
Appendix P

Response to Comments on the Draft Land Use Plan
Amendment/Environmental Impact Statement

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APPENDIX P

RESPONSE TO COMMENTS ON THE DRAFT LAND USE PLAN AMENDMENT/ENVIRONMENTAL IMPACT STATEMENT

P.1 INTRODUCTION

After publishing the Draft LUPA/EIS, the 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 NEPA regulations.

The BLM and Forest Service have reviewed and are responding 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 CEQ'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. 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 Final EIS, 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 Final EIS. 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, or C).
- 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 OHVs.
- More areas should be made available for multiple uses (e.g., drilling, OHVs, and 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/Final EIS 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 Colorado State Office. Comments received by mail, email, and at meetings, or delivered orally during the public meetings are tracked by commenter name and submission number.

P.1.1 Campaign Letters

Several organizations and groups held standardized letter campaigns for the 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.

P.1.2 How This Appendix is Organized

This appendix is divided into three main sections. The first section, Introduction, provides an overview of the comment-response process. The second section, Issue Topics, Responses, and Comments, 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 comment summaries that relate to Greater Sage-Grouse (GRSG) fall under Section 7, Greater Sage-Grouse. This includes subsections such as Best Available Information and Baseline Data, Range of Alternatives, and Impacts. Each topic or subtopic contains a statement that summarizes all substantive comments received on that topic or subtopic and the BLM's and Forest Service's response to the summary statement. Excerpts of all substantive comments are posted on the project website: http://www.blm.gov/co/st/en/BLM_Programs/wildlife/sage-grouse/0.html.

The terms preliminary priority management area (PPMA) and preliminary general management area (PGMA) were used in the Draft 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. As such, the summary statements also use these terms. However, responses use the terminology used in the Proposed LUPA/Final EIS (PHMA and GHMA).

The third section, Commenter Lists, provides the names of individuals who submitted unique comment letters (not campaign letters) on the Draft LUPA/EIS.

P.2 TOPICS, RESPONSES, AND COMMENTS

Section 4 – NEPA

Section 4.2 – Cooperating Agency Relationships

Summary

The BLM did not coordinate with state and local agencies that would be adversely economically affected by the actions considered in the EIS. Additionally, the BLM did not coordinate with Garfield County School District on development of the EIS.

Response

Both the CEQ and BLM planning regulations define cooperating agency status, including what it is, who is eligible to become a cooperating agency, and how the lead agency should invite participation as a cooperating agency (40 CFR 1501 and 1508; 43 CFR 1601.0-5). Cooperating relationships are limited to government entities: state agencies, local governments, tribal governments, and other federal agencies that have jurisdiction by law or special expertise. To be a cooperating agency, the local agency must meet the eligibility criteria set out in regulation and policy. BLM policy does not define coordinating agencies (BLM Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners, pages 21 and 31, respectively).

These relationships were described in the Draft LUPA/EIS, Section 6.3, Cooperating Agencies (page 986). On January 20, 2012, the BLM wrote to 80 local, state, federal, and tribal representatives, inviting them to participate as cooperating agencies for the Northwest Colorado Greater Sage-Grouse LUPA/EIS. Twenty-two agencies agreed to participate on the EIS as designated cooperating agencies, all of which have signed Memoranda of Understanding with the Northwest District Office (Table 6.1, Cooperating Agencies).

In addition to the BLM's invitations to a wide variety of agencies to participate as cooperating agencies, the BLM published the following statement in the Notice of Intent, published in the Federal Register on December 9, 2011:

Federal, State, and local agencies, along with other stakeholders that may be interested or affected by the BLM's or Forest Service's decision on this proposal are invited to participate in the scoping process and, if

eligible, may request or be requested by the BLM to participate as a cooperating agency.

The City of Rifle was one of the 80 invited agencies; however, the City did not accept the invitation. While the BLM did formally invite the State of Colorado, a specific participation invitation letter was not sent to the Colorado River Fire Rescue Regional Fire Authority.

DOI regulations (43 CFR 46.225(c)) require the BLM, as lead agency, to consider any request by a government entity to participate as a cooperating agency (BLM Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners, pages 8 and 9). From the time that the Notice of Intent was published and throughout the development of the EIS, an agency could notify the BLM to request cooperating agency status. However, the BLM did not receive this notification from the Colorado River Fire Rescue Regional Fire Authority or any other agency or entity to request cooperating agency status during development of the Draft LUPA/EIS nor in any of the Draft LUPA/EIS comment letters; as a result, only the agencies described in Section 6.3, Cooperating Agencies (page 986) were cooperating agencies in development of the EIS.

Section 4.3 – Range of Alternatives

Summary

The comments were focused on several issues related to the alternatives presented in the Draft LUPA/EIS:

1. Commenters believe that the preferred alternative does not meet the stated purpose of and need for action because they believe that it is not a rigorous and scientifically sound approach.
2. Commenters feel that the alternatives are all largely the same, and that the BLM and Forest Service need to provide more distinction (range) between the alternatives.
3. The BLM and Forest Service need to consider the alternatives presented by cooperating agencies and environmental organizations, including the Garfield County alternative, the Sage-Grouse Recovery Alternative, and alternatives for the listing of the species or not listing the species.

Response

1. In accordance with NEPA, the BLM and Forest Service have discretion to establish the purpose of and need for action (40 CFR 1502.13). CEQ regulations direct that an EIS "...shall briefly specify the underlying purpose of and need for action to which the agency is responding in proposing the alternatives including the proposed action" (40 CFR 1502.13). Also, under the CEQ regulations, the

BLM and the Forest Service are required to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources as provided by section 102(2)(E) of the Act [NEPA].” (40 CFR 1501.2(c)). The breadth or narrowness of the purpose of and need for action statement has a substantial influence on the scope of the subsequent analysis. The purpose of and need for action statement provides a framework for issue identification and will inform the rationale for alternative selection. The range of alternatives developed are intended to meet the purpose of and need for action and address the issue; thereby, providing a basis for eventual selection of an alternative in a decision (BLM NEPA handbook and Forest Service Handbook 1909.15 – National Environmental Policy Act Handbook Chapter 10 – Environmental Analysis).

As stated in the Draft LUPA/EIS, Section 1.2, Purpose of and Need for the Land Use Plan Amendments (page 6), the BLM and the Forest Service prepared the Northwest Colorado LUPA with an associated EIS to be applied to lands with GRSG habitat. This effort responds to the USFWS’s March 2010 “warranted, but precluded” Endangered Species Act listing petition decision, and that existing regulatory mechanisms in BLM and Forest Service LUPs was inadequate to protect the species and its habitat. The range of alternatives, including the preferred alternative and its components (such as the disturbance caps), focus on areas affected by threats to GRSG habitat identified by USFWS in the March 2010 listing decision. Formulated by the planning team and with input from the cooperating agencies, the preferred alternative represents those goals, objectives, and actions determined to be most effective at resolving planning issues, balancing resource use at this stage of the process, and meet the stated purpose of and need for action. While collaboration is critical in developing and evaluating alternatives, the final designation of a preferred alternative remains the exclusive responsibility of the BLM and Forest Service. See the Draft LUPA/EIS, Section 1.2, Purpose of and Need for the Land Use Plan Amendments (page 6) and Section 2.7, Considerations for Selecting a Preferred Alternative (pages 41-42) for further details.

2. The BLM and the Forest Service considered a range of alternatives during the GRSG planning process in full compliance with the NEPA. The CEQ regulations (40 CFR 1502.14(a)) require that the BLM and the Forest Service consider a range of alternatives that respond to "the underlying purpose and need" for the project (40 CFR 1502.13); therefore, the range of alternatives is thus limited to alternatives that meet the identified purpose of and need for action. While there are many possible alternatives or actions to manage

BLM-administered and National Forest System lands and GRSG in the planning area, the BLM and the Forest Service fully considered the planning issues and criteria developed during the scoping process to determine a reasonable range of alternatives. Further, CEQ regulations and Forest Service directives (FSM 1950 and FSH 1909.15) give the deciding official discretion to determine the appropriate range of alternatives and to select the alternative that best meets the stated purpose of and need for action. As a result, four alternatives that meet the purpose of and need for action and best address the issues and concerns identified by the affected public were analyzed in detail in the Draft LUPA/EIS. The range of alternatives in the Draft LUPA/EIS represented a full spectrum of options including a no action alternative (current management, Alternative A).

As described in the Draft LUPA/EIS, Section 2.3, Alternative Development Process (page 34), the Northwest Colorado Greater Sage-Grouse LUPA/EIS planning team employed the BLM and Forest Service planning process to develop a reasonable range of alternatives for the LUPA. The BLM and Forest Service complied with NEPA and the CEQ implementing regulations at 40 CFR 1500 in the development of alternatives for the Draft LUPA/EIS, including seeking public input and analyzing reasonable alternatives. The alternatives include management options for the planning area that would modify or amend decisions made in the field office LUPs, as amended, to meet the planning criteria, to address issues and comments from cooperating agencies and the public, or to provide a reasonable range of alternatives. Since this is a plan amendment to address GRSG conservation, many decisions from the field office LUPs are acceptable and reasonable. In these instances, there was no need to develop alternative management prescriptions.

Public input received during the scoping process was considered to ensure that all issues and concerns would be addressed, as appropriate, in developing the alternatives. The planning team developed planning issues to be addressed in the LUPA, based on broad concerns or controversies related to conditions, trends, needs, and existing and potential uses of planning area lands and resources.

Additionally, the three resulting action alternatives (Alternatives B, C, and D) offer a range of possible management approaches for responding to planning issues and concerns identified through public scoping, and to maintain or increase GRSG abundance and distribution in the planning area. While the goal is the same across alternatives, each alternative contains a discrete set of objectives and management actions and constitutes a separate LUPA with the potential for different long-range outcomes and conditions.

The relative emphasis given to particular resources and resource uses differs as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs. When resources or resource uses are mandated by law or are not tied to planning issues, there are typically few or no distinctions between alternatives. Meaningful differences among the four alternatives are described in Table 2-2, Comparative Summary of Alternatives, in the Draft LUPA/EIS, Section 2.8, Summary Comparison of Alternatives (page 42).

3. Based on this alternative development process, the BLM considered input from cooperating agencies, environmental organizations, tribal governments, and the public. As described in the Draft LUPA/EIS Section 2.4.2, Alternative B (page 39), the BLM used the GRSG conservation measures in *A Report on National Greater Sage-Grouse Conservation Measures* (NTT 2011) to form BLM management direction under Alternative B, which is consistent with the direction provided in BLM Washington Office Instruction Memorandum 2012-044 (the BLM must consider all applicable conservation measures developed by the NTT in at least one alternative in the land use planning process).

During scoping for the Northwest Colorado Greater Sage-Grouse LUPA/EIS, individuals and conservation groups submitted management direction recommendations for protection and conservation of GRSG and its habitat, including the Sage-Grouse Recovery Alternative and proposed disturbance cap. The recommendations, in conjunction with resource allocation opportunities and internal sub-regional BLM input, were reviewed in order to develop BLM management direction for GRSG under Alternative C (Draft LUPA/EIS, Section 2.4.3, Alternative C [page 39]).

Alternative D incorporates adjustments to the NTT Report (NTT 2011) to provide a balanced level of protection, restoration, enhancement, and use of resources and services to meet ongoing programs and land uses. Alternative D was developed in full cooperation with the cooperating agencies and incorporated agencies' concerns with socioeconomic issues.

The Garfield County Alternative was analyzed but not considered in detail in the Draft LUPA/EIS primarily because it is contained within the existing range of alternatives (Draft LUPA/EIS, Section 2.6.2, Garfield County Alternative [page 41]). However, the BLM included the alternative as an appendix and requested public comment on it. Based on the public input, the BLM would analyze the alternative and the public comments, then make the determination if it would be part of the Proposed Action in the Proposed LUPA/Final EIS.

Portions of the Garfield County Alternative informed the Proposed LUPA/Final EIS, particularly in those areas within GRSG habitat that contain unique terrain features or habitat use by GRSG.

While the State of Colorado did not submit a complete alternative or elements to be considered as part of another alternative, the BLM considered the Colorado Department of Natural Resources' Colorado Greater Sage-Grouse Conservation Plan: The Colorado Package (Draft LUPA/EIS, Appendix N) in its cumulative effects analysis (Draft LUPA/EIS, Section 5.4, Special Status Species – Greater Sage-Grouse [page 944]).

Whether the GRSG is determined for listing by USFWS is outside the jurisdiction of the BLM and Forest Service and beyond the scope of this EIS. As noted in the purpose of and need for action statement, the BLM and Forest Service were to consider regulatory mechanisms that would protect the species and its habitat. As such, the BLM and Forest Service did not develop alternatives based on whether USFWS chooses to list or not list the GRSG.

Section 4.5 – GIS Data and Analysis

Summary

Commenters noted several issues with the GIS data and analysis conducted in the Draft LUPA/EIS:

- The maps and data layers do not provide enough detail to address “local ecological site variability.” The data are too coarse and do not provide assurances to more localized decision making; some habitat type areas are inaccurately identified in the maps.
- The BLM used old data layers to develop maps; the BLM should use the newer data layers that CPW produced.
- The BLM should consider additional variables in the CPW data model to better represent the PPH (now known as PHMA) and PGH (now known as GHMA) areas.

Response

Before beginning the Northwest Colorado Greater Sage-Grouse LUPA/EIS and throughout the planning effort, the BLM and the Forest Service considered the availability of data from all sources, adequacy of existing data, data gaps, and the type of data necessary to support informed management decisions at the land-use plan level. The data needed to support broad-scale analysis of the planning area are substantially different than the data needed to support site-specific analysis of projects. The LUPA/EIS data and information is presented in map and table form and is sufficient to support the broad scale analyses required for land use planning.

