
Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

Comment Number: NVCASG-14-0376-2
Comment Excerpt Text:
The preferred alternative poses a threat to our existing water rights by threatening our ability to make beneficial use thereof. Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.
Comment Number: NVCASG-14-0393-5
Comment Excerpt Text:
Privately financed improvements to springs including fencing and piping have served to maintain spring integrity while simultaneously providing water to livestock and wild horses which has served to protect springs from degradation. This section fails to discuss the impacts of wild horses upon unimproved spring flows, water quality and habitats. Arguably, the public/private partnership which now exists between BLM and private holders of livestock water rights has benefited spring integrity. The FEIS must discuss this beneficial outcome of private stock water rights on public lands. To the extent that one or more of the Action Alternatives results in cancellation of grazing permits and attendant stock water rights from non-use, the adverse impact to this beneficial outcome to springs on public lands must also be discussed in the FEIS.

Comment Number: NVCASG-14-0396-1
Comment Excerpt Text:
Specific to stock water rights, Nevada Water Law is based on two principles: prior appropriation and beneficial use. Prior appropriation refers to “first in time, first in right.” To obtain a water permit in Nevada, a person must prove beneficial use such as stock watering, mining, irrigation, etc. The preferred alternative poses a threat to my existing water rights by threatening my ability to make beneficial use thereof. Management decisions by agencies must not interfere with Nevada Water Law and the BLM must document the considerations given to private property rights connected to the federally-managed lands, especially those related to livestock water rights and rights of way to access these water rights.

23.1 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCASG-14-0130-2
Comment Excerpt Text:
The FEIS must clarify how many, if any, miles of 303(d) listed streams and acres of water bodies located within PPMAs and PGMAs are not supporting the Propagation of Wildlife beneficial use water quality standard found in Nevada Administrative Code.

23.2 IMPACT ANALYSIS

Comment Number: NVCASG-14-0091-79
Comment Excerpt Text:
This text and assessment of impacts from minerals management/development does not give credit the multitude of existing environmental regulations, permits, inspections, operating standards, and best management practices inherent in mine operation. Mines operate under a variety of state, federal, and local environmental permits including water pollution control, national pollution discharge elimination, storm water, spill prevention, etc. that serve to prevent and reduce risks to surface- and groundwater resources by addressing storm water runoff, erosion, chemical management, etc. There is a severe lack of citations and proof of scientific credibility throughout this entire section, especially for the minerals management/development section.

Comment Number: NVCASG-14-0091-80
Comment Excerpt Text:
This description is not consistent with the format used to describe Alternative B. The description for Alternative C includes no discrete or quantitative measurement of acres withdrawn from mineral entry.

Comment Number: NVCASG-14-0091-81
Comment Excerpt Text:
This description is not consistent with the format used to describe any of the previous alternatives, thus comparing the impacts is impossible. Further the last two sentences state, "Alternative E could result in fewer impacts on water resources than Alternative A. Impacts would be the same as Alternative A."
**Comment Number: NVCASG-14-0132-28**
*Comment Excerpt Text:*
Action D-LG 14. We remind the agencies that sage-grouse as wildlife are not the only beneficial use within the state of Nevada. This Action item should be removed from the final document, or in the alternative should be worded differently so that it does not restrict water developments for other beneficial uses.

**Comment Number: NVCASG-14-0188-41**
*Comment Excerpt Text:*
Chapter 4.16.6 Alternative C (Page 209) - Impacts from Locatable Minerals Management

This description is not consistent with the format used to describe Alternative B. The description for Alternative C includes no discrete or quantitative measurement of acres withdrawn from mineral entry. Simply stating "fewer impacts" is qualitative, lacks sufficient detailed information, and presents an incomplete analysis to the public.

**Comment Number: NVCASG-14-0188-42**
*Comment Excerpt Text:*
Chapter 4.16.8 Alternative E (Page 213) - Impacts from Locatable Minerals Management

This description is not consistent with the format used to describe any of the previous alternatives, thus comparing the impacts is impossible. Further the last two sentences state, "Alternative E could result in fewer impacts on water resources than Alternative A. Impacts would be the same as Alternative A." These statements are overly qualitative in nature (thus preventing full disclosure to the public and, most importantly, contradict one another). Please clarify the impacts. Are there fewer impacts or the same as in Alternative A?

**Comment Number: NVCASG-14-0188-43**
*Comment Excerpt Text:*
Chapter 4.16.9 Alternative F (Page 215) - Impacts from Locatable Minerals Management

This description is not consistent and does not provide quantitative values (le. acreage) to facilitate understanding of the impacts by the reader. There is no discussion on the impacts of how reducing AMLs would be beneficial or detrimental to GRSG habitat. This statement implies there are "fewer mining activities." Please include quantitative values (le. acreage).

**Comment Number: NVCASG-14-0271-1**
*Comment Excerpt Text:*
The subject document does not designate over-grazing between livestock (controlled) and wild horses and burros (uncontrolled). The wild horses and burros occupy the land 12 months per year. Our livestock do not use the permits during wet conditions and do not destroy water sources. By using the public land year-round, wild horses and burros destroy water sources and the habitat for several hundred feet in all directions. They also prevent all types of wildlife from frequenting these water sources.

**Comment Number: NVCASG-14-0309-6**
*Comment Excerpt Text:*
Eroding soil and manure throughout watersheds end up in streams as increased sediment load, excessive nutrients, and pathogen contamination. Various grazing management strategies have not been found to reduce such watershed degradation. The Final RMP/EIS needs to discuss the impacts of each of the alternatives on the soil and watershed conditions within the planning area and to provide appropriate mitigation measures under each alternative. A list of impaired waters and the sources of contamination within the watersheds of these public lands would be an appropriate place to begin taking a “hard look” at potential grazing effects from the public lands.

**Comment Number: NVCASG-14-0344-42**
*Comment Excerpt Text:*
Page 201, third Paragraph, last sentence:

The entire section is about fluid minerals and the last sentence refers to mining. The word "mining" should be replaced with "oil and gas". The last sentence also needs to be modified and Noble suggests the following: "... could result in contamination of..."
overlying aquifers and drinking water supplies (Osborn et al. 2011; Duke University 2012); however, no known impacts of affected groundwater or human health impacts are on record where Hydraulic Fracturing has been used." The text as it appears in the Draft LUPA/DEIS is misleading.

23.3 CUMULATIVE IMPACT ANALYSIS

Comment Number: NVCASG-14-0086-8
Comment Excerpt Text:
Action D-VEG-D3 proposes to implement emergency drought management measure to protect habitat. All districts in Nevada completed Drought Management Plans in the last 18 months, and the Washington Office completed the Resource Management During Drought Handbook (H-1730-1) in 2011. How does this action integrate with existing drought management guidelines and requirements? It seems unnecessarily duplicative with existing planning efforts. The new drought management guidelines also rely heavily on the ab

24. WILD HORSE AND BURROS

Comment Number: NVCASG-14-0009-1
Comment Excerpt Text:
Unfortunately, the plan and the Environmental Impact Statement (EIS) do not adequately protect wild horses and burros in accordance with federal laws and regulations. The information included in these documents is outdated and incomplete. The EIS does not adequately reflect the Bureau of Land Management’s (BLM’s) MANDATE to protect wild horses and burros vs. its DISCRETION to authorize livestock grazing.

Comment Number: NVCASG-14-0116-6
Comment Excerpt Text:
In some alternatives, reductions in forage allocations would be borne equally by domestic livestock and wild horses and wild burros, despite the fact that domestic livestock vastly outnumber wild horses and wild burros in terms of: 1) land impacted (66% of BLM land used for domestic livestock vs. 12% of BLM land used for wild horses and wild burros); 2) forage allocated within wild horse and wild burro Herd Management Areas (82+% for private domestic livestock vs. 18% for federally-protected wild horses and wild burros); and 3) population numbers (domestic livestock outnumber wild horses and wild burros by at least 50-1 on BLM land).

Comment Number: NVCASG-14-0116-7
Comment Excerpt Text:
It has been noticed that within the proposed EIS, the description of wild horse and wild burro use, only sections of the Wild Free Roaming Horse and Burro Act (WFRHBA) that could be interpreted as restricting wild horse and burro use are included – omitting the basic premise words such as “protected, integral and principally”. When quoting FLPMA, only the section that could be interpreted as limiting wild horse and wild burro use are quoted yet the fact that FLPMA was not intended to reduce any existing premise of law, such as protection of wild horses and wild burros on public land. One example of the possible misrepresentation of the WFRHBA can be seen in this statement made within the EIS: “BLM and Forest Service policies and regulations also direct that wild horses and burros are to be managed as self-sustaining populations of healthy animals at minimal feasible levels”. The actual language of the Act is: “all management activities shall be at the minimal feasible level”. The statement made in the GSGPS limits wild horses and wild burros although the actual statement in the Act limits management. This error must be rectified in the final proposal.

Comment Number: NVCASG-14-0116-8
Comment Excerpt Text:
The proposed EIS must not combine animal unit months for privately owned domestic livestock with wild horse and burro animal unit months. Privately owned domestic livestock are “permitted” whereas wild horses and burros are designated by the 1971 Congressional law to use this public land. There is a big difference in these two uses and with the alternatives, as written, discretion given to districts actually creates a situation of contradiction that could result in discretionary interpretation district by district that would likely result in inconsistent
management practices. Wild horses and burros have a legal land base of approximately 12% of BLM/FS managed land whereas private domestic livestock allotments exist on over 65% of that same base. To utilize the same equation to manage both uses is non-equitable under any of the proposed alternatives.

**Comment Number: NVCASG-14-0132-26**

**Comment Excerpt Text:**
[Action D-WHB-1] it is clear that excess WHBs already occupy GRSG habitat, throughout the state, and the agencies have not exhibited the ability to control them at the AMLs already established, let alone at reduced AML. A possible scenario that the agencies could accomplish is to remove WHB entirely from an area (as the agencies have done in “checkerboard lands”) in important GRSG habitat. Therefore, the Action item should include the sentence: “Consider ‘zeroing-out’ AMLs to accomplish GRSG habitat goals.”

**Comment Number: NVCASG-14-0144-10**

**Comment Excerpt Text:**
Table 2.1 appears to suggest that feral horse and burro are not subject to reductions in population, why? HMAs and WHBTs have little to do with populations since horses range well outside those areas and impact resources important to Sage Grouse. BLM needs to evaluate feral horse and burro impact and not be concerned about the overlap of HMAs with priority sage grouse habitat and the amount of acres.

