Chapter 6

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CHAPTER 6
RESPONSE TO COMMENTS ON THE DRAFT RMP/EIS

6.1 INTRODUCTION

After publishing the Draft RMP/EIS, the initial 90-day public comment period to receive comments on the Draft RMP/EIS was extended by an additional 60 days in response to requests from the Mesa County Commission and other public requests. The BLM received written comments by mail, fax, email, and at public meetings. Comments covered a wide spectrum of thoughts, opinions, ideas, and concerns. The BLM recognizes that commenters invested considerable time and effort to submit comments on the Draft RMP/EIS, and developed a comment analysis methodology to ensure that all comments were considered as directed by NEPA regulations.

The BLM has identified and formally responded to all substantive public comments. A systematic process for responding to comments was developed to ensure all substantive comments were tracked and considered. Upon receipt, each comment letter was assigned an identification number and logged into a database that allowed the BLM to organize, categorize, and respond to comments. Substantive comments from each letter were coded to appropriate categories based on content of the comment, retaining the link to the commenter. The categories generally follow the sections presented in the Draft EIS, though some relate to the planning process or editorial concerns.

Comments similar to each other were grouped under a topic heading. The BLM then drafted a statement summarizing the issue(s) contained in each group of comments. The responses were crafted to respond to the comments and note whether a change to the EIS was warranted.

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, the BLM relied on CEQ 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 EIS

- Questions, with a reasonable basis, the adequacy of the information and/or analysis in the EIS
- Presents reasonable alternatives other than those presented in the Draft EIS that meet the purpose and need of the proposed action and address 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 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 RMP/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 (the BLM 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. The BLM received 521 submissions that did not contain any substantive comments. Many comments received throughout the process expressed personal opinions or preferences, had little relevance to the adequacy or accuracy of the Draft RMP/EIS, or represented commentary regarding resource management that is outside the scope of the planning effort. These comments did not provide specific information to assist the planning team in making a change to the Preferred Alternative, did not suggest other alternatives, and did not take issue with methods used in the Draft RMP/EIS, and are not addressed further in this document. Examples of some of these comments include the following:

- "The best of the alternatives is Alternative D (or A, B, or C)."

- "The BLM has yet to show land stewardship at or above the level currently demonstrated by the private sector."
- "Your plan does not reflect balanced land management."
- "More land should be protected as wilderness."
- "I want the EIS to reflect the following for this area: no grazing, no logging, no drilling, no mining, and no OHVs."
- "You need to protect all ACECs/Wild and Scenic Rivers/areas with wilderness characteristics.";
- "Do not add any more road closures to what is now in existence."
- "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 or philosophical nature were all read, analyzed, and considered. Because such comments are not substantive in nature, the BLM did not respond to them. It is also important to note that, 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 RMP/Final EIS has been extensively technically edited and revised to fix typos, missing references, definitions, and acronyms, and provide other clarifications as needed.

Finally, as of August 2014, 73 submissions were received after the comment period closed. These submissions were reviewed for consideration during development of the Proposed RMP/Final EIS, but are not included in the responses to substantive comments.

6.1.1 Campaign Letters

Conservation Colorado held a standardized letter campaign for the Draft RMP/EIS effort through which their constituents were able to submit a customized standard letter or a modified version of the letter indicating support for Conservation Colorado's position on the Draft RMP/EIS. Individuals who submitted the modified standard letter generally added new comments or information to the letter or edited it to reflect their main issue. Modified letters with unique and substantive comments were given their own letter number and coded appropriately. All commenters who used Conservation Colorado's campaign letter and did not also include unique and substantive comments will be listed in the final content analysis report under the **Campaign Letter Commenter List** heading following the comment responses.

6.1.2 How this Chapter is Organized

This chapter is divided into three main sections. **Section 6.1**, Introduction, provides an overview of the comment response process. **Section 6.2**, Issue Topics and Responses, contains comments, summary statements, and responses for all topics. This section is divided into sub-topic headings that include excerpts from individual comment letters, a summary statement (as necessary), and the BLM's response

to the summary statement. **Section 6.3**, Responses for Specific Comments, contains comments and responses pertaining to the specific travel management implementation decisions (e.g., route designations).

6.1.3 Route Designations

Throughout the planning process, BLM has received thousands of comments which have been recorded and incorporated into the planning criteria that informed designation for each alternative including the preferred.