Additionally, the BLM and the Forest Service consulted with, and collected and incorporated data from other agencies and sources, including but not limited to the USFWS, Colorado Parks and Wildlife (CPW), Office of Surface Mining, Colorado State Land Board, and the US Department of Energy. Considerations included but were not limited to GRSG habitat delineated by CPW, threatened and endangered species habitats, deer and elk herd management areas, fluid mineral development areas, solid mineral development areas, and mineral potential areas. The CPW is continually collecting and refining population and habitat data for species, and the Draft LUPA/EIS notes that the BLM and Forest Service would incorporate any refinements or updates once the data was made available by CPW. To date, CPW has neither published nor provided the newer data for use for the Proposed LUPA/Final EIS.

As a result of these actions, the data gathered by the BLM and the Forest Service is of the appropriate scale and provided an adequate analysis that led to an adequate disclosure of the potential environmental consequences of the alternatives.

Section 4.6 – Indirect Impacts

Summary

The BLM has not considered the direct, indirect, and cumulative socioeconomic impacts of the proposed action on the Grand River Health District. Any restrictions on oil and gas production in Garfield County would have detrimental effects on the Grand River Health District, due to the funding they receive through tax revenues generated by oil and gas development.

Response

The Draft LUPA/EIS provides an adequate discussion of the environmental consequences, including the cumulative impacts, of the presented alternatives. As required by 40 CFR 1502.16, the Draft LUPA/EIS provides a discussion of the environmental impacts of the alternatives, including the proposed action, any adverse environmental effects that cannot be avoided should the alternatives be implemented, the relationship between short-term uses and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented. The Draft LUPA/EIS provided sufficiently detailed information to aid in determining whether to proceed with the preferred alternative or make a reasoned choice among the other alternatives in a manner such that the public could have an understanding of the environmental consequences associated with the alternatives, in accordance with 40 CFR 1502.1.

Land use plan-level analyses are typically broad and qualitative rather than quantitative or focused on site-specific actions (BLM Land Use Planning Handbook H-1601-1, Chapter II, A-B at 11-13 and Chapter IV, B at 29; Forest Service Handbook 1909.12 – Land Management Planning). The Draft LUPA/EIS

contains only planning actions and does not include any implementation actions. A more quantified or detailed and specific analysis would be required only if the scope of the decision included implementation actions. As specific actions that may affect the area come under consideration, the BLM and the Forest Service will conduct subsequent NEPA analyses that include site-specific project and implementation-level actions. The site-specific analyses will tier to the plan-level analysis and expand the environmental analysis when more specific information is known. In addition, as required by NEPA, the public will be offered the opportunity to participate in the NEPA process for implementation actions.

Impacts were considered on numerous resources, resource uses, and socioeconomic conditions, which include the issues and populations serviced by the Grand River Health District. See Draft LUPA/EIS, Section 4.24, Social and Economic Impacts (Including Environmental Justice) (page 894).

Section 4.7 – Cumulative Impacts

Summary

The BLM failed to disclose the impacts resulting from the GRSG being listed.

Response

Analyzing the impacts as a result of assuming that the GRSG may be listed under the ESA is outside the scope of this LUPA. The purpose of and need for this LUPA is to address inadequacy of regulatory mechanisms that were identified as one of the listing factors for GRSG in the USFWS finding on the petition to list GRSG. The USFWS identified the principal regulatory mechanism for the BLM and Forest Service as conservation measures in LUPs. In response to the USFWS findings, as well as the BLM and Forest Service's requirement to manage sensitive species, the BLM and Forest Service are preparing LUPAs with associated EISs to evaluate the incorporation of conservation measures for GRSG. Because the purpose of the LUPAs is to identify and potentially incorporate appropriate conservation measures to conserve, enhance, and restore GRSG habitat by reducing, eliminating, or minimizing threats to that habitat, the alternatives in this EIS focus on those conservation measures that can be incorporated into the LUPs.

Section 4.9 – Mitigation Measures

Summary

The BLM and Forest Service need to include a monitoring, mitigation, and adaptive management plan/framework in the Proposed LUPA/Final EIS that will include specific criteria for determining GRSG conservation success and how the disturbance percentages will be calculated.

The BLM and Forest Service need to define when mitigation would be used and have enough specificity in the mitigation and monitoring plans to implement them in development actions.

Response

Draft LUPA/EIS Appendix G, Surface Reclamation Plan, refers to the White River Field Office because it originated in that field office. The plan would be adopted for the Northwest Colorado Greater Sage-Grouse LUPAs, as specified in Draft LUPA/EIS Chapter 2, Alternatives. The appendix has been updated to make it specific to the Northwest District and the Colorado Greater Sage-Grouse LUPA.

Mitigation, monitoring, and adaptive management framework plans have been added to the Proposed LUPA/Final EIS; see Chapter 2, Section 2.6, Adaptive Management, Monitoring, and Mitigation, and Appendices F, Greater Sage-Grouse Monitoring Framework, and G, Greater Sage-Grouse Mitigation Strategy. Mitigation will be applied to all implementation actions and decisions that take place on BLM-administered and National Forest System lands within GRSG habitat during the life of this plan. The Regional Mitigation Framework was developed to follow the BLM's Regional Mitigation Manual MS-1794, Forest Service Handbook FSH 1909.15, and CEQ 40 CFR 1508.20.

The mitigation framework, through the mitigation hierarchy, guides the BLM and Forest Service to provide a net conservation gain. The hierarchy direction is to:

1. Avoid impacts entirely by not taking a certain action or parts of an action.
2. If unable to avoid, minimize impacts by limiting the degree or magnitude of an action or parts of an action.
3. If avoidance or minimizing is not possible, compensate impacts associated with future implementation actions.

If residual impacts on GRSG from implementation-level actions remain after applying avoidance or minimization measures, then compensatory mitigation projects will be used to offset the residual impacts in an effort to achieve the land use plan goals and objectives. As articulated in Appendix G, compensatory mitigation will occur on sites that have the potential to yield the greatest conservation benefit to the GRSG, regardless of land ownership. These sites should be sufficiently "durable." According to BLM Draft Manual Section 1794, Regional Mitigation Manual, durability is defined as "the administrative, legal, and financial assurances that secure and protect the conservation status of a compensatory mitigation site, and the ecological benefits of a compensatory mitigation project, for at least as long as the associated impacts persist." Although Draft Manual Section 1794 has not been finalized, the BLM will continue to consider the guidance set forth therein as it undertakes the land use planning effort. The BLM is appropriately considering and evaluating the guidance set forth in Draft Manual Section 1794, in addition to any other relevant internal agency guidance, through the GRSG planning process.

Specific mitigation strategies, based on the Regional Mitigation Framework, will be developed by regional teams (at the WAFWA Management Zone level) within 1 year of the issuance of the Record of Decision. These strategies will guide the application of the mitigation hierarchy to address GRSG impacts within that WAFWA Management Zone. The WAFWA Management Zone Regional Mitigation Strategy will be applicable to BLM-administered and National Forest System lands within the Management Zone boundaries. Subsequently, the BLM and Forest Service NEPA analyses for implementation-level decisions that might impact GRSG will include analysis of mitigation recommendations from the relevant WAFWA Management Zone Regional Mitigation Strategies.

The monitoring framework in Appendix F outlines the methods that the BLM and Forest Service will use to monitor and evaluate the implementation and effectiveness of the plan to conserve the species and its habitat at the landscape scale. The regulations for the BLM (43 CFR 1610.4-9) and the Forest Service (36 CFR 219.12) require that LUPs establish intervals and standards, as appropriate, for monitoring and evaluations, based on the sensitivity of the resource to the decisions involved.

Implementation monitoring results will provide information to allow the BLM and Forest Service to evaluate the implementation of decisions from the BLM Resource Management Plans (RMPs) and Forest Service Land and Resource Management Plans (LRMPs) to conserve GRSG and its habitat. Effectiveness monitoring will provide the information to evaluate whether BLM and Forest Service actions achieve the objective of the planning strategy (BLM Instruction Memorandum 2012-044), which is to conserve GRSG populations and its habitat.

Monitoring efforts will include data for measurable quantitative indicators of sagebrush availability, anthropogenic disturbance levels, and sagebrush conditions. This information will assist the BLM and the Forest Service in identifying whether or not they are achieving their LUP goals and objectives, reaching an adaptive management soft or hard trigger, as well as providing information relative to the disturbance cap. Specifically, habitat degradation (percent of human activity in a biologically significant unit), habitat availability (percent of sagebrush in a biologically significant unit), and habitat degradation intensity (density of energy facilities and mining locations) will be gathered to inform the disturbance cap objective.

Adaptive management is a systematic approach for improving resource management by learning from management outcomes. An adaptive approach involves exploring alternative ways to meet management objectives, anticipating the likely outcomes of alternatives based on the current state of knowledge, implementing one or more of these alternatives, monitoring to learn about the impacts of management actions, and then using the results to update knowledge and adjust management actions accordingly.

Incorporating adaptive management into the Northwest Colorado Great Sage-Grouse LUPA/EIS will ensure a degree of certainty that the decisions in the plan will effectively contribute to the elimination or adequate reduction of one or more threats to the GRSG and its habitat. The adaptive management approach incorporates a set of triggers in the plan, a soft and hard trigger. These triggers were developed to inform the BLM and Forest Service as to when the federal agency needs to take action to address a declining trend in GRSG populations or habitat figures.

Soft triggers represent an intermediate threshold indicating that management changes are needed at the project/implementation level to address habitat and population losses. Hard triggers represent a threshold indicating that immediate action is necessary to stop a severe deviation from GRSG conservation goals and objectives as set forth in the BLM and Forest Service LUPs. The adaptive management soft and hard triggers and land use planning responses to these triggers are described and analyzed fully in this EIS. Refer to Proposed LUPA/Final EIS Section 2.6.1, Adaptive Management Plan, for a complete description of the adaptive management strategy.

The agencies will use the data collected from monitoring (Proposed LUPA/Final EIS Appendix F, Greater Sage-Grouse Monitoring Framework) to identify any changes in habitat conditions related to the goals and objectives of the plan. The BLM and Forest Service will use the information collected through monitoring to determine when adaptive management triggers are met.

Section 5 – Federal Land Policy and Management Act

Summary

The alternatives are overly focused on protecting GRSG and none of them meet the FLPMA or MUSYA multiple use mandate requirements.

Response

As stated in the Draft LUPA/EIS, Section 2.2, Introduction to Resource Management Plan Amendment Alternatives (page 34), the alternatives “meet the purpose of and need for the LUP or LUPA.” The LUPA is a targeted amendment specifically addressing goals, objectives, and conservation measures to conserve GRSG and to respond to the potential of it being listed (see also Draft LUPA/EIS, Section 1.2, Purpose of and Need for the Land Use Plan Amendments [page 6]).

The BLM’s FLPMA (Section 103(c)) defines "multiple use" as the management of public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people. Accordingly, the BLM is responsible for the complicated task of striking a balance among the many competing uses to which BLM-administered lands can be put. The BLM’s multiple-use mandate does not require that all uses be allowed on all areas of BLM-administered lands. The purpose of the mandate is

to require the BLM to evaluate and choose an appropriate balance of resource uses which involves tradeoffs between competing uses. The FLPMA also directs the BLM to develop and periodically revise or amend its RMPs, which guide management of BLM-administered lands, and provides an arena for making decisions regarding how lands would be managed and used.

It is consistent with the BLM's multiple-use mission to undertake a targeted planning process geared toward identifying and embedding appropriate GRSG conservation measures in RMPs, while allowing other uses of the public lands such as livestock grazing, traditional and renewable energy, and recreation to continue.

Consistent with the Multiple-Use Sustained-Yield Act of 1960 (MUSYA; 16 USC 528–531), the Forest Service manages National Forest System lands to sustain the multiple use of its renewable resources in perpetuity while maintaining the long-term health and productivity of the land. Resources are managed through a combination of approaches and concepts for the benefit of human communities and natural resources. Land management plans guide sustainable, integrated resource management of the resources within the plan area in the context of the broader landscape, giving due consideration to the relative values of the various resources in particular areas. The Forest Service is required by statute to have a national planning rule: the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the National Forest Management Act of 1976, requires the Secretary of Agriculture to issue regulations under the principles of the MUSYA for the development and revision of land management plans.

The Northwest Colorado Greater Sage-Grouse LUPA/EIS is a targeted amendment specifically addressing goals, objectives, and conservation measures to conserve GRSG and to respond to the potential of it being listed (see Draft LUPA/EIS, Section 1.2, Purpose of and Need for the Land Use Plan Amendments [page 6]). Both the BLM and Forest Service planning processes allow for analysis and consideration of a range of alternatives in the Draft LUPA/EIS that identified and incorporated appropriate regulatory mechanisms to conserve, enhance, and restore GRSG habitat and to eliminate, reduce, or minimize threats to this habitat to ensure that a balanced management approach was recommended. The Draft LUPA/EIS includes alternatives that provide a greater and lesser degree of restrictions in various use programs, but would not eliminate or invalidate any valid existing development rights.

Additionally, the BLM and the Forest Service developed the Northwest Colorado Greater Sage-Grouse Draft LUPA/EIS with involvement from cooperating agencies (see Draft LUPA/EIS, Section 6.3, Cooperating Agencies [page 986]), including CPW, Garfield County, and 20 others, to ensure that a balanced multiple-use management strategy to address the protection of GRSG

while allowing for utilization of renewable and nonrenewable resources on the BLM-administered and National Forest System lands.

Section 5.2 – Consistency with Other State, County, or Local Plans

Summary

The actions considered in the alternatives conflict with local and state agency plans and policies; furthermore, the BLM and Forest Service did not coordinate with agencies to ensure that conservation measures are as consistent as possible with other planning jurisdictions.