**Comment Number: NVCASG-14-0171-37**

**Comment Excerpt Text:**
Section 4.3.2

It is important that the document not get caught up in the numbers argument between wild horses and managed livestock. The numbers do not equate. Wild horses exist on the landscape year round and are essentially unmanageable. This equates to no rest period for the ecosystem. In addition they continue their impact during the wet season where damage is more severe and restoration far more difficult. Examples of total conversion of perennial range to annual cheat grass and medusa head were found in the wintering areas on the Modoc National Forest (Devils’ Garden Wild Horse Territory Plan Environmental Assessment 2013). They remain tied to a particular area regardless of the forage availability or the water supply. These traits, combined with their grazing habits and ability to travel, cause considerably more damage than permitted livestock that are removed from the range when thresholds are met. There is no real management tool except control of the population.

**Comment Number: NVCASG-14-0201-29**

**Comment Excerpt Text:**
This action element also proposes to prohibit the use of helicopters in the management of wild horses. Our members feel that the most effective means of managing wild horses need to be applied to all areas where wild horses exist. especially if the springs so critical to sage-grouse brood use are to be maintained in good condition. The limitation of a tool to manage wild horses in ACECs is just one more reason not to designate any additional ACECs. They will become ACECs for wild horses, not for sage-grouse.

**Comment Number: NVCASG-14-0205-23**

**Comment Excerpt Text:**
28, 2.8.1

Under the No Action Alternative, there are no goals, objectives, or management actions specifically identified within the management framework for the Wild Horse and Burro program.”

See previous comment - Revise text to state that “BLM Manual 6840 explicitly directs BLM to manage GRSG and other sensitive species and habitat to promote their conservation and to minimize the likelihood and need for listing under the ESA... In compliance with existing laws, including the BLM multiple use mission as specified in the FLPMA, the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the
likelihood and need for such species to be listed pursuant to the ESA. This includes the authority to set goals, objectives and management actions to adjust wild horse and burro programs to protect sage-grouse habitat. The US Forest Service lists sage-grouse as a sensitive species and has similar direction in Forest Service Manual 2670."

As stated in BLM Manual 6840:

On BLM-administered lands, the BLM shall manage Bureau sensitive species and their habitats to minimize or eliminate threats affecting the status of the species or to improve the condition of the species habitat, by:

1. Determining, to the extent practicable, the distribution, abundance, population condition, current threats, and habitat needs for sensitive species, and evaluating the significance of BLM-administered lands and actions undertaken by the BLM in conserving those species.

2. Ensuring that BLM activities affecting Bureau sensitive species are carried out in a way that is consistent with its objectives for managing those species and their habitats at the appropriate spatial scale.

3. Monitoring populations and habitats of Bureau sensitive species to determine whether species management objectives are being met.

Comment Number: NVCASG-14-0346-8
Comment Excerpt Text:
Alternative D [WHB] and would encourage the BLM to add an objective that speaks to the determination of whether existing AMLs are appropriated to maintain rangeland health standards.

Comment Number: NVCASG-14-0374-2
Comment Excerpt Text:
None of the alternatives analyzed adequately protects wild horses and burros. In some sections the EIS wrongly lumps wild horses together with livestock. Alternatives described would allow the BLM too much discretion in forage allocations to private livestock and wild horses.

In some alternatives, reductions in forage allocations would be borne equally by livestock and wild horses, despite the fact that livestock vastly outnumber wild horses in terms of: 1) land impacted (66% of BLM land used for livestock vs. 12% of BLM land used for wild horses); 2) forage allocated within wild horse Herd Management Areas (82+% for private livestock vs. 18% for federally-protected wild horses); and 3) population numbers (livestock outnumber wild horses by at least 50-1 on BLM land).

Comment Number: NVCASG-14-0399-3
Comment Excerpt Text:
In the description of wild horse use, only sections of the Wild Free Roaming Horses and Burros Act (WFRH&B Act) that could be interpreted as restricting wild horse use are included, omitting the basic premise words such as "protected, integral." When quoting FLPMA again only the section that could be interpreted as limiting wild horse use are quoted yet the fact that FLPMA was not intended to derogate any existing premise of law, such as protecting wild horses on public land. As but one example of the possible misrepresentation of the WFRH&B Act can be seen in this statement made on page 62 of Chapter 3: "BLM and Forest Service policies and regulations also direct that wild horses and burros are to be managed as self-sustaining populations of
healthy animals at minimal feasible levels." The actual language of the Act is: "All management activities shall be at the minimal feasible level." The statement made in the GSGPS limits horses, the actual statement in the Act limits management. This should be rectified.

Further, the WFRH&B Act instructs the BLM to consider wild free-roaming horses and burros "in the area where presently found, as an integral part of the natural system of the public lands." As the GAO explained in its 2008 report to Congress:

"the passage of the 1971 act changed the way BLM managed horses and burros on public lands. Rather than considering them as a feral species that caused damage to the rangeland, the agencies had to change their mind-set to protect and manage the animals as an integral part of the ecosystem." (GAO Report to Committee on Natural Resources [October 9, 2008]. Emphasis added)

Given this mandate, the plan and EIS wrongly consider wild horses and burros as distinct from wildlife and instead, in parts, categorize these species with livestock.

Finally, the plan and EIS do not distinguish the BLM's legal mandate to protect wild horses and burros from the agency's discretion under the Taylor Grazing Act, which states clearly that "the creation of a grazing district or the issuance of a [grazing] permit.... shall not create any right, title, interest, or estate in or to" the public lands.

Attachments 1 and 2 address these issues and are incorporated with these comments by reference. 2. Impacts to Wild Horses Not Adequately Disclosed or Analyzed

The report states that under all alternatives, no direct change would occur to wild horses and burros (page 50, CH 5) in areas allocated as HMA\s/WHBT\s. However the rest of the paragraph outlines how each alternative will restrict wild horse and burro use. (See BLM handout simplifying Alternatives at link http://www.blm.gov/pgdata/etc/medialib/blm/nv/wildlifes/sage_grouse/2013_public_workshop.Par.46296.File.dat/Range%20Poster.pdf )

Additionally information that pertains to "livestock" use (in many instances in this report that term is inclusive of wild horse use) indicates that reductions in Animal Unit Month (AUM, or "allowable forage use") would be likely (with broad discretion given to districts in most cases and all AUM's being retired in one alternative proposed). This actually creates a situation of contradiction that would result in discretionary interpretation district by district that would likely result in inconsistent management practices.

Alternatives A, B, D and E (with Alternative D being BLM's preferred alternative) leave far too much discretion to each district in allotting AUM's available to private livestock and wild horses. Alternative C eliminates all AUM's entirely. Alternative F reduces AUM's 25% for both private livestock and wild horses.

Wild horses and burros have a legal land base of approximately 12% of BLM/FS managed land whereas private livestock allotments exist on over 66% of that same base. To utilize the same equation to manage both uses is non-equitable under any of the proposed alternatives. This is particularly true in the CA-NV Sub Region, where, according to the EIS, there are 2.2 million Animal Unit Months (AUMs) allocated to livestock (Appendix K) vs. a maximum of 135,330 AUMs allocated to wild horses and burros. This is the annual equivalent of 187,290 cows vs. a maximum of 11,162 wild horses and 231 burros. Given the gross disparities in forage allocations in the planning area, any reductions in grazing AUMs cannot be borne equally by livestock and wild horses/burros. Instead, wild horse and burro Allowable Management Levels must be maintained or increased to insure genetic diversity pursuant to the BLM's and FS' mandates under the WFRH&B Act mandate.

3. Impacts of livestock vs. wild horses

Also omitted from the evaluation is the impact of private livestock grazing as opposed to impacts from...
wild horse and burro use. There are extreme differences in the impacts generated by these users of public land. These differences were clearly delineated in the National Marine Fisheries Service's biological opinion regarding impacts of wild horses in the Murderers Creek Wild Horse Territory in Oregon. (Attachment 3) Additionally, both the Center for Biological Diversity and Western Watersheds have written extensive reports showing the impact of livestock production (and its cost) to public land management. Wild horses, when not impeded by allotment fencing and large turnouts of domestic cattle, have minimal impact to the range. To treat both of these uses as "grazing" is irresponsible to the purpose of the assessment to create an equitable management plan to protect the greater sage grouse that is compatible with other provisions of law.

4. AMLs must be sufficient to maintain genetic diversity

All alternatives must include AUM’s available for wild horses and burros to the extent that a genetically viable population of wild horses and/or burros may be sustained. A matrix must exist that triggers increases of AUM’s for wild horse use if information becomes available that the population is at risk of genetic loss. A current population of 200,000 Greater Sage Grouse has triggered this massive management document. The Bureau of Land Management estimates that 40,605 wild horses and burros (about 33,780 horses and 6,825 burros) remain on BLM lands in the West. Wi horses and burros are only managed within the areas designated for their use. To that extent, any and all alternatives must include language that protects wild horses and burros in sage grouse conservation zones.

5. Herd Areas and Herd Management Areas must be clearly defined.

The maps included in "Chapter 3" show overlapping areas occupied by various uses. Map fig. 3.9 does not clearly discern the different locations of Herd Management Areas (HMA) and Herd Areas (HA). This inhibits inclusion of repatriating HA’s as a possible alternative and gives a false impression of more area inhabited by wild horses than exists. The final EIS should include a map that clearly delineates between HMA/HA land.

24.1 BEST AVAILABLE INFORMATION BASELINE DATA

Comment Number: NVCASG-14-0009-3

Comment Excerpt Text: In some alternatives, reductions in forage allocations would be borne equally by livestock and wild horses, despite the fact that livestock vastly outnumber wild horses in terms of: 1) land impacted (66% of BLM land used for livestock vs. 12% of BLM land used for wild horses); 2) forage allocated within wild horse Herd Management Areas (82% for private livestock vs. 18% for federally-protected wild horses); and 3) population numbers (livestock outnumber wild horses by at least 50-1 on BLM land).

Comment Number: NVCASG-14-0052-2

Comment Excerpt Text: The County's comments submitted for the Administrative Draft made frequent reference to lack of discussion of the detrimental influence of wild horses and burros on rangeland health. However, in our opinion, this issue is still not sufficiently acknowledged or addressed. According to the document, wild horses are capable of increasing their numbers by 18-25 percent annually. In Table 3.18, it is shown that most of the wild horse and burro populations exceed the appropriate management levels. It is also stated that insufficient funding for gathers is an issue. This issue needs to be at the top of the priority list, and funding must be provided to address the escalating numbers of wild horses and burros.