During the planning process, the BLM sought public comment on the route inventory. After the public comment, the BLM conducted on-the-ground inspection of the missing routes identified by the public. The BLM recognizes that new routes appear as off trail use occurs. In order to define a route system to use during the planning process, the BLM froze the route inventory following the on-the-ground inspection after the public comment period for the route inventory.

During the draft comment phase, GJFO received roughly 1,500 comments that were route specific. Public comments addressing route designations are not included in this chapter due to the amount of information that they contain and the length of the reports. Instead, the RMP website contains two separate resources related to route designations. The first, a series of detailed route designation comment reports, shows whether the public comment's requested designation is within the range of alternatives. The second resource is a detailed route report that contains all route designation comments, the rationale behind the Proposed RMP designation, and additional details for each route and route segment. These can be found at http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp.html.

The following section provides a general summary of the types of route designation comments received during the Draft RMP/EIS public comment period, along with a general discussion of the method and practices the BLM used to respond to these comments.

Summary

1. Some commenters asked the BLM to designate individual routes for different uses or to close individual routes. These comments are grouped into three primary categories:
    a. The first group includes comments that asked the BLM to designate an individual route as closed or open to a specific use. These comments included specific route numbers.
    b. The second group includes comments that asked the BLM to designate routes in an area with the same designation. These comments included both areas where routes should be closed and areas where routes should be open for specific uses.
    c. The third group includes comments that asked the BLM to designate routes open for general access in and through the FO.
2. Some comments noted the BLM did not have a complete inventory of all the routes.
3. Some comments asked the BLM to develop new routes that connect existing routes.
4. Some comments asked the BLM to keep more routes open to ensure we provide adequate access to public land.

Response

1. The BLM designates individual routes to create a travel network that supports resource goals and objectives and provides access in and through BLM-administered public lands. Each alternative in the travel plan relied on the different resource goals and objectives for that alternative to develop a route system that protects resources while maintaining recreational access and trail opportunities.

   In response to comments that asked for routes to be designated open or closed, the BLM developed a table that summarizes 1) public comments by route number; 2) what recommendation the public comment made for each route; 3) what designations were considered under the different alternatives; and 4) the public comment.

   On a broad scale, the BLM considered one alternative (Alternative A) where all two track routes outside wilderness areas were undesignated and were considered open and available to all uses (motorized and non-motorized), and all undesignated single track routes outside the wilderness were open to motorcycles along with non-motorized uses. Additionally, the BLM considered a hierarchy of use. That is, routes designated open to full-sized vehicles would also be open to all other uses (ATVs, motorcycles, bicycles, horse & foot travel). As such, if a comment requested a route be designated open for bicycles, and one of the alternatives designated the route open to all vehicles, the BLM considered that comment in that alternative.

   On a more detailed level, many comments asked the BLM to limit a route to specific uses (e.g. limited to bicycles and hiking only). Due to the limited number of alternatives and the wide variety of possible combinations of designations, the BLM may not have considered each individual request within the range of alternatives; however each comment was considered during the designation process. In these cases, the BLM followed its Travel and Transportation Management policy (BLM Manual 1626) of using an interdisciplinary approach to designating individual routes to create a travel system where all the RMP goals and objectives are considered. Where there was guidance in the RMP for recreational uses, routes were designated to support the recreational objectives for that area. Likewise, where there was RMP guidance to restrict or limit travel to protect other resources, routes were designated to support those objectives. As such, all route comments were considered within the range of alternatives. For example, if a comment asked for a route to be closed, and that route is in an area with recreation objectives to provide both trail-based recreation (motorized or non-motorized) and wildlife objectives to protect big game habitat, the BLM may not have closed this specific route. Instead the BLM considered the comment to close the route when deciding which of the nearby routes in that area should be open or closed to best meet both the recreation objective and the wildlife objective.

2. In the Proposed RMP, routes that access private property that were not included in the initial inventory were added, evaluated, and designated. Additionally, routes that were not in the initial inventory that provide access to and along valid rights-of-ways (e.g. power lines) were also added, evaluated and designated.