Response

The BLM and Forest Service LUPs and amendments strive for consistency with officially approved or adopted resource-related plans of Native American tribes, other federal agencies, and state and local governments to the extent that these resource-related plans comport with FLPMA and other federal laws and regulations (see 43 CFR 1610). The BLM and Forest Service have worked closely with state and local governments during preparation of the Draft LUPA/EIS. The Draft LUPA/EIS lists the cooperating agencies actively involved in the planning process in Section 6.4, Coordination and Consistency (page 988). The BLM and Forest Service work to find a balance among uses and needs as reflected in these local government plans and has done so in the preparation of the LUPA/EIS; a list of these plans can be found in the Draft LUPA/EIS, Section 1.7, Relationship to Other Policies, Plans, and Programs (page 26). While the BLM and Forest Service are not obligated to seek consistency, the agencies are required to describe the inconsistencies between the proposed action and other plans, policies, and controls within the EIS. This information has been updated in the Proposed LUPA/Final EIS.

The BLM and Forest Service coordinate with cooperating agencies commensurate with each agency's recognized jurisdiction or expertise. In areas where the State of Colorado has clear jurisdiction, such as wildlife populations, the BLM and Forest Service have worked closely with that agency. In cases where a county or agency has expertise, such as local county socioeconomic information, the BLM and Forest Service have worked closely with the group to incorporate the information into the EIS.

In addition, all BLM land use plans or plan amendments and revisions must undergo a 60-day Governor's consistency review prior to final approval to ensure consistency with state and local plans, policies, and programs.

Section 6 – Other Laws

Summary

The BLM and Forest Service have failed to document how the EIS and actions considered in the EIS comply with other laws, including all Onshore Orders regulating oil and gas development, the Energy Policy Act of 2005 and Energy

Policy and Conservation Act of 2000, other multiple use mandates (e.g., MUSYA, Forest and Rangeland Renewable Resources Planning Act of 1974, National Forest Management Act of 1976), and compliance with other federal agency regulations (e.g., Federal Regulatory Energy Commission).

Response

The Draft EIS Section 2.5 and Final EIS Section 2.7.2, Management Common to All Alternatives, state that all alternatives would comply with state and federal laws, regulations, policies, and standards, and implement actions originating from laws, regulations, and policies. Additionally, in Draft and Final EIS Section 1.6, Planning Criteria, the BLM has a criterion stating that all BLM alternatives would comply with existing laws, regulations, and policies. The BLM and Forest Service have reviewed all actions in the Proposed LUPA and found them to be consistent and within the bounds of all required laws, regulations, and policies.

Section 7 – Greater Sage-Grouse

Section 7.1 – NTT Report/Findings

Summary

Commenters had two opposing views regarding the National Technical Team (NTT) report. One group suggested that the BLM and Forest Service should not use the NTT Report and only follow existing agency policy for conserving GRSG. The agencies have not justified the need for using the NTT Report as the basis for GRSG management direction. Another group suggested that the BLM and Forest Service did not go far enough and watered-down the conservation measures that were recommended in the NTT Report; the findings should have been used as is, without any changes.

Response

A National Technical Team (NTT) was formed as an independent, science-based team made up of representatives from the BLM, USFWS, Natural Resources Conservation Service, US Geological Survey, and state wildlife agencies from Colorado, Nevada, Oregon, Idaho, and Utah to ensure that the best information about how to manage the GRSG is reviewed, evaluated, and provided to the BLM and the Forest Service during this planning process. The group produced a report in December 2011 that identified science-based management considerations to promote sustainable GRSG populations. The resultant *Report on National Greater Sage-Grouse Conservation Measures* (NTT 2011) used the best current scientific knowledge to guide the BLM and Forest Service planning efforts through management considerations to ameliorate threats, focused primarily on priority GRSG habitats on BLM-administered and National Forest System lands. In a letter to Secretary Salazar, dated January 15, 2013, more than 100 scientists endorsed the NTT Report, stating that it, “represented comprehensive compilation of the scientific knowledge needed for conserving

Sage-Grouse” and that it “offers the best scientifically supportable approach to reduce the need to list Sage-Grouse as a Threatened or Endangered species.”

The range of alternatives is based upon analysis of public scoping comments as well as information provided in the NTT Report and state management plans. GRSG conservation measures in the NTT Report were used to form BLM and the Forest Service management direction under at least one alternative (Alternative B), which is consistent with the direction provided in BLM Washington Office Instruction Memorandum 2012-044 (“The BLM must consider all applicable conservation measures developed by the NTT in at least one alternative in the land use planning process”) and the Forest Service’s Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat (2012).

The alternatives represent different approaches to balancing resources and resource use among competing human interests, land uses, and the conservation of natural and cultural resource values, while sustaining and enhancing ecological integrity across the landscape, including plant, wildlife, and fish habitat. For example, Alternative D incorporates adjustments to the NTT Report based on cooperating agency input to provide a balanced level of protection, restoration, enhancement, and use of resources and services to meet ongoing programs and land uses. Anthropogenic surface disturbance would be managed to not exceed 5 percent in ecological sites that support sagebrush within PPH (now known as PHMA) (Figure 2-1, Ecological Sites Supporting Sagebrush in Preliminary Priority Habitat, in Appendix B, Figures). Additional information on disturbance cap management under Alternative D can be found in Appendix E, Disturbance Cap Management. Under Alternative D, the White River Field Office Reclamation Plan (Appendix F, Surface Reclamation Plan) would be followed for reclamation of lands to go back into rotation under the disturbance caps. See Proposed LUPA/Final EIS Section 2.7, Draft LUPA/EIS Alternatives, for additional information related to how the NTT was used in alternative development.

In addition to the NTT Report, the BLM and Forest Service used the Conservation Objectives Team (COT) report based upon the best scientific and commercial data available at the time that identifies key areas for GRSG conservation, key threats in those areas, and the extent to which they need to be reduced for the species to be conserved, and the *Summary of Science, Activities, Programs, and Policies That Influence the Rangewide Conservation of Greater Sage-Grouse (Centrocercus urophasianus)* (referred to as the BER) as additional sources of baseline information and management objectives (see further discussion below in Section 7.3, Greater Sage-Grouse COT, of this report).

Section 7.3 – COT Report

Summary

Commenters had two opposing views regarding the Conservation Objectives Team (COT) report. One group considered the report overly biased and did not represent the best available information; therefore, it should not have been used as the basis of the EIS alternatives. The other group suggested the BLM and Forest Service did not go far enough with the alternatives, and should have taken the actions directly or been consistent with the COT Report conservation objectives.

Response

In March 2012, the USFWS initiated a collaborative approach to develop range-wide conservation objectives for the GRSG to inform the 2015 decision about the need to list the species and to inform the collective conservation efforts of the many partners working to conserve the species. In March 2013, this team of State and USFWS representatives released the COT report that identifies key areas for GRSG conservation, key threats in those areas, and the extent to which they need to be reduced for the species to be conserved. The methodology used to assess the threats was developed by the team of state and USFWS representatives and was accepted as scientifically valid for the type of study undertaking, and utilized the best scientific and commercial data available at the time. The report served as guidance to federal land management agencies, state GRSG teams, and others in focusing efforts to achieve effective conservation for this species. Specifically, the COT was used to assess the populations and habitat threats in the current conditions of GRSG range.

The COT objectives were the basis for the USFWS-identified suite of conservation objectives to ameliorate threats to the GRSG populations and habitat. The BLM and Forest Service compared the range of alternatives with the COT objectives because they are the standard against which the USFWS will determine the effectiveness of the eventual proposed alternative. During formulation of the Proposed LUPA/Final EIS, the BLM and Forest Service also met with partners to determine which actions would meet the COT Report objectives to the greatest extent practicable. The BLM and Forest Service found that all of the alternatives considered within this planning process are consistent with conservation measures and objectives outlined in the COT Report and follow the basic principles of avoiding the impact of an activity, minimizing impacts by limiting the degree of activity, and mitigating for an impact by improving or enhancing GRSG habitat. Each of the alternatives considers different means for accomplishing this strategy (see Draft LUPA/EIS, Section I.1.1, Overview, Chapter 2, Alternatives, and Chapter 4, Environmental Consequences, for references to how the reports and other information were used in alternative development).

The alternatives represent different degrees of and approaches to balancing resources and resource use among competing human interests, land uses, and the conservation of natural and cultural resource values, while sustaining and enhancing ecological integrity across the landscape, including plant, wildlife, and fish habitat. Each of the alternatives considers different means for accomplishing three points noted above. For example, some alternatives emphasize avoidance of impacts, while other alternatives emphasize minimization and mitigation.

While there was consistent guidance during alternatives development, such as BLM Washington Office Instruction Memorandum 2012-044, the BLM and Forest Service needed to vary management options across sub-regions to accommodate local issues and specific state and Forest Service requirements.

Chapter 4 incorporated the table for how the BLM and Forest Service addressed the threats to the populations in Colorado. See Table 4-2, Comparison of Alleviated Threats to Grouse in Colorado by Alternative.

Section 7.5 – Range of Alternatives

Summary

Commenters had specific issues that they felt the BLM and Forest Service should have considered in the range of management actions specific to GRSG:

- The BLM and Forest Service should add an Enhanced Mitigation/Expanded Use Authorization Program to the range of alternatives, such as the Colorado Habitat Exchange.
- The BLM and Forest Service failed to consider a full range of alternatives regarding the No Surface Occupancy (NSO) buffer; they only considered the 4-mile NSO buffer and need to consider other buffer distances.
- The BLM and Forest Service should include a discussion/table that describes how the alternatives compare in protecting GRSG.
- The BLM and Forest Service should include some incentives, including monetary compensation, to preserve GRSG habitat on private lands.

Response

As noted above in the response in Section 4.3, NEPA Range of Alternatives, of this report, Draft LUPA/EIS, Section 2.3, Alternative Development Process (page 34) describes how the Northwest Colorado Greater Sage-Grouse LUPA/EIS planning team employed the BLM and Forest Service planning process to develop a reasonable range of alternatives for the LUPA. The BLM and Forest Service complied with NEPA and the CEQ implementing regulations at 40 CFR 1500 in the development of alternatives for this draft LUPA/EIS, including seeking public input and analyzing reasonable alternatives while still meeting the

stated purpose of and need for action. The alternatives include management options for the planning area that would modify or amend decisions made in the field office LUPs, as amended, to meet the planning criteria, to address issues and comments from cooperating agencies and the public, or to provide a reasonable range of alternatives. Since this is a LUPA to address GRSG conservation, many decisions from the field office LUPs are acceptable and reasonable. In these instances, there was no need to develop alternative management prescriptions.

As previously noted, the relative emphasis given to particular resources and resource uses differs as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs. When resources or resource uses are mandated by law or are not tied to planning issues, there are typically few or no distinctions between alternatives. Meaningful differences among the four alternatives are described in the Draft LUPA/EIS, Section 2.8, Summary Comparison of Alternatives (page 42) and Table 2-2, Comparative Summary of Alternatives (page 42).

Additionally, the 4-mile buffer for GRSG habitat protection is supported and was derived from research performed by several noted GRSG scientists including Holloran 2005, Walker et al. 2007, Tack 2009, and Johnson et al. 2011. For example, from the NTT Report:

Impacts as measured by the number of males attending leks are most severe near the lek, remain discernible out to more than 4 miles (Holloran 2005, Walker et al. 2007, Tack 2009, Johnson et al. 2011), and often result in lek extirpations (Holloran 2005, Walker et al. 2007). Negative effects of well surface occupancy were apparent out to 3.1 miles, the largest radius investigated, in 2 of 7 study areas in Wyoming (Harju et al. 2010). Curvilinear relationships show that lek counts decreased with distance to the nearest active drilling rig, producing well, or main haul road and that development within 3 to 4 miles of leks decrease counts of displaying males (Holloran 2005).

All well-supported models in Walker et al. (2007) indicate a strong negative effect, estimated as proportion of development within either 0.5 miles or 2 miles, on lek persistence. A model with development at 4 miles had less support, but the regression coefficient indicated that negative impacts within 4 miles were still apparent. Two additional studies reported negative impacts apparent out to 8 miles on large lek occurrence (more than 25 males; Tack 2009) and out to 11.7 miles on lek trends (Johnson et al. 2011), the largest scales evaluated.

Mitigation and monitoring frameworks were introduced in the Draft LUPA/EIS in Chapter 2 (Alternatives), Appendix I (Required Design Features, Preferred Design Features, and Suggested Design Features, Regional Mitigation Strategy), and Appendix J (Greater Sage-Grouse Draft Monitoring Framework). An

adaptive management strategy was also introduced in Chapter 2 of the Draft LUPA/EIS. A more detailed mitigation framework, monitoring framework, and adaptive management strategy have been incorporated into Proposed LUPA/Final EIS Chapter 2, Section 2.6, Adaptive Management, Monitoring, and Mitigation, and Appendices F, Greater Sage-Grouse Monitoring Framework, and G, Greater Sage-Grouse Mitigation Strategy.

Further detailed descriptions of the mitigation, monitoring, and adaptive management frameworks are available in Section 4.9, NEPA Mitigation Measures, of this report.

The Northwest Colorado mitigation strategy, described in Proposed LUPA/Final EIS Section 2.6.3, Regional Mitigation, and the criteria for exceptions and modifications in the stipulations appendix allow for offsite mitigation by providing incentives to allow for impacts on GRSG or its habitat to be offset by mitigation on private or state land if an overall benefit to GRSG or its habitat is realized.

Section 7.6 – Best Available Information Baseline Data

Summary

Commenters provided several references and studies that the BLM and Forest Service did not consider in the Draft LUPA/EIS but should include or consider in the Proposed LUPA/Final EIS. Also, commenters questioned the accuracy and validity of the NTT Report.