Comment Number: NVCASG-14-0116-4

Comment Excerpt Text: This recent [2013] National Academy of Science report found “no evidence” of overpopulation of wild horses and wild burros. ...The plan and the proposed Environmental Impact Statement (EIS) do not adequately protect wild horses and burros in
accordance with federal laws and regulations. The information included in these documents is outdated and incomplete.

**Comment Number: NVCASG-14-0140-2**
**Comment Excerpt Text:**
Chapter 3 map, Feral Horse and Burro Herd Areas: This map is grossly incorrect in describing the status of the upper NW corner of Washoe County and should be corrected to accurately reflect facts. Specifically T48N to T46N and R18E to R21E are and never have been feral horse range, nor are they HMA contrary to what your map shows. Please correct this in the final EIS.

**Comment Number: NVCASG-14-0205-23**
**Comment Excerpt Text:**
28, 2.8.1
Under the No Action Alternative, there are no goals, objectives, or management actions specifically identified within the management framework for the Wild Horse and Burro program.”

See previous comment - Revise text to state that “BLM Manual 6840 explicitly directs BLM to manage GRSG and other sensitive species and habitat to promote their conservation and to minimize the likelihood and need for listing under the ESA… In compliance with existing laws, including the BLM multiple use mission as specified in the FLPMA, the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA. This includes the authority to set goals, objectives and management actions to adjust wild horse and burro programs to protect sage-grouse habitat. The US Forest Service lists sage-grouse as a sensitive species and has similar direction in Forest Service Manual 2670. ”

As stated in BLM Manual 6840:
On BLM-administered lands, the BLM shall manage Bureau sensitive species and their habitats to minimize or eliminate threats affecting the status of the species or to improve the condition of the species habitat, by:

1. Determining, to the extent practicable, the distribution, abundance, population condition, current threats, and habitat needs for sensitive species, and evaluating the significance of BLM-administered lands and actions undertaken by the BLM in conserving those species.

2. Ensuring that BLM activities affecting Bureau sensitive species are carried out in a way that is consistent with its objectives for managing those species and their habitats at the appropriate spatial scale.

3. Monitoring populations and habitats of Bureau sensitive species to determine whether species management objectives are being met.

**Comment Number: NVCASG-14-0278-30**
**Comment Excerpt Text:**
The Manier et al 2013 citation is interesting. It cites Bartmann et al. (1987) to document that wild horses increase soil compaction. The only problem is that Bartmann et al. (1987) is a mule deer study that that does not address wild horses (the term, wild horses is not present in the paper) or soil compaction.

**Comment Number: NVCASG-14-0380-3**
**Comment Excerpt Text:**
The EIS fails to seriously analyze the extreme difference of range impacts of overpopulated destructive livestock as compared to beneficial wild equines. Instead of constantly implicating wild horses/burros for rangeland degradation without scientific evidence to back up such a claim, BLM must provide a detailed breakdown of range data, including GENUINE data that TRUTHFULLY examines the obvious difference of impacts between destructive livestock vs. beneficial wild equines is needed, including data on usage of stream riparian areas. In fact, when not hindered by intrusive fencing or swarms of livestock, mustangs have little impact on the rangeland.
24.2 IMPACT ANALYSIS

Comment Number: NVCASG-14-0009-2
Comment Excerpt Text:
Impacts to wild horses are not adequately analyzed. For example, the EIS states that “Under all alternatives, no direct change would occur to areas allocated as HMAs [Herd Management Areas]/WHBT [Wild Horse and Burro Territories] for wild horses and burros” (page 50, CH 5). However the rest of the paragraph outlines how each alternative will restrict wild horse and burro use.

Comment Number: NVCASG-14-0052-6
Comment Excerpt Text:
Page 609 Wild Horses and Burros

"Effects of wild horses and burros on habitats may also be more pronounced during periods of drought or vegetation stress". The effect of wild horses and burros ARE more pronounced because during periods of drought, livestock producers must reduce their numbers. However, the BLM does not remove more wild horses and burros during a drought.

Comment Number: NVCASG-14-0109-5
Comment Excerpt Text:
In addition, grazing by other herbivores in Nevada needs to be adequately reviewed such as ungulates and wild horse and burros. Grazing, as determined by the USFWS, refers to native wildlife, feral horses and livestock but BLM failed to address all species thoroughly and I request BLM readdress these concerns.

Comment Number: NVCASG-14-0116-3
Comment Excerpt Text:
Wild horses, wild burros and other wildlife have minimal impact to the land when not impeded by allotment fencing, cattle guards and large turnouts of domestic livestock. To treat both of these uses as “grazing” is irresponsible to the purpose of the assessment to create an equitable management plan that is compatible with other provisions of the law and to protect the sage grouse.

Comment Number: NVCASG-14-0116-5
Comment Excerpt Text:
Table 4.2 Needs to include feral horse and burro grazing as well and not just limited to livestock to be consistent with analysis throughout the EIS which attributes negative impacts to horses and burros.

Comment Number: NVCASG-14-0144-15
Comment Excerpt Text:
In regards to unregulated grazing by wild horses and wildlife: The document should disclose which Herd Management Areas (HMAs), Herd Areas (HAs), and Wild Horse and Burro Territories (WHBTs) within sage-grouse habitat are actually within Appropriate Management Levels (AML). Along the same lines, the document should disclose which Wildlife Management Areas are within elk population objectives. This disclosure is critical as it will show that these management areas within the N-4 Grazing Board's area of interest are over allocated. This over allocation has resulted in subsequent overgrazing, by wild horses and elk, particularly in key sage-grouse habitats such as riparian areas. It is essential that this problem is acknowledged, as too often regulated livestock grazing is blamed resulting in unjustified cuts in AUMs.

Comment Number: NVCASG-14-0180-4
Comment Excerpt Text:
The subject document does not designate over-grazing between livestock (controlled) and wild horses and burros (uncontrolled). The wild horses and burros occupy the land 12 months per year. Our livestock do not use the permits during wet conditions and do not destroy water sources. By using the public land year-round, wild horses and...
burros destroy water sources and the habitat for several hundred feet in all directions. They also prevent all types of wildlife from frequenting these water sources.

**Comment Number: NVCASG-14-0374-1**  
**Comment Excerpt Text:**  
Impacts to wild horses are not adequately analyzed. For example, the EIS states that "Under all alternatives, no direct change would occur to areas allocated as HMAs [Herd Management Areas]/WHBT [Wild Horse and Burro Territories] for wild horses and burros" (page 50, CH 5). However the rest of the paragraph outlines how each alternative will restrict wild horse and burro use.

**Comment Number: NVCASG-14-0375-2**  
**Comment Excerpt Text:**  
Although the report states that, Under all alternatives, no direct change would occur to areas allocated as HMAs/WHBTs for wild horses and burros (page 50, CH 5); the rest of the paragraph outlines how each alternative will restrict wild horse and burro use. (See BLM handout simplifying Alternatives at link:

http://www.blm.gov/pgdata/etc/medialib/blm/nv/wildlifefishes/sage_grouse/2013_  

public_workshop.Par.46296.File.dat/Range%20Poster.pdf) Additionally, information that pertains to "livestock" use (in many instances in this report that term is inclusive of Wild Horse use), indicates that reductions in Animal Unit Month (AUM, or "allowable forage use") would be likely (with broad discretion given to different districts in most cases, and all AUM's would be retired in one alternative proposed. This actually creates a situation of contradiction that would result in discretionary interpretation district by district which would tend to result in inconsistent management practices.

**Comment Number: NVCASG-14-0375-3**  
**Comment Excerpt Text:**  
Also omitted from the evaluation is the impact of private livestock grazing as opposed to impacts from wild horse and burro use. There are extreme differences in the impacts generated by these users of public land. Both the Center for Biological Diversity and Western Watersheds have done extensive papers showing the impact of livestock production (and its cost) to public land management. Wild horses, when not impeded by allotment fencing and large turnouts of domestic cattle, have minimal impact to the range. To treat both of those uses as "grazing" is irresponsible for the purpose of the assessment to create an equitable management plan to protect the greater sage grouse that is compatible with other provisions of law.

**Comment Number: NVCASG-14-0377-1**  
**Comment Excerpt Text:**  
Information that pertains to "livestock" use, and in many instances in this report that term is inclusive of Wild Horse use, indicates that reductions in AUMs, or "allowable forage use" would be likely with broad discretion given to different districts in most cases, and all AUM's would be retired in one alternative proposed. This actually creates a situation of contradiction that would result in discretionary interpretation district by district which would tend to result in inconsistent management practices.

**Comment Number: NVCASG-14-0380-2**  
**Comment Excerpt Text:**  
the EIS arbitrarily and wrongly attempts to categorize livestock AND wild horses together under the description of livestock.

**Comment Number: NVCASG-14-0400-1**  
**Comment Excerpt Text:**  
The Draft EIS does not include impact of private livestock grazing as opposed to impacts from wild horse and burro use. There are extreme differences in the impacts generated by these two categories of animals. Both the Center for Biological Diversity and Western Watersheds have done extensive papers showing the impact of livestock production (and it's cost) to public land management. Wild horses, when not impeded by allotment fencing and large turnouts of domestic cattle, have been shown to have minimal impact to the range.
25. WILDERNESS AREAS/WILDERNESS STUDY AREAS

Comment Number: NVCASG-14-0311-11
Comment Excerpt Text:
One of the planning criteria developed by BLM for the Nevada DEIS is compliance with BLM’s Manuals 6310 and 6320 regarding Lands with Wilderness Characteristics. The planning criterion states that land use allocations for Sage-grouse must be consistent with these manuals. Section 1.6. Additionally, the management common to all alternatives states that management actions for lands with wilderness characteristics must comply with current policies. Section 2.5. These directives and planning criteria comport with Section 5 of Secretary Salazar’s Secretarial Order No. 3310, Section 5(d), that requires land use planning decisions to take wilderness characteristics into consideration and to manage lands with those characteristics in a manner that protects those characteristics as part of BLM’s planning process. The difficulty arises in that Secretarial Order No. 3310 may not, under the Department of the Interior, Environment, and Related Agencies Appropriations Act of 2014, be implemented, administered, or enforced in any manner. Id., § 124. The law does not affect the Secretary’s authorities under Sections 201 and 202 of FLPMA that call for inventorying of wilderness characteristics and general land use planning. But to the extent that these lands with wilderness characteristics are incorporated into the actual management plans pursuant to any chosen alternative, it will be inconsistent with the statutory prohibition on the implementation of Order No. 3310.