   In the development of the proposed plan BLM looked at routes that for various reasons would require some form of mitigation (bridge, reroute, public access, etc.) to allow for long term public or administrative access. These situations included issues like safety concerns from an operating well pad, no legal public access, impassable wash out or resource that needs to be avoided to name a few. In these instances, BLM is proposing mitigation measures to remedy the

situation and allow for continued access. Route reports will have specific information on the issue, mitigation measure needed and any special instructions. Roughly 13% of routes have mitigation requirements that result in a change to the route designation over time.

3. Proposals for new routes in the FO will be considered after the initial decisions are made regarding those roads and trails that will become part of the permanent network, verses those which need to be closed and/or removed. New route proposals will be considered on a case-by-case basis during implementation of the RMP.
4. As noted above, the BLM designated routes will create a travel system that supports all resource and resource use goals and objectives.

6.2 NATIONAL ENVIRONMENTAL POLICY ACT

6.2.1 General

Summary

The BLM is not in compliance with CEQ Regulation 1502.22 regarding the impact of incomplete or unavailable data on the Draft RMP/EIS. The balance of resources and uses in the Draft RMP/EIS is skewed such that it violates NEPA Title I Section 101(b)(3) and (5).

Comments

Submission No: emc0693

Commenter: Thomas Hundtroft, Bookcliff Rattlers

Comment: To summarize, the BLM is not in compliance with 1502.22 because BLM fails to state how highly relevant these gaps [i.e., Section 4.1.3, Incomplete or Unavailable Information] are, and BLM is proposing significant disruptions to the human environment in spite of these knowledge gaps, and the gaps are critical precisely because BLM is proposing such drastic changes to the human environment. In the absence of any factual data about whether there really are any significant impacts, the BLM has failed to provide a rationale for these radical changes. The remedy is to place the unknown information much more prominently within the text for each potential effect. This will require hundreds of added statements in Chapter 3 and Chapter 4. That way, the Deciding Officer has the proper perspective on the actual effects.

Submission No: emc0693

Commenter: Thomas Hundtroft, Bookcliff Rattlers

Comment: The third actionable item is that NEPA does not require BLM to place natural values above all others. It instructs BLM to take a "hard look" at the consequences of its Decisions. NEPA states that we must "achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities." In other words, the human values must receive the same or more consideration as natural values. NEPA emphasizes the "human environment," and that specific instruction is to prepare an analysis of the consequences of all BLM actions "significantly affecting the human environment." That means the "built" environment. The only built environment in the planning area are the roads and trails, and BLM is proposing to dismantle the entire system for the sake of purely natural values. This wholesale closure will significantly affect the human environment and it will be a negative effect on the human environment. It will be negative because in BLM's proposals, there will be no balance between population and resource use; the scales are being tipped by BLM to the favor of purely natural values. Humans will be denied the amenities of participating in the natural values present

in the planning area. This is a direct violation of NEPA Title I Section 101(b)(3) and (5). We learned that the only real evidence available (the RMP analysis of cumulative effects) yielded the judgment that the cumulative effects of the present situation will not be significant. Therefore, to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences" BLM must keep planning areawide, general public access available. The existing roads and trails are presently feasible within the NEPA mandate and BLM has not shown a compelling need to close even a few of them.

Response

CEQ Regulation 1502.22 does not require a federal agency to provide complete and comprehensive data supporting every element of the decision-making process; such a requirement would not be feasible and would include exorbitant costs. The CEQ regulations require that information essential to a reasoned choice be provided in an EIS, because without such information no reasoned choice could be made. The GJFO RMP process provides data that is essential to a reasoned choice. The comprehensive data-gathering, public outreach, and alternatives development of the long-term planning process have provided the data and analysis necessary to support the conclusions of the EIS, even if such data and analysis are by necessity broad in scope and of uncertain specificity. It is the nature of long-term planning that assumptions must be developed to consider future impacts. Requiring the BLM to identify specific impacts on geographically specific resources prior to making a planning-level decision would derail the planning and environmental review process, and no final RMP could ever be promulgated.

The BLM operates under an assortment of laws and regulations, but in this circumstance the primary policies are NEPA and FLPMA. NEPA establishes the procedural context, directing the BLM to evaluate the environmental impacts of its proposed RMP on the natural and human environment, and to provide the public an opportunity to comment on the proposal and its impacts. FLPMA directs the BLM to balance multiple uses for the long-term benefit of both the natural environment and human uses. Multiple use is defined in the FLPMA as "the management of the 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; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output."