Response

The CEQ regulations require an environmental impact statement to:

...succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The description shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. (40 CFR 1502.15)

Additionally, the Northwest Colorado Greater Sage-Grouse LUPA/EIS is a programmatic NEPA effort to conserve GRSG and its habitat across a broad geographic area. As such, the BLM described the current conditions and trends in the affected environment broadly, across a range of conditions, appropriate to program-level land use planning actions.

Programmatic documents are regional in scope and place emphasis on developing broad environmental policies, programs, and plans. Site-specific data is important during implementation level decisions, which may be tiered to the

decisions made in this document. Data scales include broad-scale, mid-scale, fine-scale, and site-scale. For this planning document, it is appropriate to utilize data at the mid-scale (e.g., WAFWA Management Zones) and fine-scale (e.g., sub-region data). For this document, the best available information was used as generated and provided by the organizations and agencies with authority and special expertise to provide that information on a planning scale.

Before beginning the Northwest Colorado Greater Sage-Grouse LUPA/EIS and throughout the planning effort, the BLM and the Forest Service considered the availability of data from all sources, adequacy of existing data, data gaps, and the type of data necessary to support informed management decisions at the land-use plan level. The data needed to support broad-scale analysis of the planning area are substantially different than the data needed to support site-specific analysis of projects. The LUPA/EIS data and information is presented in map and table form and is sufficient to support the broad scale analyses required for land use planning.

The BLM and the Forest Service used the most recent and best information available that was relevant to a land-use planning-level analysis, including the Baseline Environmental Report (BER; Manier et al. 2013). The BER assisted the BLM and the Forest Service in summarizing the effect of their planning efforts at a range-wide scale, particularly in the affected environment (Chapter 3) and cumulative impacts (Chapter 5) sections, as well as reviewed opposing science or information.

Additionally, the BLM and the Forest Service consulted with, collected, and incorporated data from other agencies and sources, including but not limited to the USFWS, CPW, Office of Surface Mining, Colorado State Land Board, and US Department of Energy. Data included GRSG habitat delineated by CPW, threatened and endangered species habitats, deer and elk herd management areas, fluid mineral development areas, solid mineral development areas, and mineral potential areas.

Several commenters provided additional citations, references, and information to be considered as part of the baseline information and affected environment in the EIS. Many of these references, data, and information related to GRSG or sagebrush habitat. The information has been reviewed by the BLM and Forest Service. Several of the references had already been included or cited in the document, some references were essentially the same as information already included, and some of the information was new and incorporated into the Proposed LUPA/Final EIS. Specific instances where the information was incorporated into the document are noted under the topic-specific response with a reference to where the reader can find it in the Proposed LUPA/Final EIS.

As a result of these actions, the BLM and the Forest Service gathered the necessary data essential to make a reasoned choice among the alternatives analyzed in detail in the Draft LUPA/EIS, and provided an adequate analysis that

led to an adequate disclosure of the potential environmental consequences of the alternatives. The BLM and the Forest Service have thoroughly considered the alternatives and environmental consequences of the alternatives in the Draft LUPA/EIS to enable the decision maker to make an informed decision, as required by the NEPA.

Section 7.7 – Impact Analysis

Summary

The BLM and Forest Service should revise some of the assumptions, such as the assumption that the analysis did not include historic or potential habitat. The assumption that historic and potential habitat is not considered in the analysis is inappropriate. Also, the BLM and Forest Service did not do enough analysis for actions in the priority habitat areas (PPH or PHMA).

Response

As required by 40 CFR 1502.16, the Draft LUPA/EIS provided a discussion of the environmental impacts of the alternatives including the proposed action, any adverse environmental effects that cannot be avoided should the alternatives be implemented, the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented. Additionally, the Draft LUPA/EIS and Proposed LUPA/Final EIS provide detailed discussion about the assumptions used in the impact analysis (see Proposed LUPA/Final EIS Section 4.2, Analytical Assumptions). As noted in the chapter, several overarching assumptions were made in order to facilitate the analysis of the project impacts. These assumptions set guidelines and provided reasonably foreseeable projected levels of development that would occur in the planning area during the planning period. The assumptions do not constrain or redefine the management objectives and actions proposed for each alternative. Therefore, the LUPA/EIS provided sufficiently detailed information to aid in determining whether to proceed with the preferred alternative or make a reasoned choice among the other alternatives in a manner such that the public could have an understanding of the environmental consequences associated with the alternatives, in accordance with 40 CFR 1502.1.

Land use plan-level analyses are typically broad and qualitative rather than quantitative or focused on site-specific actions (BLM Land Use Planning Handbook H-1601-1, Chapter II, A-B at 11-13, and Chapter IV, B at 29; Forest Service Handbook 1909.12 – Land Management Planning). The LUPA/EIS contains only planning actions and does not include any implementation actions. A more quantified or detailed and specific analysis would be required only if the scope of the decision included implementation actions. Based on this, the impacts on PHMA are discussed in Proposed LUPA/Final EIS Chapter 4, Environmental Consequences. As specific actions that may affect the area come

under consideration, the BLM and the Forest Service will conduct subsequent NEPA analyses that include site-specific project and implementation-level actions.

Section 7.8 – Cumulative Impact Analysis

Summary

Commenters suggested that the BLM and Forest Service did not address the cumulative impacts of the GRSG actions on non-BLM-administered or National Forest System lands, and that the BLM and Forest Service should include a table or section that compares the anticipated outcomes of each alternative in protecting GRSG populations.

Response

As noted previously in Sections 4.6 (NEPA Indirect Impacts), 4.7 (NEPA Cumulative Impacts), and 7.7 (Greater Sage-Grouse Impact Analysis) of this report, the BLM and Forest Service complied with the CEQ regulations for developing the direct, indirect, and cumulative impacts analysis.

Draft LUPA/EIS Chapter 4, Table 4.6, Comparison of Alleviated Threats to Greater Sage-Grouse in Northwest Colorado by Alternative (page 188), provides an overview of how each threat would be alleviated on BLM-administered and National Forest System lands. In addition to this table, the BLM and Forest Service prepared a cumulative impact analysis in the Draft LUPA/EIS, Section 5.4, Special Status Species – Greater Sage-Grouse (page 944), that describes the cumulative impacts from each threat on all habitat and land ownerships. It would be difficult to prepare a table that shows how threats would be alleviated on private lands, but the Colorado Package also identifies GRSG conservation activities that are happening or are planned to happen on private lands. In addition, the BLM and Forest Service have prepared a Tier II Cumulative Effects Analysis completed at the WAFWA Management Zone 2 level that is included in the Proposed LUPA/Final EIS.

Section 7.9 – Mitigation Measures

Summary

The BLM and Forest Service need to consider a comprehensive mitigation and monitoring program for GRSG that includes explicit criteria for determining the adequacy of the management actions.

Response

Mitigation and monitoring frameworks were introduced in the Draft LUPA/EIS in Chapter 2 (Alternatives), Appendix I (Required Design Features, Preferred Design Features, and Suggested Design Features, Regional Mitigation Strategy), and Appendix J (Greater Sage-Grouse Draft Monitoring Framework). An adaptive management strategy was also introduced in Chapter 2 of the Draft LUPA/EIS. A more detailed mitigation framework, monitoring framework, and

adaptive management strategy have been incorporated into Proposed LUPA/Final EIS Chapter 2, Section 2.6, Adaptive Management, Monitoring, and Mitigation, and Appendices F, Greater Sage-Grouse Monitoring Framework, and G, Greater Sage-Grouse Mitigation Strategy.

Further detailed descriptions of the mitigation, monitoring, and adaptive management frameworks are available in Section 4.9, NEPA Mitigation Measures, of this report.

Section 32.2 – Disturbance Cap

Summary

Commenters felt there was no methodology or scientific backing for establishing the disturbance cap in the alternatives, and that the BLM and Forest Service needed to demonstrate more range in the disturbance cap amounts presented in the alternatives.

Response

The BLM and Forest Service used recommendations specific to each alternative to determine the disturbance cap level. For example, the BLM based the disturbance cap for Alternative B on the NTT Report. Conservation measures included in Alternative B focus primarily on GRSG PHMA and include a 3 percent disturbance cap in PHMA. PHMA areas have the highest conservation value to maintaining or increasing GRSG populations.

For Alternative C, conservation measures were mostly focused on all designated habitat (i.e., PHMA, GHMA, and LCHMA). These areas have been identified by CPW in coordination with respective BLM offices, and include a 3 percent cap on disturbance in ADH. The 3 percent disturbance cap for Alternatives B and C has been incorporated as-is from the NTT Report and conservation group alternatives; the BLM did not modify the disturbance caps in the alternatives.

For Alternative D, the BLM intended to protect those areas that were most important for GRSG within PHMA to protect the best of the best habitat. The BLM utilized information from the Wyoming Core Strategy to support consideration of the 5 percent disturbance cap with the goal of presenting a reasonable edge of the range of alternatives with a higher percentage.

As part of the Proposed LUPA/Final EIS, the BLM has provided additional clarification on the disturbance caps and guidance for how they would be implemented and accounted for and what data are appropriate for determining disturbance. While the caps would set a particular level of disturbance, the implementation of the disturbance caps would occur after the LUPA is approved in the ROD. The BLM inventoried the habitat with the best available info at the time of the Draft LUPA/EIS, but would also do additional in-depth analysis and inventory within Management Zones at the implementation stage.

Section 9 – Noise

Summary

The BLM and Forest Service should consider additional studies that suggest noise can greatly affect GRSG, such as Blickley 2010, Patricelli 2012 and Blickley 2012. These studies show that noise limits should be imposed in the LUPA.

Response

As noted previously in Section 7.6, Greater Sage-Grouse Best Available Information Baseline Data, of this report, the BLM and the Forest Service complied with CEQ regulations in describing the affected environment. The suggested studies and references put forth by the commenters were reviewed by the BLM and Forest Service to determine if they presented new information. The BLM and Forest Service determined that the information was already included in the draft EIS (Section 4.4.2, Greater Sage-Grouse [page 505]).

Restrictions on noise can be found in **Appendix I**, Required Design Features, Preferred Design Features, and Suggested Design Features.

Section 10 – Climate Change

Summary

The BLM and Forest Service failed to include a climate change alternative and failed to evaluate the potential effectiveness of climate change management actions on lessening the threat to GRSG.

Response

The Proposed LUPA/Final EIS does disclose the potential effects associated with global climate change on the GRSG (Draft LUPA/EIS, Section 4.18, Climate Change [page 804]). However, pursuant to 40 CFR 1500.1(b), information must be “of high quality” in order to be considered in the analysis. As explained in the EIS, it is speculative to attempt to predict the specific nature or magnitude of such changes. As noted on page 805:

In summary, climate change has the potential to have profound impacts for those critical habitats that support GRSG populations within the planning area. As the temperatures warm and precipitation patterns change this may change vegetation communities which may cause impacts on GRSG. These climate changes, along with current non-climate related stressors may have profound impacts on GRSG in the long term.

The Proposed LUPA/Final EIS was refined with additional climate change information from the Rapid Ecological Assessment for the region. See Proposed LUPA/Final EIS Section 4.19, Climate Change, for additional details on the included information.

Section 10.2 – Best Available Information Baseline Data

Summary

The BLM and Forest Service should have applied the Colorado Plateau Rapid Ecological Assessment information across the entire planning area.

Response

The BLM and Forest Service did consider and use the Colorado Plateau Rapid Ecological Assessment and cited the document in the impacts on climate change section. Bryce, et. al. is cited in the Draft LUPA/EIS, Section 4.28.11, Climate Change [page 930].

Section 12 – Fire and Fuels

Summary

The BLM and Forest Service need to follow all current applicable policy and guidance documents related to wild fire, including Washington Office Instruction Memorandum 2013-128.

Response

The BLM and Forest Service did consider Instruction Memorandum 2013-128 in the EIS development; the BMPs from the Instruction Memorandum were included in the Draft LUPA/EIS and have been analyzed in Appendix O, Greater Sage-Grouse Wildfire and Invasive Species Habitat Assessment.

Section 12.1 – Range of Alternatives

Summary

The BLM and Forest Service need to modify the alternatives for fire management actions to 1) not count habitat loss due to wild fires in the disturbance cap; 2) not place protection of the GRSG over protecting life and property; and 3) include additional conservation measures to alternatives, such as not reduce canopy cover to less than 15 percent on all designated habitat, apply appropriate seasonal restrictions to all designated habitat, and include a risk analysis for a prescribed burn/natural ignition fire.

Response

The BLM and Forest Service considered the recommendations made from the cooperating agencies as well as the input provided by the public. This information was reviewed for content against the current range of alternatives. The recommendations were found to fall within the range of alternatives. Additional coordination with cooperating agencies between the Draft LUPA/EIS and Proposed LUPA/Final EIS resulted in changes that are presented in the Proposed LUPA/Final EIS (see Section 1.10, Changes Between the Draft Land Use Plan Amendment/Environmental Impact Statement and the Proposed Land Use Plan Amendment/Final Environmental Impact Statement).

For additional information regarding the disturbance cap and the suite of GRSG-related conservation measure comments and responses, see Section 32.2, Greater Sage-Grouse Disturbance Cap, and Section 7.5, Greater Sage-Grouse Range of Alternatives, of this report.

Section 12.3 – Impact Analysis

Summary

Commenters noted that the assumptions for the fire impacts analysis were flawed and requested that the BLM and Forest Service to include a strategy for identifying sagebrush landscapes that are at risk from fire in order to avoid conversion of landscapes to being dominated by invasive species.

Response

As noted in Section 7.7, Greater Sage-Grouse Impact Analysis, of this report, the BLM and Forest Service complied with CEQ guidance, and the methodology and assumptions provide an adequate starting point for discussion of the environmental consequences, including the cumulative impacts, of the presented alternatives. For the fire and fuels section, the Draft LUPA/EIS described the methodology and assumptions used for conducting the impact analysis in Section 4.7.2, Methodology and Assumptions (page 604).