25.1 RANGE OF ALTERNATIVES

Comment Number: NVCASG-14-0151-11
Comment Excerpt Text:
The document fails to list wilderness management plans for a number of locations within the planning area and recommendations for addressing sage grouse needs within these areas. Lincoln County would recommend that all Wilderness Plans within the Ely District that contain PPMAs or PGMAs be included for amendment by this document.

Comment Number: NVCASG-14-0285-69
Comment Excerpt Text:
This planning amendment addresses the protection of sage grouse habitats across Nevada and northeastern California, therefore directly affecting the naturalness and outstanding opportunities for primitive and unconfined recreation. It therefore requires consideration of an alternative that would protect wilderness characteristics pursuant to BLM Manual 6320.06. The designation of new Lands with Wilderness Characteristics (“LWCs”) under BLM inventories in the planning area represents significant new information that must be addressed here. BLM states that it will address inventory and consideration policies for LWCs. DEIS at 20. BLM does not disclose the acreage or location of Lands with Wilderness Character that overlap with sage grouse Priority or General Habitats, but apparently as much as 410,618 acres of lands with wilderness characteristics fall within potential Priority and General Habitats (DEIS at 544). None of these lands has been designated for protection of wilderness resources through the land-use planning process to date. DEIS at 545. BLM apparently intends to ignore direction to address this issue in this land-management planning effort (DEIS at 600), despite the clear value in designating LWCs for protection of wilderness character to sage grouse conservation. This is arbitrary and capricious. We are concerned that BLM has not fully lived up to its obligations under Manual 6320, undertaking the process required for the planning and management of Lands with Wilderness Characteristics. This must be done under the RMP amendment at hand, and the plan amendment should further designate all LWCs falling within sage grouse habitats to preserve their naturalness, solitude, and outstanding opportunities for primitive and unconfined types of recreation. Such protections would directly address threats that have been identified as threatening the persistence of sage grouse, such as infrastructure. This would confer addition protections on key sage grouse habitats,
further buttressing the agency effort to apply adequate conservation measures for the bird.

**Comment Number: NVCASG-14-0297-8**

**Comment Excerpt Text:**
Recommendations: BLM should identify lands with overlapping conservation values for protective designation, including considering whether and how protecting lands with wilderness characteristics would contribute to protecting and recovering sage-grouse in the planning area, and incorporate an analysis of these benefits into developing and selecting a proposed plan. BLM should include all potential LWCs in its analysis and management decisions for this EIS, recognizing that the LWC inventories underway in a number of field offices are still in progress and are not yet completed.

**25.2 BEST AVAILABLE INFO BASELINE DATA**

**Comment Number: NVCASG-14-0297-2**

**Comment Excerpt Text:**
Lands with wilderness characteristics are, by definition, relatively large parcels of contiguous unroaded BLM lands that are largely natural and where any human impacts are “substantially unnoticeable”. According to the National Technical Team Report of 2011, “Sage-grouse populations have the greatest chance of persisting when landscapes are dominated by sagebrush and natural or human disturbances are minimal (Aldridge et al. 2008, Knick and Hanser 2011, Wisdom et al. 2011)” (emphasis added). As the BLM looks to identify the highest priority habitats for increased protections for sage-grouse, lands with wilderness characteristics should be prioritized where they overlap with greater sage-grouse habitat as these are likely to be the highest quality and least disturbed habitats remaining. Protecting lands with wilderness characteristics can support the principles for protecting and managing sage-grouse habitat as outlined in BLM’s National Strategy and reiterated in IM 2012-043, namely protecting unfragmented habitats and minimizing habitat loss and fragmentation.

**Comment Number: NVCASG-14-0297-7**

**Comment Excerpt Text:**
In most of the field offices affected by this EIS, full field inventories and public input on the proposed inventories has not yet occurred or is ongoing in these field offices. Until full field inventories are completed and the public is given an opportunity to analyze and comment on these inventories, these inventories cannot be considered complete, and therefore BLM should adopt a broad approach to addressing lands with wilderness characteristics in this EIS. Because the potential LWCs were identified on the basis of likely containing at least 5,000 acres of unroaded, undeveloped land, BLM should assume for the purposes of this EIS that all potential LWCs overlapping with mapped sage-grouse habitat may likely provide important habitat and represent good opportunities for sage-grouse conservation.

**Comment Number: NVCASG-14-0311-12**

**Comment Excerpt Text:**
Additionally, lands with wilderness characteristics are subject to continuation of existing uses including grazing in a manner and to a degree in which the same were being conducted in 1976 at the time of the passage of FLPMA. If the FEIS and Record of Decision call for management under any alternative so as to exclude grazing, the issue once again arises as to whether that form of management is consistent with the Tenth Circuit's decision in Public Lands Council v. Babbitt, 167 F.3d 1287 (10th Cir. 1999), affirmed on other grounds, 529 U.S. 728 (2000). The court criticized BLM’s grazing regulations that would have allowed the placement of grazing districts into non-use status for the entire duration of a grazing permit absent designation of the lands as wilderness study areas through the FLPMA Section 603(c) process. The FEIS should explain how BLM is in compliance with the 2014 Interior appropriations act prohibitions on funding and implementing Secretarial Order No. 3310. Any alternative that may be selected by BLM must not manage lands with wilderness characteristics as de facto wilderness.
25.3 Impact Analysis

Comment Number: NVCASG-14-0109-7
Comment Excerpt Text:
14, All, Section 1.7, 21

The document fails to list wilderness plans for a number of locations within the planning area and recommendations for addressing sage-grouse needs within these areas. How do wilderness areas provide benefits to sage-grouse and opportunity to increase and or maintain their population segments when range treatments are limited or disallowed within wilderness areas?

Comment Number: NVCASG-14-0105-2
Comment Excerpt Text:
The Elko County Commission passed a Resolution last week declaring the raven a Nuisance to the health, safety and welfare of the people, livestock, and wildlife of Elko County. (See Resolution in Footnote 1 below.) The Resolution cites to and is based on the best scientific studies and research available showing the danger that Ravens pose to Sage Grouse. Under NEPA, BLM is required to accept and implement this Resolution as a local directive as the most effective and least restrictive alternative for the benefit of Sage Grouse.

Comment Number: NVCASG-14-0109-13
Comment Excerpt Text:
106, All, Table 4.2, 604

While Livestock grazing, wildfire, and other are listed as threats in this table, it is inexcusable that BLM does not include predators among the threats, or even to footnote the chart to explain that predators are not the responsibility of the land management agencies but rather the State and USFWS. Not showing predators among the threats leaves a critical void in the information that the publics deserve and need to be fully apprised of. We strongly recommend addressing this concern in the final document.

Comment Number: NVCASG-14-0109-4
Comment Excerpt Text:
BLM made a dismal attempt to analyze the concern of predator control although USFWS has acknowledged and stated predation has increased dramatically in the Great Basin.

Comment Number: NVCASG-14-0120-5
Comment Excerpt Text:
Failure to consider predation. The U.S. Fish & Wildlife service has recognized predation as a significant factor related to the decline of GRSG distribution and abundance. Yet, the Draft EIS fails to address predation issues or the potential for mitigation measures that could reduce impacts from predation.

Comment Number: NVCASG-14-0128-1
Comment Excerpt Text:
The effects of this predation can be very large, resulting in complete fledging failure of the least tern colony in Venice, CA in 7 years of the 12 year period 1999-2010 (Delnevo et al. 2009) and reducing marbled murrelet (Nelson and Hamer 1995) and sage grouse (Coates and Delehanty 2004, Dinkins 2013) nesting success by close to 50%. Modeling work (Peery and Henry 2010) supports this extremely large predation effect, showing that reducing corvid populations by 40% would reduce marbled murrelet 100 year extinction likelihood from 96% to 5%.

These numbers are astounding. Multi-fold increases in predator numbers and 50% decreases in fledging rates would be expected to cause extremely large decreases in prey populations. Yet the Bureau of Land Management documents largely ignore this by far most likely cause, and instead concentrate on something—grazing—that is correlated in precisely the wrong direction to be a causal factor in sage grouse decline.

Comment Number: NVCASG-14-0132-11
Comment Excerpt Text:
Predation needs to be considered as part of the habitat, especially since common raven population
indices have increased by 400% between 1968 and 2009 (Breeding Bird Survey 2011).

**Comment Number: NVCASG-14-0132-40**

**Comment Excerpt Text:**

It may well be that the modern-day (2007-2013) predator base is similar to what it was before being artificially depressed by man’s widespread (geographically and temporally) use of 1080, M44s and other lethal controls in the 1940s through the 1970s. If that is the case, and since sage-grouse co-evolved with its predators, then an equally rational conclusion is that the prey base (sage-grouse) populations have now also returned to such pre-control levels. But, if the ultimate goal is to increase GRSG populations to that of the 1960s, then substantial predator control may be called for.

**Comment Number: NVCASG-14-0149-1**

**Comment Excerpt Text:**

we urge the BLM to take a more proactive role in the predation issue by increasing communication with state and federal wildlife agencies relating to predator management, and where appropriate incorporating coordinated predator management plans into habitat restoration projects.

**Comment Number: NVCASG-14-0151-3**

**Comment Excerpt Text:**

It has been well documented that sagegrouse predators, ravens in particular, have experienced a major increase over the past 50 years. This has resulted in a direct increase in predation on sagegrouse and their nests. While the BLM may not have the authority to conduct lethal predator control, they have direct authority on habitat and land use, which can influence the presence and effectiveness of predators.

**Comment Number: NVCASG-14-0171-14**

**Comment Excerpt Text:**

We understand that it was eliminated from further consideration because the BLM believes it is outside its authority, but it is unacceptable to have other users potentially suffer substantial economic hardship and still not address one of the primary threats to the bird. There is no legal reason why the BLM/FS cannot make a strong statement in the document that predator control will be analyzed and implemented in conjunction with the states when appropriate.

**Comment Number: NVCASG-14-0174-1**

**Comment Excerpt Text:**


Comment Number: NVCASG-14-0179-2

Comment Excerpt Text:
It is well documented in many areas that sage grouse recruitment is not keeping up with loss during nesting and brood rearing even where habitat conditions are favorable. The RMP/EIS must call for active control of corvids (especially ravens), raptors, and mammalian predators such as coyotes and badgers. Predator control could result in an immediate increase in sage grouse production. Livestock have not used the Hart Mountain and Sheldon National Wildlife Refuges for many years and sage grouse production has not rebounded. Without a doubt an important limiting factor is the presence of predators and wild horses.

Comment Number: NVCASG-14-0180-1

Comment Excerpt Text:
The document does not even list predators as a major threat, even though the handout provided at open public meetings entitled USFWS-Identified Threats to Greater Sage-grouse and Their Habitat clearly lists “Predation” as a threat, noting that resource programs for addressing the threats applies to all program areas. Establishment of design features and BMPs/RFDs can reduce the threat of predation. These threats must be appropriately identified, framed and addressed in the final document and ROD.

In regards to predation: BMPs and RFDs do not allow the application of all possible management tools to reduce the threat of predation. Coordinating with Wildlife Services to remove predators can also reduce the threat of predation and must be included as part of BLMs strategy for improving sage-grouse numbers.

Comment Number: NVCASG-14-0188-9

Comment Excerpt Text:
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.

Comment Number: NVCASG-14-0191-1

Comment Excerpt Text:
The DEIS also declined to address predator control because wildlife populations are managed by NDOW and CDFW, while BLM and the Forest Service manage habitat. DEIS 18. However, habitat and wildlife populations are not distinct and separable issues. Rather, land use choices have important effects on predator populations. For example, municipal landfills and roads contribute to increases in common raven populations, and ”[ ravens are known to be an important predator on sage-grouse nests and have been considered a restraint on sage-grouse population growth.” 75 Fed. Reg. 13927. The
EIS should therefore consider how the Project will affect predator populations.

**Comment Number: NVCASG-14-0195-12**

Comment Excerpt Text:
A number of studies have reported findings related to GRSG predation which needs to be considered by the agencies in the planning process. Found in Dinkin, et al (2012) "Depredation of nests and predation of chicks can be two of the most influential factors limiting GRSG productivity.” Quality of nesting habitat is an important factor but predation is detrimental to nest survival of greater sage grouse and must be addressed. Coates et. al (2008) reports that nest predation is the primary cause of nest failure in GRSG. Webb et. al. (2012) stated that predation of GRSG nests was the most common cause of nest failure (84.7 percent) followed by direct predation on the female (13.6 percent). Bui et. al. (2010) reported that nesting ravens are responsible for most GRSG predation.

**Comment Number: NVCASG-14-0199-39**

Comment Excerpt Text:
Page 18, 1.5.4. Issues Eliminated from Detailed Analysis Because They Are Beyond the Scope of the LUPAs:

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 sagegrouse populations and habitats.

**Comment Number: NVCASG-14-0201-8**

Comment Excerpt Text:
Cumulative Effects. NOGA finds it very hard to comprehend why predation and hunting of sage grouse are not analyzed so that the relative impacts for each alternative can be put in context, especially with regard to cumulative effects. BLM and Forest Service do not have to have a program for hunting or predation to include these population suppressing factors in the analyses; they must be included to understand how effectively the alternatives address the conservation of sage-grouse. Cumulative impacts result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertaking such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place of a period of time [40 CFR 1508.7]. The actions by NDOW to regulate hunting and the actions by the U.S. Fish and Wildlife Service and NDOW to authorize predator control qualify as agency (Federal or non-Federal) undertakings. As such, they should be included in the analysis.

**Comment Number: NVCASG-14-0203-1**

Comment Excerpt Text:
Information contained in the Draft LUPA/DEIS fails to adequately address the adverse effects of predation on the sage-grouse population in Nevada. Significant growth of predator populations, particularly the coyote and raven, pose a series threat to sage-grouse and other prey species on public lands. Despite the known adverse effects of predator population expansion, the Draft LUPA/DEIS does little to address these risks. Future land planning and wildlife management policy should adequately address the damage imposed by predators of the sage-grouse.
Comment Number: NVCASG-14-0204-1
Comment Excerpt Text:
Of the “major threats” that are identified within the LUPA and DEIS to harm the survival of the greater sage-grouse it is observed that not once is predation mentioned as any kind of threat to the existence of the greater sage-grouse. It is strongly recommended that if there is a list that compiles supposed threats that predation is also a part of this list. Excluding predation, regardless of who is in charge of its control, would be an unprofessional and unbalanced assessment.

Comment Number: NVCASG-14-0204-2
Comment Excerpt Text:
Chapter 4, Section 4.3.1, Table 4.2

If steps are to be taken to make a list of the various threats to greater sage-grouse it is absurd that predators would not make the list. This is what has been done in this table. Not only is it questionable on the scientific proof that livestock grazing threatens greater sage-grouse habitat it greatly rises suspicions that predators would not even be mentioned in this table.

Comment Number: NVCASG-14-0224-10
Comment Excerpt Text:
Although USFWS (2010) previously recognized predation as a factor related to the decline in GRSG distribution and abundance, neither the COT report, the NTT report nor this LUPA/DEIS address the potential of predation to affect populations of GRSG in NV. Of particular note, neither report nor this LUPA/DEIS suggest measures that could reduce predation.

A number of studies have reported findings related to GRSG predation which need to be considered by the agencies in the planning process. For example, Dinkins et al (2012) reported “Depredation of nests and predation of chicks can be two of the most influential factors limiting GRSG productivity.” Dinkins (2013) reported that GRSG hen survival was negatively correlated with golden eagle density. Coates et al (2008) report that nest predation is the primary cause of nest failure in GRSG. Webb et al (2012) stated that predation of GRSG nests was the most common cause of nest failure (84.7 percent) followed by direct predation on the female (13.6 percent). Bui et al (2010) reported that nesting ravens are responsible for most GRSG predation.

Dzialak et al (2011) found that the spatial patterns of risk during GRSG nesting and brood rearing suggested a human-mediated increase in predator abundance or effectiveness as a potential cause of increased risk (i.e., predator subsidization). Watterson et al (2002) found that Richardson’s ground squirrels were the primary predators of GRSG nests with some predation by corvids (e.g., ravens) and badgers. Baxter et al (2007) found that non-native red fox is an effective predator on GRSG in Utah and threaten to extirpate the GRSG from the study area if not controlled. Bedrosian and Craighead (2010) suggest that limiting the population growth of non-native red fox in the Jackson Hole study area would benefit GRSG. Kirol (2012) reported that predation is a major factor contributing to GRSG chick survival. Coates (2007) reported that ravens and badgers were the primary predators on GRSG nests and at high population densities; ravens can substantially reduce GRSG reproduction. Coates and Delechanty (2004) found that raven population reductions through poisoning resulted in GRSG nesting success of 73.6 percent compared to expected nest success of 42.6 percent. Coates and Delechanty (2010) report that raven abundance has increased an estimated 300 percent in the United States and as much as 1,500 percent in some parts of the western United States. Cote and Sutherland (1997) reported that removing predation often has a large positive effect on hatching success and post-breeding populations of target birds. Dinkins et al (2012) found that GRSG select nesting and brood-rearing areas with fewer avian predators.

Comment Number: NVCASG-14-0226-7
Comment Excerpt Text:
Scientific studies relevant to predation by ravens on GRSG include:

Comment Number: NVCASG-14-0240-5
Comment Excerpt Text:
BLM made a dismal attempt to analyze the concern of predator control although USFWS has acknowledged and stated predation has increased dramatically in the Great Basin.

Comment Number: NVCASG-14-0247-2
Comment Excerpt Text:
While the Draft EIS recognizes that predation is a major threat to the GRSG populations, it fails to recognize that predation is part of the habitat. It also fails to recognize that even if there is more federal emphasis on positive changes in the habitat for the CRSG, predation, if not reduced significantly, will ultimately destroy the GRSG population.

Comment Number: NVCASG-14-0247-3
Comment Excerpt Text:
As the population of the ravens are allowed to increase because the protections afforded them under Federal law, the competition amongst the ravens will grow and the predation on the eggs of GRSG will also increase. The failure of the EIS to examine this issue and examine ways to deal with the raven infestation in ways that do not affect the local geoeconomic structure of local communities is problematic at best and a clear failure to follow the requirements of the EIS provisions at worst.

Comment Number: NVCASG-14-0250-1
Comment Excerpt Text:
Failure to address predation occurring under federal authority after listing predation under state authority is to incompletely address the issue; even if it is decided that the issue is beyond the scope of the BLM and USFS authority.

Comment Number: NVCASG-14-0285-51
Comment Excerpt Text:
Noise from military overflights can create noise in excess of 100 dBA. Disturbance from low altitude military overflights from military bases in the Mojave Desert are a concern for sage 31 grouse conservation. Please analyze the frequency and number of low-level overflights historically and currently over identified sage grouse habitats, the altitude at which these overflights occur, the types of aircraft making such low-level overflights, and the estimated decibel noise levels at affected leks. Sage grouse Priority and General Habitats should thus be closed to low-level military overflights during the breeding and nesting season for sage grouse. We recommend that noise limits be imposed in the RMP, allowing no greater than 32 dBA noise levels in sage grouse nesting and breeding habitats.

Comment Number: NVCASG-14-0285-61
Comment Excerpt Text:
Livestock grazing also leads to cheatgrass invasion, as overgrazing eliminates native bunchgrasses and degrades biological soil crusts, both of which represent the ecosystem’s natural defenses against this invasive weed (Reisner et al. 2013, Attachment 18). The plan amendment must implement measures that will reverse this trend with ironclad certainty. In order to minimize the spread of cheatgrass, livestock forage removal limits need to be set under the RMP amendment, allowing no more than 25% of the available forage to be consumed each year. Widespread devastation of rangeland (and more pertinently to this amendment, sage grouse habitat) and loss of habitat value can be wrought by this invasive weed. DEIS at 436. BLM must restore degraded habitats by managing for elimination of cheatgrass from the system.

Comment Number: NVCASG-14-0285-67
Comment Excerpt Text:
BLM provides baseline information on the spatial extent of cheatgrass “high probability” in the planning area (See DEIS at Figure 3-5). This totals 8 million acres across all land types in the planning area. DEIS at 427. BLM must restore degraded habitats by managing for elimination of cheatgrass from the system.
14% per year. DEIS at 427. How is this distributed in Priority and General Habitats? How will this change by alternative over the life of the plan amendment? Elsewhere in the DEIS, cheatgrass “threat” is equated with “presence.” DEIS at 875. There also is no baseline information on the spatial extent of non-native grasses such as crested wheatgrass, which also are deleterious to sage grouse. This 56 information should be included in the EIS to inform impact analyses under the various alternatives.