In regards to the request for a fire strategy, land use plan-level analyses are typically broad and qualitative rather than quantitative or focused on site-specific actions (BLM Land Use Planning Handbook H-1601-1, Chapter II, A-B at 11-13 and Chapter IV, B at 29; Forest Service Handbook 1909.12 – Land Management Planning). The LUPA/EIS contains only planning actions and does not include any implementation actions. A more quantified or detailed and specific analysis would be required only if the scope of the decision included implementation actions. As specific actions that may affect the area come under consideration, the BLM and the Forest Service will conduct subsequent NEPA analyses that include site-specific project and implementation-level actions, such as developing local fire and week management strategies. Any future site-specific analyses will tier to the plan-level analysis and expand the environmental analysis when more specific information is known. In addition, as required by NEPA, the public will be offered the opportunity to participate in the NEPA process for implementation actions.

Section 13.5 – Predation

Summary

The BLM and Forest Service need to consider additional information about raven predation on GRSG. There is abundant research on raven predation on GRSG and other species (Boarman 1993, 2003; Bedrosian and Craighead 2010; and Bui 2009).

Response

The BLM and Forest Service described the effects of predation on GRSG in the Draft LUPA/EIS; the information used here and in the affected environment was taken from the BER. The BLM and Forest Service have authority to manage the habitat and have provided analysis to describe how the numerous management actions across the range of alternatives could affect the habitat and indirectly the effects of predation. Altering sagebrush habitat can create an influx of predators into an area that could result in a population decline for GRSG. Roads, fences, power lines, trails and other disturbances may make access easier for potential predators and increase risks to the species. The EIS calls for measures that will substantially reduce disturbances in the bird's habitat, thus reducing predation risk. This information can be found Proposed LUPA/Final EIS Section 4.5, Special Status Species.

Section 14 – Lands and Realty

Section 14.1 – Range of Alternatives

Summary

The BLM and Forest Service should modify Alternative D to include statements that the BLM and Forest Service will strive to retain public ownership of PHMA and acquire non-federal lands important to GRSG, as well as the criteria and processes for determining what constitutes a healthy and stable or increasing GRSG population and what constitutes an adverse effect on GRSG due to habitat loss and disruptive activities.

Response

As noted above in the response in Section 4.3, NEPA Range of Alternatives, of this report, Draft LUPA/EIS, Section 2.3, Alternative Development Process (page 34) describes how the Northwest Colorado Greater Sage-Grouse LUPA/EIS planning team employed the BLM and Forest Service planning process to develop a reasonable range of alternatives for the LUPA. The BLM and Forest Service complied with NEPA and the CEQ implementing regulations at 40 CFR 1500 in the development of alternatives for the Draft LUPA/EIS, including seeking public input and analyzing reasonable alternatives. The alternatives include management options for the planning area that would modify or amend decisions made in the field office LUPs, as amended, to meet the planning criteria, to address issues and comments from cooperating agencies and the public, or to provide a reasonable range of alternatives.

Under the preferred alternative (Alternative D), the BLM and Forest Service will retain public ownership of PHMA except for disposal of tracts that are not capable of altering GRSG populations (Draft LUPA/EIS, Section 4.5.3, Direct and Indirect Impacts on Lands and Realty [page 585] and Table 2.4, Description of Alternatives B, C, and D [page 148]), and GRSG habitat values will be considered when acquiring lands (Table 2.4, page 149). Exiting criteria define a

healthy and stable or increasing GRSG population, as well as what constitutes an adverse effect on GRSG populations (Manier et al. 2013) and was referenced in the Draft LUPA/EIS, Section 3.4.3, References (page 272).

During the development of the Proposed LUPA/Final EIS, the BLM and Forest Service considered the comments in the context of whether to change management actions and mitigation measures to meet the purpose of and need for the action. The outcome of these meetings resulted in clarifications and edits to the alternatives and impacts analysis (see Proposed LUPA/Final EIS Section I.10, Changes Between the Draft Land Use Plan Amendment/Environmental Impact Statement and the Proposed Land Use Plan Amendment/Final Environmental Impact Statement).

Section 14.2 – Best Available Information Baseline Data

Summary

The BLM and Forest Service did not use scientific studies when establishing the areas around leks. The BLM and Forest Service need to double check the miles of transmission line presented in Table 3.14 because the numbers appear to overestimate the amount of lines.

Response

As noted in Section 7.6, Greater Sage-Grouse Best Available Information Baseline Data, of this report, the BLM and the Forest Service complied with CEQ regulations in describing the affected environment. Of the suggested studies and references put forth by the commenters (Manier et al. 2013), the BLM and Forest Service reviewed them to determine if they presented new information that would need to be incorporated into the Proposed LUPA/Final EIS, were references already included in the draft EIS, or if the references provided the same information as already used or described in the Draft LUPA/EIS. The BLM and Forest Service determined that the data presented in Table 3.14 is taken from the BER, and while it is coarse data, represents a source of best available data.

Section 15 – Leasable Minerals

Section 15.1 – Range of Alternatives

Summary

The BLM and Forest Service need to consider additional actions or clarifications to existing actions within the range of alternatives. Some of the management actions are not compliant with current management policies and guidance, such as BLM Instruction Memorandum 2013-151 regarding bond amounts.

Response

As noted in Sections 4.3, NEPA Range of Alternatives, and 7.5, Greater Sage-Grouse Range of Alternatives, of this report, the BLM and the Forest Service

complied with CEQ regulations in developing the range of alternatives and the spectrum of actions considered all meet BLM and Forest Service regulations, policy and guidance. The alternatives include management options for the planning area that would modify or amend decisions made in the field office LUPs, as amended, to meet the planning criteria, to address issues and comments from cooperating agencies and the public, or to provide a reasonable range of alternatives. Since this is a LUPA to address GRSG conservation, many decisions from the field office LUPs are acceptable and reasonable. In these instances, there was no need to develop alternative management prescriptions.

Also as previously noted, the relative emphasis given to particular resources and resource uses differs as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs. When resources or resource uses are mandated by law or are not tied to planning issues, there are typically few or no distinctions between alternatives. Meaningful differences among the four alternatives are described in Draft LUPA/EIS, Section 2.8, Summary Comparison of Alternatives (page 42) and Table 2-2, Comparative Summary of Alternatives (page 42).

The BLM is not suggesting to increase bond amounts on existing leases in the preferred alternative, but rather to ensure that sufficient bond amounts are in place in order for the operator to complete reclamation activities in GRSG habitat.

During the development of the Proposed LUPA/Final EIS, the BLM and Forest Service considered the comments to determine whether changes to the management actions and mitigation measures were warranted. The outcome of these meetings resulted in noted clarifications and edits to the alternatives, including conservation objectives, and impacts analysis (see Proposed LUPA/Final EIS Section 1.10, Changes Between the Draft Land Use Plan Amendment/Environmental Impact Statement and the Proposed Land Use Plan Amendment/Final Environmental Impact Statement).

Section 15.2 – Best Available Information Baseline Data

Summary

The BLM and Forest Service need to consider additional research sources regarding the effects of oil and gas development on GRSG populations.

Response

As noted previously in Section 7.6, Greater Sage-Grouse Best Available Information Baseline Data, the BLM and Forest Service complied with CEQ regulations in describing the affected environment. The suggested studies and references put forth by the commenters were reviewed by the BLM and Forest Service to determine if they presented new information that would need to be incorporated into the Proposed LUPA/Final EIS. The BLM and Forest Service

determined that the information was already included in the draft EIS (Section 4.13.3, Direct and Indirect Impacts on Range Management [page 701]).

Section 15.3 – Impact Analysis

Summary

The BLM and Forest Service have failed to adequately disclose the impacts of the noted restrictions on oil and gas operations. The analysis presented in the Draft EIS is insufficient to provide the public a full understanding of how oil and gas operations would be adversely impacted by the conservation measures outlined in the Draft EIS.

The BLM and Forest Service need to provide further analysis to show the effectiveness of using a less restrictive action/mitigation rather than a more restrictive one. The oil and gas analysis was overly biased in presenting adverse effects from oil and gas developed and not presenting the adverse effects created by other programs/uses.

Response

As noted previously in Sections 4.6 (NEPA Indirect Impacts), 4.7 (NEPA Cumulative Impacts), and 7.7 (Greater Sage-Grouse Impact Analysis) of this report, the BLM and Forest Service complied with the CEQ regulations in developing the direct, indirect, and cumulative impacts analyses.

Oil and gas development is one of the main USFWS-identified threats to GRSG and their habitat in northwest Colorado (Draft LUPA/EIS, Table 2.1, USFWS-Identified Threats to GRSG and Their Habitat and Applicable BLM/USFS LUP Resource Programs for Addressing Threats [page 36]); as such, the EIS thoroughly analyzes impacts on oil and gas development on GRSG. The impacts from leasable mineral development on GRSG and GRSG habitat are discussed in the Draft LUPA/EIS, Section 4.4.2, Greater Sage-Grouse (page 505).

Impacts from the management actions and conservation measures on leasable mineral development are also thoroughly discussed and analyzed in Section 4.8, Minerals (Leasable) (page 619), as well as Section 4.24.3, Socioeconomic Impacts.

Section 15.5 – Mitigation Measures

Summary

Additional reclamation bonding requirements are unnecessary as both federal and state government require bonding, and the additional requirements go against current regulations (43 CFR 3104 and 36 CFR 228 Subpart E).

Response

The BLM and Forest Service are not proposing to add new lease stipulations or bonding requirements developed under this LUPA to existing leases. The BLM

will work with the lessees, operators, or other project proponents to avoid, reduce, and mitigate adverse impacts to the extent compatible with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an application for permit to drill for the lease to avoid or minimize impacts to GRSG or its habitat and will ensure that the best information about the GRSG and its habitat informs and helps guide development of such federal leases. Where warranted, the BLM will use Conditions of Approval to mitigate impacts on other resources to be disclosed and analyzed in subsequent site-specific NEPA analyses. This approach is consistent with BLM's authority under the Mineral Leasing Act, as amended, and regulations promulgated under the Act. Conditions of can be applied at the project-approval stage when warranted by resource concerns. Existing oil and gas or other mineral lease rights will be honored. When an oil and gas lease is issued, it constitutes a valid existing right; BLM cannot unilaterally change the terms and conditions of the lease. Existing leases will not be affected by new closures and/or areas administratively unavailable for lease. Existing leases will not be terminated until the lease expires.

Based on site- or project-specific environmental analysis, Conditions of Approval could be applied at the Application for Permits to Drill and Sundry Notice stages and subsequent development stages to mitigate potential impacts from oil and gas operations within existing lease areas, provided the leaseholder's right to develop the lease remains intact.

Section 16 – Livestock Grazing

Section 16.1 – Range of Alternatives

Summary

Commenters were divided on what changes would need to be made to alternatives. Some commenters wanted alternatives for livestock grazing changed to be consistent with the multiple-use mandate, and for the BLM and Forest Service to incorporate a range of BMPs focused on range management.

Other commenters wanted the livestock grazing alternatives to include terms and conditions for grazing permits that assure that GRSG habitat requirements are met, are consistent with NTT recommendations, and that conservation measures prevent adverse impacts from livestock range improvement projects on GRSG habitat. Additionally, the BLM should consider drought in the habitat objectives and apply BLM Instruction Memorandum 2013-094.

Response

As noted in Sections 4.3, NEPA Range of Alternatives, and 7.5, Greater Sage-Grouse Range of Alternatives, of this report, the BLM and the Forest Service complied with CEQ regulations, policy, and guidance in developing the range of alternatives and the spectrum of actions considered. The BLM and Forest Service considered a range of reasonable alternatives during the planning

process in full compliance with the NEPA. The CEQ regulations (40 CFR 1502.1) require that the BLM and Forest Service consider reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.

While there are many possible alternatives or actions to manage public lands and GRSG in the decision area, the BLM and Forest Service used the scoping process to determine a range of reasonable alternatives. As a result, four alternatives were analyzed in detail in the Draft LUPA/EIS, and five alternatives are analyzed in the Proposed LUPA/Final EIS; these alternatives best address the livestock grazing issues and concerns identified by the affected public. The range of alternatives in the Draft LUPA/EIS represented a full spectrum of options, including a no action alternative (current management, Alternative A).

The BLM and Forest Service recognize that there could be a large number of variations of alternatives put forth in the planning process. However, the BLM and Forest Service are not required to analyze in detail each variation, including those variations determined not to meet the purpose of and need for the LUPA or those alternatives determined to be unreasonable given BLM and the Forest Service mandates, policies, and programs, including the FLPMA, Multiple Use and Sustained Yield Act, and other federal laws and regulations applicable to public lands. The alternatives include management options for the planning area that would modify or amend decisions made in the field office LUPs, as amended, to meet the planning criteria, to address issues and comments from cooperating agencies and the public, or to provide a reasonable range of alternatives. Since this is a LUPA to address GRSG conservation, many decisions from the field office LUPs are acceptable and reasonable. In these instances, there was no need to develop alternative management prescriptions.

Each of the alternatives considered and analyzed in detail in the Draft LUPA/EIS achieves the purpose of and need for the LUPA, is implementable, and addresses all significant issues. The preferred alternative was the result of a broad range of analysis and public input and represents a balanced, multiple-use management strategy that conserves GRSG and responds to the potential of it being listed.

The relative emphasis given to particular resources and resource uses differs as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs. When resources or resource uses are mandated by law or are not tied to planning issues, there are typically few or no distinctions between alternatives. Meaningful differences among the four alternatives are described in the Draft LUPA/EIS, Section 2.8, Summary Comparison of Alternatives (page 42) and Table 2-2, Comparative Summary of Alternatives (page 42).