Comment Number: NVCASG-14-0285-68
Comment Excerpt Text:
Thus, livestock grazing plays a key role in the spread of cheatgrass, both pre-fire in the sagebrush understory, and post-fire leading to conversion to annual grasslands. BLM states,

The dominance of cheatgrass and medusahead in the intermountain West, partly caused by extensive overgrazing in the late 1800s and early 1900s, would not be rectified by simply removing cattle of by reducing their numbers....Passive restoration methods may not allow for conversion to a different vegetation community.

DEIS at 662. This statement is erroneous at least in part, and is directly contradicted by the finding of Yeo (2005), who demonstrated that cessation of livestock grazing leads to recovery of grass cover in sagebrush ecosystems, and restoration of rangeland health. As BLM itself states, “Removal of annual hot season grazing would allow for re-establishment of riparian and wetland plant communities resulting in functional floodplains and for elevated water tables, conditions leading to expansions in amount and extent of riparian habitats.” DEIS at 678. BLM’s ‘hard look’ failure in this instance leads to the result that the appropriate management actions (removal of livestock grazing entirely from cheatgrass-infested ranges, or at the very least removal of livestock from allotments that have burned for a minimum of three years) are not applied in either of the Preferred Alternatives. We are also concerned that this assumption has biased the results of the impacts analysis regarding Alternative C, which should have the best performance in long-term range health due to removal of the leading cause of range health decline, domestic livestock. We are concerned that this bias in impacts analysis leads the agencies to erroneous conclusions regarding relative fire risk across alternatives.

Comment Number: NVCASG-14-0288-3
Comment Excerpt Text:
Although the LUP accurately states that the BLM and USFS do not have management or control authority over predators, we are concerned about the very real threat that the overabundance of predators have on sage grouse. Because the LUP is proposing to alter land use activities to protect the species, it must be stated in the selected final alternative that before land use is limited, adequate measures must be undertaken to limit predator populations. Regardless of the amount of perceived suitable habitat for sage grouse, if predator populations are above sustainable and natural levels, they will have a big impact on the survival of the sage grouse species. It cannot be overlooked that the decline of sage grouse closely mirrors both the decline in grazing numbers on public lands and the decline in predator control efforts.

Comment Number: NVCASG-14-0297-3
Comment Excerpt Text:
Transmission lines should be more strictly managed in priority habitat.

Anti-perching devices should be required for all new overhead transmission lines in greater sage-grouse habitats to reduce predation from raptors. In addition, the BLM should work with right-of-way holders to identify conflict areas and get anti-perching devices installed on existing overhead powerlines in these same habitats. These two minimizing techniques are noted in the Lander RMP (Draft EIS at 882). Because approximately 74-80% of sage-grouse females nest within 4 miles of leks (Moynahan 20046, Holloran and Anderson 20057), this measure will help to reduce predatory pressures on nesting and foraging grouse. We recommend deterrent devices on H-frame structures because recent research indicates they are effective tools in reducing perch
use of such structures (Lammers and Collopy 2007, Slater and Smith 2010).

Comment Number: NVCASG-14-0307-1
Comment Excerpt Text:
A number of studies indicate that predation (particularly by ravens) is one of the main causes of sage grouse reproductive failure and potentially limiting sage grouse populations. Where raven numbers are high they can successfully find and raid nests even in otherwise "good" habitat. Many of the features that promote the raven population such as fragmentation of habitat, roads, highways and associated trash and road-kill, utility corridors, solid waste transfer stations, etc. are now permanent fixtures on the landscape.

Comment Number: NVCASG-14-0308-46
Comment Excerpt Text:
BLM and the Forest Service livestock grazing allotments include numerous water developments aimed at allowing livestock to graze across entire landscapes. These water developments provide supplemental water for sage-grouse predators. For example, ravens are known to preferentially use stock tanks over natural springs in arid environments (Knight et al.1998).

Comment Number: NVCASG-14-0311-10
Comment Excerpt Text:
the Service's warranted but precluded finding raises concerns about anthropogenic causes of the species' decline including transmission corridors, wind energy structures, and other tall structures as providing perching points for avian predators and yet a full discussion and disclosure of the impact of those predators on Sage-grouse is not provided in the DEIS. If predators are not a significant threat to the species as concluded by the Service, then why is BLM analyzing the effects of anthropogenic structures that would lead to predation of Sage-grouse? The FEIS should not dodge the predator issue simply by the notion that predator control is primarily a state-regulated action and therefore outside the scope of the plan amendments. See Section ES.7. The absence of detailed analysis of disease and predators in the current environment and their effects on the alternatives results is a major omission of the DEIS, especially since disease and predation are among the five specific ESA factors that could lead to a listing.

Comment Number: NVCASG-14-0311-22
Comment Excerpt Text:
Table 5.8 fails to adequately identify reasonably foreseeable future actions. For example, hunting and predator control are determined to be outside the scope of the DEIS. See Section ES.6 and 1.5.4. Given that both hunting and predator control are known, identified and foreseeable future actions, they must be analyzed as part of the cumulative impacts analysis even though they are considered to be outside of the scope of the action alternatives themselves. As BLM properly notes, the cumulative impacts analysis takes into account all reasonably foreseeable actions regardless of land ownership and jurisdiction.

Comment Number: NVCASG-14-0311-28
Comment Excerpt Text:
The DEIS' discussion of predation is similarly inadequate. The Service's warranted but precluded finding states that predation may be limiting Sage-grouse populations in northeastern Nevada where Y-3 II operates. 75 Fed. Reg. at 13973. The Service notes that landscape fragmentation, habitat degradation and human populations have the potential to increase predator populations including increased suitability for ravens among other species that attack Sage-grouse. Like the discussion of West Nile Virus, the Service concludes that definitive data are lacking to link Sage-grouse population trends with predator abundance. As with West Nile Virus, BLM has a duty to obtain this information or explain why it is either unavailable or too expensive to obtain. There is vast anecdotal information available as indicated by comments from ranchers across the West about the increase in predation on Sage-grouse and other species.

Comment Number: NVCASG-14-0344-13
Comment Excerpt Text:
Noble concludes that the Cumulative Effects analysis in the Draft LUPA/DEIS is inadequate and not in
compliance with 40 CFR 1508.7. Two major impacts to sage-grouse were eliminated from detailed analysis because the BLM and Forest Service do not have jurisdiction over hunting and predation. However, 40 CFR 1508.7 is clear that the federal agencies do not have to be "undertaking such other actions" to have them included in the cumulative effects analysis.

**Comment Number: NVCASG-14-0344-4**

**Comment Excerpt Text:**
Noble finds it very hard to comprehend why predation and hunting of sage grouse are not analyzed as a component of a cumulative effects analysis so that the relative impacts for each alternative can be put in context. It is not required for BLM and Forest Service to have a program for hunting or predation to include these population suppressing factors in the analyses. Rather these populations must be included to understand how effectively the alternatives address the conservation of sage-grouse. Cumulative impacts result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal or person undertaking such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place of a period of time [40 CFR 1508.7].

**Comment Number: NVCASG-14-0346-2**

**Comment Excerpt Text:**
Chapter: Intro, Section: 1.5.4, Page Number: 18

Comment: Some predator control actions may also be subject to federal laws and regulations, not just state laws. In the case of ravens, for example, a permit is required from the U.S. Fish and Wildlife Service due to the Migratory Bird Treaty Act.

**Comment Number: NVCASG-14-0351-11**

**Comment Excerpt Text:**
Estimates of predation rates on juveniles are limited (Aldridge and Boyce 2007, p. 509; Hagen 2011, p. 98). Chick mortality due to predation ranged from 10 to 51 percent in three study sites (Gregg et al. 2003a, p. 15; 2003b, p. 17). Mortality due to predation during the first few weeks after hatching was estimated at 82 percent (Gregg et al. 2007, p. 648). Crawford et al. (2004, p.4 and references therein) reported survival of juveniles to their first breeding season was approximately 10 percent, and predation was one of several factors affecting juvenile survival. "Raven abundance has increased as much as 1,500 percent in some areas of western North America since the 1960's." (Coates and Delhanty 2010, p. 244 and references therein).

**Comment Number: NVCASG-14-0351-12**

**Comment Excerpt Text:**
Human made structures in the environment increase the effect of raven predation, particularly in low canopy cover areas, by providing ravens with perches (Braun 1998, pp. 145-146; Coates 2007, p. 155; Bui 2009, p. 2). Reduction in patch size and diversity of sagebrush habitat, as well as the construction of fences, power lines, landfills, and other infrastructure also are likely to encourage the presence of the common raven (Coates et al. 2008, p. 426; Bui 2009, p. 4).

**Comment Number: NVCASG-14-0351-18**

**Comment Excerpt Text:**
there are scientific studies which demonstrate that predation is an enormous problem in the habitat of the GRSG, to wit: "Predation of adult GRSG occurs, survival of the adult birds ranges from 55 to 67% for females and from 38 to 60% for males." (Zablan 1993, Connelly et al, 1994).

**Comment Number: NVCASG-14-0351-5**

**Comment Excerpt Text:**
Roads can provide corridors for predators to move into previously unoccupied areas. For some mammalian species, dispersal along roads has greatly increased their distribution (Forman and Alexander 1998, p. 212; Forman 2000, p. 33). Corvids (e.g., ravens (Corvus spp.)) also use linear features like roads as travel routes, expanding into new regions (Knight and Kawashima 1993, p. 268; Connelly et al. 2004, p. 12-3). Associated with roads are highway rest areas, which provide a source of food and perches for corvids and raptors, and facilitate their
movements into surrounding areas (Connelly et al. 2004, p. 7–25).

**Comment Number: NVCASG-14-0351-6**  
Comment Excerpt Text:  
In areas with low vegetation and relatively flat terrain, power poles provide hunting perches roosting perches, and nesting stratum for raptors and corvids (Steenhof et al. 1993, p. 27; Connelly et al. 2000a, p. 974; Manville 2002, p. 7; Vander Haegen et al. 2002, p. 503), which in turn can result in increased predation of sage-grouse. Power poles increase a raptor’s range of vision, allow for greater speed during attacks on prey, and serve as territorial markers (Steenhof et al. 1993, p. 275; Manville 2002, p. 7). In southern Idaho and Oregon, raptors and ravens began nesting on the support poles within 1 year of construction of a 596-km (372.5-mi) power line (Steenhof et al. 1993, p. 275); after 10 years, 133 pairs of raptors and ravens were nesting along this line." (Steenhof et al. 1993, p. 275).

**Comment Number: NVCASG-14-0351-7**  
Comment Excerpt Text:  
In Nevada, raven counts increased by approximately 200 percent along the Falcon–Gondor power line within 5 years of construction (Atamian et al. 2007, p. 2). In Utah, Ellis (1985, p. 10) reported that golden eagle (Aquila clausaetos) predation of sage grouse increased from 26 to 73 percent of the total lek predation after construction of a power line within 200 meters (220 yards) (yd) of an active lek; the lek was eventually abandoned, and Ellis (1985, p. 10) concluded that the line changed sage-grouse dispersal patterns and fragmented the habitat. In Wyoming, leks within 0.4 km (0.25 mi) of new power lines had significantly lower growth rates (measured by recruitment of new males onto the lek), presumed to be from increased raptor predation (Braun et al. 2002, p. 10). Municipal solid waste landfills and associated roads contribute to increases in synanthropic predators (i.e., predator species adapted to conditions created or modified by people) (Knight et al. 1993, p. 470; Restani et al. 2001, p. 403; Webb et al. 2004, p. 523). For example, common raven numbers have increased dramatically across the West (see "Predation" section below); commonly in association with human developments, and ravens are a sage-grouse nest predator that restrains sage-grouse population growth in some locations (Batterson and Morse 1948, p. 14; Autenrieth 1981, p. 45; Coates 2007, p. 26). In one Nevada study, corvids (i.e., ravens) were responsible for more than 50 percent of nest depredations (Coates 2007, pp. 26–30).

**Comment Number: NVCASG-14-0351-8**  
Comment Excerpt Text:  
Predation of sage-grouse as a food item is the most commonly identified cause of direct mortality during all life stages (Schroeder et al. 1999, p. 9; Connelly et al. 2000b, p. 228; Casazza et al. 2009, p. 45; Connelly et al. 2011a, p. 65). Until recently, there has been little published information that indicates predation is a limiting factor for the sage grouse (Connelly et al. 2004, p. 10–1), particularly where habitat quality has not been compromised (Hagen 2011, p. 96). Although many predators consume sage-grouse, none specialize on the species (Hagen 2011, p. 97). However, generalist predators may have a significant effect on ground nesting birds because predator numbers are independent of prey density (Coates 2007, p. 4). Hens will abandon nests when disturbed by predators." (Patterson 1952, p. 110).

**Comment Number: NVCASG-14-0352-1**  
Comment Excerpt Text:  
It has been noted that the numbers of ravens have increased 600% in the last 10 years. BLM made a dismal attempt to analyze the concern of predator control although USFWS has acknowledged and stated predation has increased dramatically in the Great Basin.

**Comment Number: NVCASG-14-0361-1**  
Comment Excerpt Text:  
Under, Major Threats identified by the BLM and the USFWS, hunting and predator control are not listed. How can these two threats not be considered? Shouldn’t the increase in the raven and crow population across the state and the studies that prove they destroy a lot of GRSG nests (studies conducted
by Dr. Coates, wildlife biologist from the USGS) be proof that they are a major threat? Under 1.5.4, it is stated that hunting and predator control is outside the BLM’s authority to address, but under 1.6 it notes coordinating and cooperating with agencies. If this is the case, why isn’t the BLM coordinating with NDOW to address the predator and hunting threats? It is good to see in 2.4 Table 7 that predation is being addressed by reducing avian perching, but more needs to be done. In 1988 NDOW released a study Project W-48-R-21 that showed a continual decline in GRSG numbers across Nevada for the past 30 years and that ravens/crows were determined to be the greatest predator with dummy nest losses of 39% occurring in "good Sage Grouse habitat".

**Comment Number: NVCASG-14-0364-1**
**Comment Excerpt Text:**
The plan is missing a vital aspect, predation. The BLM could provide all the best habitat required to help the sage grouse but if raccoons, ravens, raptors and other predators are not managed nothing will improve.

**Comment Number: NVCASG-14-0365-1**
**Comment Excerpt Text:**
There was no information presented on the predators of sage grouse and, at present, no control of the predators in our pasture allotments.

**Comment Number: NVCASG-14-0372-2**
**Comment Excerpt Text:**
The increase in native predators, particularly ravens, and non-native species, such as raccoons, must be addressed. While the BLM and USFS may not have jurisdiction over this issue, I am not aware of a process comparable to the DEIS where the public may recommend that the Nevada Department of Transportation should have an obligation to remove road-kill and that the Environmental Protection Agency should require land-fill operators to manage garbage to reduce subsidies to raven populations. These efforts would need to be coordinated with increased raven takes sanctioned by the United States Fish and Wildlife Service so that the loss of food sources for a predator species does not increase the predatory loss of the sage grouse.

**Comment Number: NVCASG-14-0376-4**
**Comment Excerpt Text:**
BLM made a dismal attempt to analyze the concern of predator control despite the fact, USFWS has acknowledged and stated predation has increased dramatically in the Great Basin. Therefore we request full disclosure by BLM of predator issues especially raven and crow predation (600% increase over the past 30 years) and a scientific review of cumulative effects of properly applied predator control.

**Comment Number: NVCASG-14-0381-1**
**Comment Excerpt Text:**
The preferred course of action and various mitigation proposals do not address the extent of effects predators have on sage grouse populations.

**Comment Number: NVCASG-14-0384-2**
**Comment Excerpt Text:**
Predator control is an important area that is not adequately emphasized. We do not agree that predator control is outside the scope of this EIS and think the document should include policies to promote and support predator control in areas where sage grouse populations are being impacted by predation.

**Comment Number: NVCASG-14-0385-11**
**Comment Excerpt Text:**
NREA utility members fully understand the need to protect greater Sage Grouse, but believe the use of perch discouragers should be limited to where they would provide the greatest value and benefit to the species rather than used wholesale. Use of such devices in a wholesale manner presents an unnecessary burden on utilities for very few or no return benefits. Instead of placing perch discouragers on all structures throughout potential greater Sage Grouse habitat, such resources may be best placed in areas which concentrate greater Sage Grouse. Based on the results of Blomberg and Sedinger (2008) and Nonne et al. (2013) which did not see a decrease in nest survival, pre-fledgling survival, and female survival despite a dramatic increase in raven abundance, as well as the presence of other existing perching on the landscape, NREA utility members do not feel the...
wholesale application of perch discouragers is warranted. To reduce potential predation pressure on birds attending leks, and nesting and brood rearing females, NREA utility members may agree to place perch discouragers on structures where location specific evidence supports their application when those structures are up for ROW renewal.

**Comment Number: NVCASG-14-0394-1**

**Comment Excerpt Text:**
Predator control is an important area that is not adequately emphasized. We do not agree that predator control is outside the scope of this EIS and think the document should include policies to promote and support predator control in areas where sage grouse populations are being impacted by predation. A good start would be to support increased control of ravens and coyotes by the Wildlife Services Agency. Existing quotas do not allow the agency to meaningfully reduce the concentration of predators in sage grouse habitat areas.

27. **NOISE**

**Comment Number: NVCASG-14-0083-38**

**Comment Excerpt Text:**
Text Referencing: Locatable, Leasable, and Salable Minerals Management - The authors found that the low-frequency mining noise in the study area was continuous across days and seasons and did not diminish as it traveled from its source.

Comment: The authors offered no reference to studies conducted or data collected. Metaphorical and assuming statement. This would also apply to assumptions made concerning Oil and Gas exploration and development. This statement should not be included in the FEIS / LUPA.

**Comment Number: NVCASG-14-0091-65**

**Comment Excerpt Text:**
The last paragraph on page 609, which continues onto page 610, includes a discussion of noise impacts. The DEIS states that the “authors found that the low-frequency mining noise in the study area was continuous across days and seasons and did not diminish as it traveled from its source.” Two points need to be made. First, the noise may be continuous at an operating mine or oil and gas well, but the level of noise is variable during the day depending on the level of activity, wind, weather, and topography. The sentence as written implies a continuous level as well as continuous noise production. This needs to be corrected or clarified.

The second point refers to the italicized text (added in this comment for emphasis). This statement is incorrect and scientifically impossible. Noise attenuates with distance; this is a law of physics. While it is correct to state that low frequency tones attenuate at a lower rate than high frequency tones, they do attenuate. Noise studies routinely include “contours” that indicate how noise from a source diminishes with distance from the source. If the statement in the DEIS were true, then the distance of these disturbance from a lek or other seasonal habitat would not matter because the statement indicates the noise level would be the same no matter what distance the lek or habitat is from the source. In addition, the work done by Patricelli and others indicates that the higher frequency noise is more likely to interfere with sage-grouse activities than low frequency noise. Therefore, the implications of the text in question are misleading.

**Comment Number: NVCASG-14-0150-1**

**Comment Excerpt Text:**
The BLM/USFS have failed to identify nest and youngling GRSG predation as a significant cause to loss of populations. This needs to be incorporated into the LUP to address needed management practices to reduce predation occurrence to the GRSG.

**Comment Number: NVCASG-14-0155-1**

**Comment Excerpt Text:**
As there is now sufficient research to indicate an association between sounds in the landscape and biological activities of upland birds including greater sage-grouse, the discussion of the greater sage-grouse resource, Subchapter 3.2.2: Sage-Grouse Biology and
Life History, should also include the relationship between the ambient sound environment and life-cycle requirements for nesting, breeding and avoiding predation.

**Comment Number: NVCASG-14-0155-2**

*Comment Excerpt Text:*

(Patricelli et al. Fall 2013). The 2013 paper does not infer that ambient measures are between 20 - 24 dB(A), but rather that an ambient value of 16 to 20 dB(A) should be used for interim protections (frequency is A-weighted for human perception). Patricelli, et al. suggest that noise protection is critical for all life-cycle periods including mating, foraging, nesting, and brood-rearing and recommend that "noise >10 dB above ambient be managed as a disruptive activity throughout sage-grouse lekking, nesting, and brood-rearing habitat (e.g., BLM 2012).

**Comment Number: NVCASG-14-0188-37**

*Comment Excerpt Text:*

Page 17-18, Section 4.3.2. Nature and Type of Effects, Locatable, Leasable, and Salable Minerals Management:

The last paragraph on page 17, which continues onto page 18, includes a discussion of noise impacts. The DEIS states that the "authors found that the low-frequency mining noise in the study area was continuous across days and seasons and did not diminish as it traveled from its source." Two points need to be made. First, the noise may be continuous at an operating mine or oil and gas well, but the level of noise is variable during the day depending on the level of activity, wind, weather, and topography. The sentence as written implies a continuous level as well as continuous noise production. This needs to be corrected or clarified.