During the development of the Proposed LUPA/Final EIS, the BLM and Forest Service considered the comments to determine whether changes to the

management actions and mitigation measures were warranted. The outcome of these meetings resulted in noted clarifications and edits to the alternatives for livestock grazing and impacts analysis (see Proposed LUPA/Final EIS Table 2.8, Description of Alternatives B, C, D, and BLM and Forest Service Proposed LUPAs, Range Management Objectives, and Section 4.14, Range Management).

Section 16.2 – Best Available Information Baseline Data

Summary

The BLM and Forest Service need to consider the additional referenced information in the EIS (Beschta, R. L., D. L. Donahue, D. A. DellaSala, J. J. Rhodes, J. R. Karr, M. H. O'Brien, T. L. Fleischner, and C. Deacon-Williams. 2012. Adapting to climate change on western public lands: addressing the ecological effects of domestic, wild, and feral ungulates; and Reisner, M. D., J. B. Grace, D. A. Pyke, and P. S. Doescher. 2013. Conditions favouring *Bromus tectorum* dominance of endangered sagebrush steppe ecosystems).

Response

As noted previously in Section 7.6, Greater Sage-Grouse Best Available Information Baseline Data, of this report, the BLM and the Forest Service complied with CEQ regulations in describing the affected environment. Of the suggested studies and references put forth by the commenters, the BLM reviewed them to determine if they presented new information that would need to be incorporated into the Proposed LUPA/Final EIS, were references already included in the draft EIS, or if the references provided the same information as already used or described in the Draft LUPA/EIS. The Draft LUPA/EIS (Section 4.18, Climate Change [page 804]) discloses the impacts that livestock grazing has to vegetation as an additive adverse impact to change wrought by climate change in the context of overgrazing. Much of what is discussed in the references is already addressed in the assumptions for vegetation impacts (Draft LUPA/EIS Section 4.6.2, Methodology and Assumptions [page 587]) and the assumptions for range management (Draft LUPA/EIS Section 4.13.2, Methodology and Assumptions [page 699]). Additionally, complete livestock removal and the associated impacts are discussed in detail (Draft LUPA/EIS Section 4.13.4, Summary of Impacts on Range Management [page 711]). The reference suggested by the commenter also provides information for more comprehensive analysis of the impacts of range management on vegetation; see Section 4.6.3, Direct and Indirect Impacts on Vegetation, Changes in Vegetative Cover.

Section 16.3 – Impact Analysis

Summary

The BLM and Forest Service failed to provide adequate analysis of the impacts from the alternatives on livestock grazing, as well as the effects of livestock grazing on GRSG and its habitat. There is no mention of the positive benefits of

livestock grazing on GRSG or the negative effect that prioritizing GRSG over livestock grazing may have on the livestock industry.

Response

As noted previously in Sections 4.6 (NEPA Indirect Impacts), 4.7 (NEPA Cumulative Impacts), and 7.7 (Greater Sage-Grouse Impact Analysis) of this report, the BLM and Forest Service complied with the CEQ regulations for developing the direct, indirect, and cumulative impacts analysis.

The impacts from livestock grazing on GRSG and GRSG habitat are discussed in the Draft LUPA/EIS, Section 4.4.2, Greater Sage-Grouse (page 505); impacts from the management actions and conservation measures on livestock grazing are discussed in Section 4.13, Range Management (page 699). The socioeconomic impacts are discussed in Section 4.24, Social and Economic Impacts (Including Environmental Justice) (page 894).

Section 16.4 – Cumulative Impact Analysis

Summary

The BLM and Forest Service failed to include the direct and indirect cumulative impacts of the GRSG conservation actions on the livestock industry or the impacts of the actions on private lands. No mention is made of impacts to private land livestock grazing operations from alternatives that would reduce livestock grazing on federal land.

Response

As noted previously in Sections 4.6 (NEPA Indirect Impacts), 4.7 (NEPA Cumulative Impacts), and 7.7 (Greater Sage-Grouse Impact Analysis) of this report, the BLM and Forest Service complied with the CEQ regulations for developing the direct, indirect, and cumulative impacts analysis.

The impacts from livestock grazing on GRSG and GRSG habitat are discussed in the Draft LUPA/EIS, Section 4.4.2, Greater Sage-Grouse (page 505); impacts from the management actions and conservation measures on livestock grazing are discussed in Section 4.13, Range Management (page 699). The socioeconomic impacts are discussed in Section 4.24, Social and Economic Impacts (Including Environmental Justice) (page 894).

Cumulative impacts on livestock grazing are discussed in the Draft LUPA/EIS, Section 5.11.

Section 16.5 – Mitigation Measures

Summary

The Draft LUPA/EIS lacks specificity to explain how the BLM and Forest Service will monitor for and treat invasive species associated with existing range improvements in GRSG designated habitat.

Response

As noted previously in Section 4.6 (NEPA Indirect Impacts) of this report, land use plan-level analyses are typically broad and qualitative rather than quantitative or focused on site-specific actions (BLM Land Use Planning Handbook H-1601-1, Chapter II, A-B at 11-13 and Chapter IV, B at 29; Forest Service Handbook 1909.12 – Land Management Planning). The Draft LUPA/EIS contains only planning actions and does not include any implementation actions. A more quantified or detailed and specific analysis would be required only if the scope of the decision included implementation actions. As specific actions that may affect the area come under consideration, the BLM and the Forest Service will conduct subsequent NEPA analyses that include site-specific project and implementation-level actions.

Mitigation and monitoring frameworks were introduced in the Draft LUPA/EIS in Chapter 2 (Alternatives), Appendix I (Required Design Features, Preferred Design Features, and Suggested Design Features, Regional Mitigation Strategy), and Appendix J (Greater Sage-Grouse Draft Monitoring Framework). An adaptive management strategy was also introduced in Chapter 2 of the Draft LUPA/EIS. A more detailed mitigation framework, monitoring framework, and adaptive management strategy have been incorporated into Proposed LUPA/Final EIS Chapter 2, Section 2.6, Adaptive Management, Monitoring, and Mitigation, and Appendices F, Greater Sage-Grouse Monitoring Framework, and G, Greater Sage-Grouse Mitigation Strategy.

Further detailed descriptions of the mitigation, monitoring, and adaptive management frameworks are available in Section 4.9, NEPA Mitigation Measures, of this report.

Section 17 – Locatable Minerals

Section 17.1 – Range of Alternatives

Summary

The USFWS requested some additional mitigation measures to be considered in the range of alternatives for locatable minerals (mining operations), such as ensuring that reclamation is conducted to meet GRSG habitat objectives and ensuring that reclamation of an existing mine does not replace off-site compensatory mitigation for mine disturbances.

Response

As discussed previously under Sections 4.3, NEPA Range of Alternatives, and 7.5, Greater Sage-Grouse Range of Alternatives, of this report, the BLM and the Forest Service complied with CEQ regulations in developing the range of alternatives and the spectrum of actions considered all meet BLM and Forest Service regulations, policy, and guidance.

During the development of the Proposed LUPA/Final EIS, the BLM and Forest Service met with the USFWS to consider changes to the management actions and mitigation measures. The outcome of these meetings resulted in noted clarifications and edits to the alternatives and impacts analysis (see Proposed LUPA/Final EIS Section 1.10, Changes Between the Draft Land Use Plan Amendment/Environmental Impact Statement and the Proposed Land Use Plan Amendment/Final Environmental Impact Statement).

Section 20 – Recreation

Summary

The Draft LUPA/EIS contains conflicting impact analysis statements regarding the effects of closures and restrictions on dispersed camping and other recreational activities.

Response

The conflict arose from a typographic error in the Draft LUPA/EIS. The referenced section should note that it refers to Alternative C, not Alternative D, as Alternative C is the most restrictive of the alternatives analyzed in the EIS. This error has been corrected in the Proposed LUPA/Final EIS; see Section 4.13, Recreation.

Section 22 – Socioeconomics and Environmental Justice

Section 22.2 – Best Available Information Baseline Data

Summary

The BLM and Forest Service need to use more current and site-specific data, including new data from 2012. The BLM and Forest Service also need analyze disadvantaged communities by place of residence, not just county of residence.

Response

As noted previously in Section 7.6, Greater Sage-Grouse Best Available Information Baseline Data, of this report, the BLM and the Forest Service complied with CEQ regulations in describing the affected environment. The BLM and Forest Service used the best available data at the time of elaboration of the Draft LUPA/EIS.

The BLM and Forest Service described the affected area at a geographic level, the county level, that would support the analysis of potential socioeconomic and environmental justice impacts. The county level of analysis is appropriate for the programmatic nature of the action in this EIS. Potential disproportionately high and adverse human health and environmental effects on these communities from implementation actions would be analyzed during assessment of site-specific projects.

Section 22.3 – Impact Analysis

Summary

The Draft LUPA/EIS analysis underestimates/understates the economic hardships that restrictive management actions would impose on planning area operators, communities, and services. The Draft LUPA/EIS also does not disclose the indirect impacts on communities and services that were raised by commenters during scoping, such as the effects of more restrictions resulting in less support emergency services, thereby resulting in harm to life and property. Also, the analysis was overly generalized and did not provide county-specific impacts. The analysis methodology is inadequate to provide a comprehensive analysis of direct, indirect, and cumulative analysis of the socioeconomic impacts on the planning area communities. Finally, the Draft LUPA/EIS is biased in favor of nonmarket valuation methods.

Response

As noted previously in Sections 4.6 (NEPA Indirect Impacts), 4.7 (NEPA Cumulative Impacts), and 7.7 (Greater Sage-Grouse Impact Analysis) of this report, the BLM and Forest Service complied with the CEQ regulations for developing the direct, indirect, and cumulative impacts analysis.

Socioeconomic impacts assessed include impacts on output, employment, earnings and tax revenues in the affected area, non-market values, population and public services, specific groups and communities as well as environmental justice impacts. See the Draft LUPA/EIS, Section 4.24, Social and Economic Conditions (Including Environmental Justice) (page 894).

In response to comments, the BLM and Forest Service revised the impact analysis as follows:

- The analysis of impacts through oil and gas production were revised to correct an unintentional miscalculation in the estimates of the value of gas production and associated employment, provide additional information on the projected geographic distribution of production, and expand the qualitative discussion of specific measures included in management alternatives.
- Additional discussion of impacts on counties was included where possible and appropriate, including an expanded discussion of fiscal impacts on counties and other local jurisdictions such as fire districts.
- A brief qualitative discussion of the effect of potential impacts of ROW restrictions on local energy rates was included.
- The social impacts analysis of the effects of management alternatives on local communities and public services was expanded.

- An expanded discussion of the potential impacts of disturbance caps was included.
- A brief explanation of impacts on BLM administrative costs was included.

The BLM also revised the impacts analysis to present the impacts of each management alternative relative to current management.

Further, the BLM and Forest Service found that several aspects commented on are appropriately addressed in the Draft LUPA/EIS. Although the discussion of impacts on counties and local communities was expanded to the extent possible, the distribution of estimated impacts on counties, cities, and towns depends on the location of expenditures associated with economic activities. This location is often not known at the county, city, or town level, based on the available data. In addition, because economic activity in one community or county typically has socioeconomic effects in other communities and counties with shared trade and commuter linkages, the impacts are often best assessed at the multi-county level. The BLM and Forest Service consider the assessment of potential nonmarket values associated with the use of BLM-administered and National Forest System lands important to recognize. A complete assessment of the economic effects of the management alternatives would include effects on values not mediated by markets or captured in market prices. The impacts discussion focuses on those nonmarket values where impacts are most likely to be felt by the choice of management alternatives.

Section 23 – Soil

Summary

The Draft LUPA/EIS fails to consider the effects of livestock grazing in erosion calculations and plant community degradation.

Response

As noted previously in Sections 4.6 (NEPA Indirect Impacts), 4.7 (NEPA Cumulative Impacts), and 7.7 (Greater Sage-Grouse Impact Analysis) of this report, the BLM and Forest Service complied with the CEQ regulations for developing the direct, indirect, and cumulative impacts analysis. Draft LUPA/EIS, Section 4.16, Soil and Water Resources, Impacts from Range Management on Soil and Water Resources (page 775), discusses the effects of livestock grazing on vegetation (ground cover) and the elevated potential for soil erosion.

Draft LUPA/EIS, Section 4.6, Vegetation (Forests, Rangelands, Riparian and Wetlands, and Noxious Weeds), Impacts from Range Management on Vegetation (page 594), discusses the effects of livestock grazing on vegetation.

Section 24 – Travel Management

Section 24.1 – Range of Alternatives

Summary

The Draft LUPA/EIS failed to provide changes to unrestricted motorized travel or open motorized routes to protect GRS, which does not comply with the BLM's open road minimization requirements. Also, the BLM and Forest Service need to consider additional measures under the alternatives.

Response

As discussed previously under Sections 4.3 (NEPA Range of Alternatives) and 7.5 (Greater Sage-Grouse Range of Alternatives) of this report, the BLM and the Forest Service complied with CEQ regulations in developing the range of alternatives and the spectrum of actions considered all meet BLM and Forest Service regulations, policy, and guidance.

During the development of the Proposed LUPA/Final EIS, the BLM and Forest Service met with USFWS to consider changes to the management actions and mitigation measures. The outcome of these meetings resulted in noted clarifications and edits to the alternatives and impacts analysis (see Proposed LUPA/Final EIS Section 1.10, Changes Between the Draft Land Use Plan Amendment/Environmental Impact Statement and the Proposed Land Use Plan Amendment/Final Environmental Impact Statement).

There are several management actions in the Draft LUPA/EIS that do aim to minimize road construction and also would make open OHV areas in PHMA limited to existing routes.

Under the NTT Action 1, Alternatives B, C, and D all limit motorized travel: "(PPH) (now known as PHMA) Limit motorized travel to existing roads, primitive roads, and trails at a minimum." Alternative A is the No Action/Current Management. Draft LUPA/EIS, Section 4.11.3, Impacts from Travel Management on Travel Management (page 681) identifies that Alternatives B, C, and D would change 574,100 acres from Open to Limited in PHMA. Areas in PHMA would become Limited under Alternatives B, C, and D and would not be open to unrestricted cross-country motorized travel.

NTT Action 3 identifies the following objective: "(PPH) (now known as PHMA) Complete activity level travel plans within 5 years of the ROD." Alternative A (Table 2.3, Description of Alternatives A and B [page 52]) identifies that travel management route designation is being completed as a part of the RMP revision process for CRVFO, GJFO, and KFO. The LSFO RMP requires that transportation plans be completed in all Limited travel management areas within 5 years of the LUP ROD, per Colorado State BLM policy. The Roan Plateau RMP identifies developing and maintaining a travel management plan and the White River RMP identifies that a travel management plan will be initiated upon

approval. Activity level plans have already been completed for the Routt National Forest.

Section 24.5 – Mitigation Measures

Summary

Further explanation is needed to clarify how to measure for adverse effects on GRSG.

Response

Mitigation and monitoring frameworks were introduced in the Draft LUPA/EIS in Chapter 2 (Alternatives), Appendix I (Required Design Features, Preferred Design Features, and Suggested Design Features, Regional Mitigation Strategy), and Appendix J (Greater Sage-Grouse Draft Monitoring Framework). An adaptive management strategy was also introduced in the Draft LUPA/EIS, Section 2.10.2, Adaptive Management (page 192). A more detailed mitigation framework, monitoring framework, and adaptive management strategy have been incorporated into Proposed LUPA/Final EIS Chapter 2, Section 2.6, Adaptive Management, Monitoring, and Mitigation, and Appendices F, Greater Sage-Grouse Monitoring Framework, and G, Greater Sage-Grouse Mitigation Strategy.

Further detailed descriptions of the mitigation, monitoring, and adaptive management frameworks are available in Section 4.9, NEPA Mitigation Measures, of this report.

Section 26 – Vegetation Sagebrush

Section 26.1 – Range of Alternatives

Summary

The Draft LUPA/EIS should include additional conservation measures from the COT in one or more alternatives, including controls for preventing the spread of invasive, nonnative plants.

Response

The Draft LUPA/EIS contains an entire appendix (Appendix I, Required Design Features, Preferred Design Features, and Suggested Design Features, Regional Mitigation Strategy) that articulates Required Design Features (RDFs), Preferred Design Features (PDFs), and Suggested Design Features (SDFs). While the list of design features in Appendix I is thorough, the list is not intended to be exhaustive. Additional design features could be developed and implemented to help achieve resource objectives. Design features include state-of-the-art measures applied on a site-specific basis to avoid, minimize, reduce, rectify, or compensate for adverse environmental or social impacts. They are applied to management actions to help achieve desired outcomes for safe, environmentally responsible resource development by preventing, minimizing, or mitigating

adverse impacts and reducing conflicts. Design features also can be proposed by project applicants for activities on BLM-administered and National Forest System lands (e.g., for gas drilling). Design features not incorporated into the permit application by the applicant may be considered and evaluated through the environmental review process and incorporated into the use authorization as Conditions of Approval or ROW stipulations. Standard Conditions of Approval and ROW stipulations from each LUP would apply to site-specific analysis. Additional design features, Conditions of Approval, and ROW stipulations could be developed to meet resource objectives based on local conditions and resource specific concerns.

As noted previously in Sections 4.3 (NEPA Range of Alternatives) and 7.3 (Greater Sage-Grouse COT) of this report, all alternatives considered within this planning process are consistent with conservation measures and objectives outlined in the COT Report and follow the basic principles of avoiding the impact of an activity, minimizing impacts by limiting the degree of activity, and mitigating for an impact by improving or enhancing GRSG habitat. Each of the alternatives considers different means for accomplishing this strategy. For example, some alternatives emphasize avoidance of impacts, while other alternatives emphasize minimization and mitigation.

Section 26.2 – Best Available Information Baseline Data

Summary

The BLM and Forest Service failed to consider research by CPW on the range of canopy cover preferred by GRSG.

Response

As noted previously in Sections 4.5 (NEPA GIS Data and Analysis) and 7.6 (Greater Sage-Grouse Best Available Information Baseline Data) of this report, the BLM and the Forest Service consulted with, collected, and incorporated data from other agencies and sources, including but not limited to the USFWS and CPW. The BLM reviewed the current research by CPW on the range of canopy cover preferred by GRSG to determine if it presented new information that would need to be incorporated into the Proposed LUPA/Final EIS. The BLM provided clarification in the Proposed LUPA/Final EIS Section 2.6.1, Adaptive Management Plan, to allow for the consideration of new information as it becomes available.

Section 26.5 – Mitigation Measures

Summary

Commenters requested clarification on several mitigation measures including what would be appropriate plant regrowth or cover requirements, thresholds for determining when mitigation standards have been met, and procedures for monitoring mitigation measures. Additionally, the Draft LUPA/EIS needs to

explicitly state the required methodology to use when determining whether a mitigation standard has been met or not.

Response

The Proposed LUPA/Final EIS has been corrected in response to comments requesting clarification of certain mitigation language. Mitigation and monitoring frameworks were introduced in the Draft LUPA/EIS in Chapter 2 (Alternatives), Appendix I (Required Design Features, Preferred Design Features, and Suggested Design Features, Regional Mitigation Strategy), and Appendix J (Greater Sage-Grouse Draft Monitoring Framework). An adaptive management strategy was also introduced in the Draft LUPA/EIS, Section 2.10.2, Adaptive Management (page 192). A more detailed mitigation framework, monitoring framework, and adaptive management strategy have been incorporated into Proposed LUPA/Final EIS Chapter 2, Section 2.6, Adaptive Management, Monitoring, and Mitigation, and Appendices F, Greater Sage-Grouse Monitoring Framework, and G, Greater Sage-Grouse Mitigation Strategy.

Further detailed descriptions of the mitigation, monitoring, and adaptive management frameworks are available in Section 4.9, NEPA Mitigation Measures, of this report.

Section 27 – Vegetation, Riparian

Section 27.1 – Range of Alternatives

Summary

The BLM and Forest Service should include management actions to address pinyon-juniper incursions within the range of alternatives.

Response

The original direction that initiated this planning process for the BLM can be found in BLM Instruction Memorandum 2012-44. The BLM was tasked with analyzing the conservation in the NTT Report:

The conservation measures developed by the NTT and contained in Attachment I must be considered and analyzed, as appropriate, through the land use planning process by all BLM State and Field Offices that contain occupied GRSG habitat.

As such, creation of new conservation measures that were not contained in the NTT Report is out of scope for this planning process.

Section 27.2 – Best Available Information Baseline Data

Summary

The BLM and Forest Service need to expand on the information presented in the affected environment, specifically for acreage of GRSG habitat in riparian

areas that is not meeting proper functioning condition, and to explain what irrigated lands are on BLM-administered and National Forest System lands.

Response

As noted previously in Section 7.6 (Greater Sage-Grouse Best Available Information Baseline Data) of this report, the BLM and the Forest Service complied with CEQ regulations in describing the affected environment. Additionally, as noted in Section 4.5, NEPA GIS Data and Analysis, of this report, the BLM and the Forest Service consulted with and collected and incorporated data from other agencies and sources, including but not limited to the US Geological Survey, CPW, and USFWS, as well as consulted on the analysis and the incorporation of available data into the LUPA/EIS with its cooperating agencies and other agencies with jurisdiction or expertise. The combination of all of these data are summarized in the affected environment section and reflect the current status and condition of habitat that is or isn't meeting PFC. The BLM has further reviewed the information and determined that the acreage amounts are accurate and at the appropriate scale for a planning level analysis.

There are a number of acres of previously cultivated lands returned to the BLM through the Bankhead Jones Act. Additionally, at the scale used for classification of land uses, vegetation treatments on BLM-administered lands can be misidentified as irrigated or cultivated from aerial photography. These two factors contributed to a number of acres being identified as irrigated or cultivated on BLM-administered land.

Section 29 – Water

Summary

The BLM and Forest Service need to include a list of impaired watersheds as part of the affected environment to more accurately discuss potential impacts on the watersheds from actions. Additionally, the impact analysis for watersheds is based on inaccurate assumption that all streams and waterbodies are currently meeting State Water Quality Standards.

The water impact analysis needs further discussion to support the claim that longer directional drilling reaches would increase the likelihood for impacts on groundwater quality.

Response

As noted previously in Section 7.6 (Greater Sage-Grouse Best Available Information Baseline Data) of this report, the BLM and the Forest Service complied with CEQ regulations in describing the affected environment. Additionally, as noted in Section 4.5, NEPA GIS Data and Analysis, of this report, the BLM and the Forest Service consulted with and collected and incorporated data from other agencies and sources, including but not limited to the US Geological Survey, CPW, and USFWS, as well as consulted on the

analysis and the incorporation of available data into the LUPA/EIS with its cooperating agencies and other agencies with jurisdiction or expertise.

The BLM and Forest Service did not make an assumption that all streams and water bodies are currently meeting State Water Quality Standards. The BLM and Forest Service did make the assumption that soil and water resources would be managed to meet Standards 1 and 5 of the BLM Colorado Public Land Health Standards (BLM 1997) and the Routt Forest Water and Aquatic Soils Standards and Guidelines (Forest Service 1997). There is no specific state designation/identification of impaired watersheds, only for impaired surface waters, which are identified by stream and segment. A list of these impaired segments can be found in Regulation 93 (Colorado's Section 303[D] List of Impaired Waters and Monitoring and Evaluation List) at: <http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251596877171>. Information for all impaired waterbodies/stream segments within GRSG habitat was summarized. The most common impairments identified across river basins relative to management actions are sediment, selenium and iron. Potential impacts on water quality (including impaired stream segments) from management actions proposed across all alternatives are detailed in Chapter 4.

The impact analysis for surface water quality in all basins within the project area is based on the most recent, best available, and most comprehensive water quality data supplied by Colorado Department of Public Health and Environment, Water Quality Control Division, the state agency charged with implementation of the Clean Water Act. Review and revision of water quality classifications and standards is an ongoing process and is based on water quality data collected and submitted by the agency's Environmental Data Unit. Data is also obtained from US Geological Survey, Riverwatch, and third parties, including federal land management agencies. State and federal law require this review at least once every 3 years. The public can access data that informs regulation and standard development here: <http://www.colorado.gov/cs/Satellite?c=Page&childpage=CDPHE-WQ%2FCBONLayout&cid=1251597394826&pagename=CBONWrapper>

For more information on the review and revision of water quality classifications and standards, as well as the triennial review schedule for each of Colorado's river basins, please see pages 19 through 21 in the following guide:

<http://www.yourwatercolorado.org/cfwe-education/water-is/water-quality/54-citizens-guide-to-colorado-water-quality-protection>

Directional wells have a longer well bore to achieve the same bottom hole location as a vertical well. Drilling and well casing may also be more complicated than vertical wells due to the bends in the well bore to achieve the horizontal distance. Typical BLM requirements for drilling would require vertical surface casing to a depth below known aquifers (before the production well bore bends to become directional), to minimize the risk of contaminating freshwater

aquifers during drilling or due to well integrity failure. Good industry drilling standards, better drilling equipment and better casing and cementing methods reduce the danger of "loosing drilling fluid" or casing and cementing failure, but there is some increased risk inherent in directional drilling. This means there is a higher potential for groundwater contamination during drilling, completion and hydraulic fracturing for directional drilling, due to the loss of fluids or failure of well casing and cementing. Longer reaches for directional drilling may increase this risk.

Section 30 – Wild Horse and Burros

Summary

The BLM should link the Colorado Monitoring Framework with the vegetation studies. Additionally, BLM should have considered appropriate management levels for drought conditions in the range of alternatives.

Response

The BLM established appropriate management levels for each herd management unit in each of its relevant existing land use plans for the field offices in Northwest Colorado. Establishing new appropriate management levels in the Greater Sage-Grouse LUPA is out of this project's scope.

A monitoring framework was introduced in the Draft LUPA/EIS in Chapter 2 (Alternatives) and Appendix J (Greater Sage-Grouse Draft Monitoring Framework). A more detailed monitoring framework has been incorporated into Proposed LUPA/Final EIS Chapter 2, Section 2.6.2, Monitoring of the Greater Sage-Grouse Planning Strategy, and Appendix F, Greater Sage-Grouse Monitoring Framework. Further, a detailed description of the monitoring framework is available in Section 4.9, NEPA Mitigation Measures, of this report.

Section 32 – Weeds

Summary

The Draft LUPA/EIS should have considered a cohesive weed management program and the effects of cheatgrass incursions and presence on GRSG and sagebrush habitat.

Response

As noted previously in Sections 4.6 (NEPA Indirect Impacts), 4.7 (NEPA Cumulative Impacts), and 7.7 (Greater Sage-Grouse Impact Analysis) of this report, the BLM and Forest Service complied with the CEQ regulations for developing the direct, indirect, and cumulative impacts analysis.

The Draft LUPA/EIS assesses and discloses the environmental impacts associated with invasive and noxious weeds from proposed management actions of other resources and resource uses in Section 4.6, Vegetation (Forests, Rangelands, Riparian and Wetlands, and Noxious Weeds) (page 587). A

discussion of the impacts from noxious weeds on GRSG and its habitat can be found in Section 4.4.2, Greater Sage-Grouse (page 505).

Section 32.1 – Lands with Wilderness Characteristics

Summary

The existing lands with wilderness characteristics inventories are out of date, and the BLM failed to conduct updated inventories for lands with wilderness characteristics.