The second point refers to the italicized text (added in this comment for emphasis). This statement is incorrect and scientifically impossible. Noise attenuates with distance; this is a law of physics. While it is correct to state that low frequency tones attenuate at a lower rate than high frequency tones, they do attenuate. Noise studies routinely include "contours" that indicate how noise from a source diminishes with distance from the source.

**Comment Number: NVCASG-14-0199-60**

*Comment Excerpt Text:*

"We played drilling noise and road noise on leks at 70 dB (F) sound pressure level (unweighted decibels) measured 16 m directly in front of the speakers (Fig. 1 & Supporting Information). This is similar to noise levels measured approximately 400 m from drilling rigs and main access roads in Pinedale, Wyoming (J.L.B and G.L.P., unpublished data).

"To minimize disturbance, we took propagation measurements during the day. Daytime ambient noise levels are typically 5-10 dBA higher than those in the
early morning (J.L.B and G.L.P., unpublished data) and are likely higher than those heard by birds at a lek."

"For leks treated with drilling noise, recordings from 3 drilling sites were spliced into a 13-minute mp3 file that played on continuous repeat. On leks treated with road noise we randomly interspersed mp3 recordings of 56 semi-trailers and 61 light trucks with 170 30-second silent files to simulate average levels of traffic on an access road (Holloran 2005). Noise playback on experimental leks continued throughout April in 2006, from mid-February or early March through late April in 2007, and from late February through late April in 2008. We played back noise on leks 24 hours/day because noise from deep natural gas drilling and vehicular traffic is present at all times."

There was no data presented in the cited studies that the playback sound was an accurate rendition of actual frequencies and sound pressure levels from oil and gas operations as measured at set-back distances required by the BLM, or that it occurred at the same levels 24 hours a day. Instead, the authors relied upon "unpublished data" or speculation. The BLM cannot rely upon data that are not publicly available (unverifiable data), or speculation, as the basis for its decision making.

The EIS did not accurately portray the methods and results of the studies by Patricelli et al. (2010) and Blickley et al. (in preparation). As an initial matter, Patricelli et al. (2010) is an unpublished, 16-page PowerPoint presentation, it is not a scientific paper or report.

Recordings of operations and traffic noise were played back at the edges of leks at sound pressure levels in excess of what they would be on the majority of lands managed by the BLM where oil and gas operations occur. While a 0.25 mile buffer has been the minimum set back distance required by the BLM, most oil and gas operations are found at far greater distances from leks (Wyoming Oil and Gas Conservation Commission well data and Wyoming Game and Fish lek count and location data). Thus, the reported effects on sage grouse were biased in the cited studies to achieve a negative response by sage grouse rather than measure responses from sound pressure levels as they would occur at the required set back distances.

Blickley et al. (in press) maximized projected sound from recordings at the edges of leks, which were as high as the noise levels occurring within 200m of a busy freeway (as measured across an open field with traffic loads of greater than 50,000 cars per day, or 55-70 decibels as shown in Figure 2 of Reijnen et al. 1995). Below, is a relevant excerpt from Blickley et al. (in press):

"Drilling-noise recordings were broadcast on experimental leks at an equivalent sound level (Leq) of 71.4±1.7 dBF (unweighted decibels) SPL re 20 Pa (56.1±0.5 dBA [A-weighted decibels]) as measured at 16 meters; on road-noise leks, where the amplitude of the noise varied with the simulated passing of vehicles, noise was broadcast at an Lmax (maximum RMS amplitude) of 67.6±2.0 dBF SPL (51.7±0.8 dBA)."

The fact that authors broadcast such high levels of noise in such close proximity to leks biased the results, an error of omission by the authors and the EIS that cites them and proposed regulations based upon their recommendations.

The EIS and the NTT Report where much of the information came from cannot have it both ways, claiming a negative effect on sage grouse populations but admitting that there was "low statistical support for a cumulative effect of noise over time" in the study by Blickley et al. (in press). As noted above, there are no data showing a long-term cumulative decline in the sage grouse population in the Pinedale Planning Area.

Deficiencies in Blickley et al.'s equipment are detailed below.

Microphone:

According to the manufacturer (http://en-us.sennheiser.com/k6-microphone-system), "the ME 62 [microphone used by Blickley et al.] is an omni-
directional microphone head suitable for K6 and K6P powering modules. It can be used for reporting, discussions and interviews. The ME 62 is particularly suitable for good reproduction of ‘room’ ambience and ‘spaced omni’ stereo recording. Matt black, anodized, scratch-resistant finish.”

Recorder:

The Marantz model PMD670 used by Blickley et al. does not offer high-resolution (88.2 or 96 KS/s) sampling rates, its metering characteristics are unknown, and it is limited to 16/48 recording and thus is not considered a high-resolution recorder. It retails online for $700.

Playback speakers:

The speakers used in the study were standard outdoor speakers camouflaged as rocks and designed for background music playing in home, hotel, and amusement park applications. They were not designed for accurately reproducing industrial sounds. The specifications for the speakers may be found on the manufacturers' website:

http://www.ticcorp.com/specifications_tfs14.pdf. The speakers were powered by 12 volt car batteries rather than 120 volt AC power and a car stereo amplifier of unknown make and model was used to boost the output. Packed into each simulated rock speaker housing was a 10" woofer with an injection molded cone, a 5.5" midrange cone, and 2" soft dome tweeter. The size and quality of the speakers, and the small speaker housing, severely limits the physical capability of the system to accurately reproduce either low or high frequency sound produced by oil and gas operations or traffic.

As a result of substandard equipment and lack of expertise in sound recording and reproduction, Blickley et al. (in press) resorted to placing their speakers at the edge of leks and to playing their systems at high levels in order to elicit a behavioral response. This is a biased approach to obtain a preferred result. The BLM cannot rely on biased research in its decision-making.

The recommended noise levels are not based upon any standardized, repeatable data collection, or accepted methods of sound measurement.

The methods used by Blickley et al. (in press), and reported results did not contain either any credible, professional analysis of local ambient sound levels or oil and gas noise (e.g. the type, duration, frequencies, sound pressure levels, and power of sound produced by different oil and gas drilling or production operations; equipment being recorded); or employ the use of professionally accepted standards, such as International Organization for Standardization (ISO) standards for quantifying industrial and traffic noise (http://www.iso.org/iso/home/standards.htm). The standards not followed by the cited studies include, but are not limited to: ISO 1996-1:2003 Acoustics -- Description, measurement and assessment of environmental noise -- Part 1: Basic quantities and assessment procedures; ISO 9613-2:1996 Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation; ISO 4871:1996 Acoustics -- Declaration and verification of noise emission values of machinery and equipment; ISO 532:1975 Acoustics -- Method for calculating loudness level; ISO 7196:1995. Acoustics -- Frequency-weighting characteristic for infrasound measurements; ISO 8297:1994 Acoustics -- Determination of sound power levels of multisource industrial plants for evaluation of sound pressure levels in the environment -- Engineering method; and IEC 61672-1:2002(E) - Electroacoustics, Sound level meters -- Part 1: Specifications).

Blickley et al. did not employ any sound propagation models in their study to quantify the confounding effect of temperature, relative humidity, topography, ground cover and surface porosity, wind direction, the direction noise was generated from, the geographic extent of the noise, its duration, frequency of occurrence, or permanence, (Attenborough 2007). Nor did they provide any correlation of their playbacks compared to the industrial and traffic sources they had attempted to
duplicate. Furthermore, no graphic equalizer was used which would have allowed for the adjustment of sound pressures in different frequency ranges (at standardized 1/3 octave band frequencies), and no measurement of sound pressure levels was taken in front of playback speakers, which together would have allowed for the accurate reproduction of the sound at the same frequencies and sound pressure levels as the original noise. Therefore, BLM cannot base regulations upon no data and results based upon arbitrary methods that are not compliant with accepted professional standards in the noise control industry (i.e. Bies and Hansen 2009; ISO).

Noise limits recommended in the EIS, based on the NTT Report are biased downward.

What is being proposed for noise thresholds is an "impossible to achieve" standard found in an idyllic wilderness setting, on quiet days when the wind does not blow, the leaves do not rustle, birds do not sing, humans are completely absent, streams are not close by, and no aircraft fly overhead. While this may be appropriate for management of anthropogenic sound in the wilderness areas of some national parks (Lynch et al. 2011), it is not appropriate and would be impossible to achieve on most of the BLM lands in the West that are administered for multiple uses.

There are no data to justify the minimum sound levels used as a basis in Blickley et al.'s (in press) recommendations, or the supposed "disruptive activities" that an increase of 10dBA above these would cause. There are no data to show that the minimum levels recommended in the NTT based alternatives in the EIS occur for extended periods of time in any of the sage-grouse core areas, including the Pinedale Planning Area.

The EIS, based on the NTT Report, or cited studies, did not present the results of other studies of noise generated by the oil and gas industry (especially in the Pinedale Planning Area), even though those studies and data were available at the time the EIS was being prepared (i.e., Harvey 2009). The cited studies were biased in a way to find a measurable impact, the speakers were increased from two to four during the course of the study, and the sound pressures measured in front of the speakers, and effect on sage grouse, were made without regard to the increased sound gradient created by their close distance (i.e. due to the physics of sound attenuation over distances, also known as the inverse square law, where sound decreases four times for every doubling of distance from its source) as compared to leks at the required BLM setback distances of 0.25 or 0.6 miles.

**Comment Number: NVCASG-14-0291-9**
**Comment Excerpt Text:**
Because impacts are not well understood, the 10dBA increase restriction identified in the EIS is arbitrary. The 10dBA increase restriction (and any noise restriction) should be removed from consideration in the EIS. Because there is no scientific consensus on the level of noise that could negatively impact Sage-Grouse, this noise restriction measure will not aid in the recovery of Sage-Grouse.

**Comment Number: NVCASG-14-0344-35**
**Comment Excerpt Text:**
at the perimeter of a lek during active lek season, a restriction that was pulled directly from the BLM's National Technical Team (NTT) report. This requirement is based on questionable studies, is overly restrictive, and would be difficult, if not impossible, to achieve. Dr. Patricelli has modified the ambient noise level since the NTT report was published and has another publication in press that will revise this level again. Therefore, the restriction is based on a moving target and not on any measurement that is scientifically defensible.

**Comment Number: NVCASG-14-0346-10**
**Comment Excerpt Text:**
Lyon and Anderson (2003) suggested that light traffic disturbance (1-12 vehicles/day) during the breeding season might reduce nest-initiation rates and increase distances moved from leks during nest-site selection. Also see acoustic impacts (Slickley and Patricelli 2012)