Response

As noted in the Draft LUPA/EIS, Section 3.20, Lands with Wilderness Characteristics (page 395), the purpose of and need for the National Greater Sage-Grouse planning effort is limited to making land use planning decisions specific to the conservation of GRSG habitats. No decisions related to the management of lands with wilderness characteristics will be made as part of this planning effort; therefore, management of lands with wilderness characteristics is considered outside the scope of this plan amendment process. Impacts on lands with wilderness characteristics from the alternatives being analyzed for this planning effort are presented in the Draft LUPA/EIS, Section 4.20, Lands with Wilderness Characteristics (page 821).

As part of the original FLPMA Section 603-mandated inventories, inventories were conducted during past RMP revisions and amendment efforts, and through other various lands with wilderness characteristics inventory updates that have recently taken place. Inventories for wilderness characteristics were conducted for each field office, including some ongoing inventories and reflect the most up-to-date lands with wilderness characteristics baseline information for this planning area. For inventories that were conducted after 2011, findings were documented following guidance in BLM Instruction Memorandum 2011-154, Requirement to Conduct and Maintain Inventory Information for Wilderness Characteristics and to Consider Lands with Wilderness Characteristics in Land Use Plans, which is now encompassed in BLM Manuals 6310 and 6320. Lands with wilderness characteristics inventories will be updated for any site-specific project NEPA analyses that are conducted in the planning area to determine if a project will have impacts on lands with wilderness characteristics identified through previous or updated inventory efforts.

Wilderness characteristics assessments are not applicable to National Forest System lands.

P.3 COMMENTER LIST

Table P.1 provides the names of individuals and others that submitted unique comment letters (not campaign letters) on the Draft LUPA/EIS.

**Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest
Colorado GRSG Draft LUPA/EIS**

Name	Organization
Individuals	
Albers, Marcus	
Alderson, George	
Alderson, George	
Alexander, Sam	
Anderson, William	
Arvidson, Matthew	
Atteyah, Matthew	
Backlund, John	
Baldwin, Kevin E.	
Barr, Deb	
Barrett, Linn	
Barrett, Linn D.	
Bates, Jeff	
Bergstrom, Dustin	
Berkowitz, Hannah	
Betz, Kelsie	
Bock, Nathan	
Bonczynski, Mike	
Braden, Scott	
Bridges, Gary	
Briggs, Caroline	
Bristow, Dave	
Brown, Deirdre	
Brown, J. Paul	
Brown, Jason	
Brown, Jessica	
Brown, Susan	
Burch, Jan	
Burgen, Julia	
Byars, Katrina	
Byers, Peg	
Calicuria, Patrick	
Cameron, Carol	
Canton, Jacky	
Carn, Carl	
Carwile, Terry	
Chadwick, Carter	
Chadwick, Johanna	

Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest Colorado GRSG Draft LUPA/EIS

Name	Organization
Clark, Laura	
Collins, Steve	
Cook, Elizabeth	
Couey, Carrie	
Couey, Kelly	
Crawford, Joyce	
Davies, Shauna	
Davis, J	
Davis, Sean	
Dick, M	
Dimand, Mary Ann	
Donovan, Katie	
Dowling, Theodora	
Durrett, Gregory	
Epstein, Susan	
Esterbrook, Kay	
Fenner, Jacob	
Ferguson, Peter	
Feuerborn, Theresa	
Frank, Rebecca	
Frontczak, Susan Marie	
Fuller, Mark	
Geer, Caye	
Goldberg, David	
Golden, Peter	
Goodge, Michelle	
Goodrich, Lisa	
Gowen, Mark	
Grancias, Susan	
Gray, Ethan	
Greslin, Betsy	
Grieger, Shawna	
Grimm, Evelyn	
Grobe, Charles G.	
Groll, Stacie	
Groves, Erik	
Guidi, Rita	
Hansen, Sue	
Hanson, Abigail	

**Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest
Colorado GRSG Draft LUPA/EIS**

Name	Organization
Hanzel, Karl	
Hasselbrink, Robert	
Hawkins, Mike	
Hemmer, Justin	
Henderson, David	
Henebry, Carla	
Holland, Susan	
Hollon, Hollie	
Holm, Gregory	
Honnecke, Marcus	
Hudson, Marie	
Hughey, Ronald E.	
Hunsen, Justin	
Hunt, Claire	
Hurowitz, Mike	
Jacobson, Claudia	
Jauhola, Christine	
Javier, Jamie	
Johnson, Cheryl	
Johnson, Dan	
Johnson, Janet	
Jolley, Kent	
Jorgensen, Pam	
Kastel, Diane	
Kessler, Matthew	
Kline, Jane	
Krueger-Koplin, Suzanne	
Kurtz, Maya	
Ladd, Brenda	
Ladd, Frank	
Ladd, Jonathan	
Lambeth, Ron	
Laursoo, Marlis	
Lewers, Elaine	
Lilly, Nakia	
Lim, Sarah	
Lipson, Pete	
Littlehawk-Calicura, Sheila	
Loeffelholz, Marie	

Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest Colorado GRSG Draft LUPA/EIS

Name	Organization
Long, Kevin	
Ludgin, Scott	
Maggied, Michael	
Marah, Bartie	
Marjie,	
Marxuach, Antonio	
Massaro, Patrick	
Mathers, Thomas J	
Matheson, Diana	
May, David	
Maysmith, Pete	
McAfee, Gina	
McAfee, Mary	
McAfee, Oralie	
McCallum, Jim	
McCarty, Donna	
McCoy, Hazel	
McGrew, Joanne	
McManus, Denise	
McManus, Joseph	
McNeal, Michael	
McStay, Wes	
Merrill, Nancy	
Millette, Robert	
Morgan, Michael C	
Morris, David	
Murray, Sandra	
Nash, Jacob	
Nelson, Sasha	
Newman, Ricki	
Oden, Marilyn	
Oden, Marilyn	
Odor, Jeff	
Olsen, Joyce	
Orbanek, Emily	
Palmer, Marilyn	
Patrick, Todd	
Pederson, Margaret	
Pentecost, Roy	

**Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest
Colorado GRSG Draft LUPA/EIS**

Name	Organization
Pohle, Linda	
Pomeroy, Sean	
Powers, Linda	
Price, Laurie	
Quinty, Austin	
Rechel, Eric	
Redd, Kenny	
Reece-Long, Gina	
Reed, Kenneth	
Reynolds, Steven	
Richards, William	
Riley, Kathleen	
Robinson, Robert	
Roley, Mittch	
Romance, Maggie	
Rose, Kathryn	
Ross, Guy	
Rovner, Jefferey	
Rudin, David	
Safken, Melody	
Sanchez, David	
Savage, Harlin	
Savett, Adam	
Schafer-Lisowski, Lois	
Schafer-Lisowski, Lois	
Schenk, Sherry	
Schlollenberger, Scott	
Schmandt, Danielle	
Schneider, Ken	
Schultz, Carol	
Scissors, Ken	
Sealing, Clee	
Sealing, Clee	
Shaffer, Linda	
Shaw, Rex	
Shepard, Janice	
Shepherd, Janice	
Sheridan, Janet	
Showalter, David	

Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest Colorado GRSG Draft LUPA/EIS

Name	Organization
Sikkema, Justin	
Sisk, Sidney	
Slaughter, Kathy	
Smith, Jesse	
Smith, Rocky	
Smith, Susan	
Sosa, Rodolfo	
Spehar, Jim	
Srelitz, Katherine	
Starr, Shirley	
Starr, Zuzana	
Steitz, Jim	
Stevenson, Hillary	
Storey, Porter	
Storrs, Andrea	
Storrs, Andrea	
Storrs, Andrea	
Stout, Gene	
Strelitz, Joy	
Strelitz, Mark	
Strelitz, Matthew	
Streliz, Paul	
Streliz, Rebecca	
Strosburg, Lynn	
Sundgren, Kent	
Swain, Frank	
Teklu, Axum	
Terry, Susan	
Thom, Mary	
Tice, Elizabeth	
Umbarger, Brian	
Unfred, Craig	
Unruh, Jerry D.	
Uphoff, Chris	
Van Hoven, Sue	
Vanderloop, Celia	
Vaughn, Colton	
Visinttainer, Gary	
Vollmar, Denise	

Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest Colorado GRSG Draft LUPA/EIS

Name	Organization
Vollmar, Mark	
Vyhnal, Kristin	
Warner, Barbara	
Weber, Fred	
Weber, Robyn	
Weinrich, Jean	
Weinstein, Joseph	
Westley, Raelyn	
White, Dennis	
Wickens, Thomas	
Wilkop, Lindsay	
William, Steve	
Williams	
Wilson, Brent	
Wilson, W.L.	
Winton, Lauren	
Wisen, Kate	
Wizer, Joyce	
Wood, Margaret	
Wuerthner, George	
Wunder, Mitch	
Wussow, Megan	
Yazzie, Jane	
Zogg, Paul	
Zuboy, Jarrett	
Others	
Samson, Mike	AGNC
Steve, Steve	American Bird Conservancy
	American Bird Conservancy
Ranger, Richard	American Petroleum Institute
Applegate, David	Anadarko
Owens, Nick	Anadarko
Alward, Richard	Aridlands Natural Resource Consulting
Monger, Doug	Associated Governments of Northwest Colorado
Samson, Mike	Associated Governments of Northwest Colorado
Edmunds, Daly	Audubon Rockies
Crowder, Kent	Board of County Commissioners of Jackson County
Winkler, Randy	City of Rifle
Petersen, Bonnie	Club 20

Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest Colorado GRSG Draft LUPA/EIS

Name	Organization
Jones, Scott	COHVCO
Lane, John F.	COHVCO
Manuello, Gene	Colorado Cattlemen's Association
Minnick, Tamera	Colorado Mesa University
Sanderson, Stuart	Colorado Mining Association
Casper, Andrew	Colorado Oil and Gas Association
Rhule, Rex	Colorado River Fire Rescue
Miller, Randall	Colorado Snowmobile Association
O'Neill, Suzanne	Colorado Wildlife Federation
Visintainer, Gary	Colorado Wool Growers Association
Danni Dey, Eileen	ConocoPhillips Company
Schafer, Luke	Conservation Colorado
	Conservation Colorado
Hill, Jon	Cripple Cowboy Cow Outfit, Inc.
Marx, Nick	De Beque Fire Protection District
Salvo, Mark	Defenders of Wildlife
Robertson, Scott	Douglas Creek Conservation District
Gordon, Bruce	EcoFlight
Chamberlain, Stephen P.	Energy Investments, Inc.
Clark, Michael	Enirgi Natural Resources USA Corp
Bohan, Suzanne	EPA
Jankovsky, Tom	Garfield County
Martin, John	Garfield County
Martin, John	Garfield County
Samson, Mike	Garfield County
Jankovsky, Tom	Garfield County Board of County Commissioners
Samson, Mike	Garfield County Board of County Commissioners
Haptonstall, Ken	Garfield County School District
Bumgarner, Gary	Grand County
Linke, Merrit	Grand County
Newberry, James	Grand County
Coombs, James	Grand River Health
Korte, Nic	Grand Valley Audubon Society
Silbert, Shelly	Great Old Broads for Wilderness
Naatz, Dan	Independent Petroleum Association of America
Joy, Matthew	Jorden Bischoff & Hiser, P.L.C.
Kimball, Spencer	Mesa County
Ritschard, Mike	Middle Park Farm Bureau
Kinkaid, John S.	Moffat County

Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest Colorado GRSG Draft LUPA/EIS

Name	Organization
Pomper, Elizabeth	National Audubon Society
Zimmerman, Kathleen	National Wildlife Federation
Riley, Terry Z	North American Grouse Partnership
Riley, Terry Z.	North American Grouse Partnership
Anderson, Phillip	North Park Stockgrowers Association
Braun, Jeff	Nucor
Oldland, Reuben	Oldland Brothers, Inc.
Hornung, Elisha	Pacificorp
Zogg, Paul	Pinto Valley Ranch
Hilding, Nancy	Prairie Hills Audubon Society
Moseley, Claire	Public Lands Advocacy
Van Liew, Dustin	Public Lands Council
Huemoeller, Kelly	QEP Resources, Inc.
Smith, Mike	QEP Resources, Inc.
Bolton, Shawn	Rio Blanco County
Eskelson, Jefferey	Rio Blanco County
Hill, Jon	Rio Blanco County
Sprague, Mark	Rio Blanco County
Ritschard, Michael	Ritschard Cattle Co.
Liguori, Sherry	Rocky Mountain Power
Mueller, Megan	Rocky Mountain Wild
Delia G.,	Sierra Club
Groll, Stacie	Sierra Club and Conservation Colorado member
Stewart, Scott	The High Lonesome Ranch
Kram, Megan	The Nature Conservancy
Culver, Nada	The Wilderness Society
Arnett, Edward B.	Theodore Roosevelt Conservation Partnership
Cook, Rodney S.	Timberlake Ranch, LLC
Riggle, Don	Trails Preservation Alliance
Miller, Garry	TransWest
Luke, Forrest	Trapper Mining Inc.
Lempke, Douglas A.	Tri-State Generation & Transmission Association, Inc.
Petersen, Carol	Troublesome Valley Ranch
Nettleton, Jerry M	Twentymile Coal, LLC
Linner, Susan	USFWS
T. Wright,	Vermillion Ranch Limited Partnership
van West, Rein	Western Colorado Congress
Nicke, Andy	Western Colorado Jobs Alliance
Sgamma, Kathleen	Western Energy Alliance

Table P.1
Individuals and Others That Submitted Unique Comment Letters on Northwest Colorado GRSG Draft LUPA/EIS

Name	Organization
Bruner, Travis	Western Watersheds Project
Bruner, Travis	Western Watersheds Project
Hendrickson, Callie	White River and Douglas Creek Conservation Districts
Thompson, Leonard	White River Conservation District
	Wild Earth Guardians
	Wild Earth Guardians
Silbert, Shelley	WildEarth Guardians
Shoemaker, Sloan	Wilderness Workshop
Holloran, Matt	Wyoming Wildlife Consultants, LLC