According to 40 CFR 1508.14, the human environment:

> shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of "effects" [40 CFR 1508.8].) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated,

then the environmental impact statement will discuss all of these effects on the human environment (see page G-14).

NEPA is purely a procedural statute; it establishes no preferences (for built environment or any other resource) and requires no specific outcomes. The BLM proposes a sustainable network of roads and trails that meets the objectives set forth in this planning document and the mandates of the FLPMA. The alternatives described in Chapter 2 and the Travel Management Plan in Appendix M all retain routes open to a variety of means of transport (motorized, mechanized, foot, and horseback).

A federal agency complies with NEPA when it makes its decision based on sound science provided in the administrative record, and when it gives stakeholders an opportunity to participate in the decision-making process. Under FLPMA, where one use is incompatible with a multitude of other, equally valuable uses, the balancing of multiple uses may result in a reduction of the incompatible use.

6.2.2 Purpose and Need

Summary

The Purpose and Need statement and the planning issue statements are incomplete and fail to recognize the need to foster and encourage the development of domestic sources of energy.

The Travel Management Plan conflicts with the requirements of the RMP's Purpose and Need statement, specifically the need to manage the land for human uses.

Comments

Submission No: rmc0068

Commenter: Robert Boswell, Piceance Energy, LLC

Comment: The Purpose and Need statement on Draft RMP/EIS page 1-2 and the "Planning Issue Statements" on Draft RMP/EIS pages 1-11 through 1-12 are incomplete and fail to recognize the need to foster and encourage the development of domestic sources of energy. The Purpose and Need statement states only that the RMP must "identify areas and conditions in which mineral development can occur." Draft RMP/EIS at 1-2. The Planning Issue Statement for energy development states only that the RMP should address: "Which areas should be open to oil and gas leasing ... and what restrictions should be employed to protect natural and cultural resources and minimize user conflicts." Draft RMP/EIS at 1-11. Laramie does not dispute that the BLM must balance multiple competing uses. But these statements reflect a view that oil and gas development is an unwanted activity that the RMP must constrain, rather than a beneficial activity that develops domestic sources of energy, supports high paying jobs, and provides federal, state, and local governments with much needed tax revenues. The RMP/EIS also fails to recognize that the BLM has already made the policy decision to lease much of the planning area for oil and gas development. Where the BLM has already made a leasing decision, it has made the binding decision that those leased lands are in an "area in which mineral development can occur."

The purpose and need statement of the Draft RMP/EIS should identify the need to provide an RMP that allows for and supports the responsible development of domestic sources of energy from federal lands, including from existing leases. The BLM should state that one of the "Issues Addressed" in the RMP/EIS is to provide for development of domestic sources of energy.

Commenter: Robert Boswell, Piceance Energy, LLC
Comment: • Draft RMP/EIS Page 1-2: state that a purpose and need for the RMP is to foster the development of domestic sources of energy from federal lands, including from existing oil and leases.
• Draft RMP/EIS Page 1-4: include providing for the development of domestic energy sources as an "Issue Addressed" in the EIS.

Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: The Draft RMP/EIS Purpose and Need must include the intent of Congress, which is to manage the land for human use and occupancy, stimulate development of mankind, foster the general welfare, and promote productive harmony with nature. The Travel Management Plan includes no consideration of the contribution of motor access to the development of man, or to the enjoyment of productive harmony.

Response
The CEQ regulations direct that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action" (40 CFR 1502.13). Section 1.2 describes the Purpose and Need for the RMP revision. It describes the principles of multiple use and sustained yield, addresses land use issues and conflicts, and identifies major issues contributing to the need for an RMP revision. The major issues span a wide variety of resource programs and concerns, including energy and minerals management.

Travel management is guided by various laws, policies, and guidelines. Among these, 43 CFR 8342.1 and BLM Manual 1626 require the BLM to adhere to minimization criteria and account for a variety of resources, including recreation. Appendix M describes how these criteria were utilized to develop a comprehensive travel system that addresses the needs of all BLM resource and use programs, including public use. Section 6.3.3, Planning Issues and Criteria, describes the planning issue and criteria development process. The BLM developed a range of alternatives for travel management. This range was influenced by two public scoping periods devoted solely to travel management. The public was engaged in those public scoping periods and provided recreational use information that helped with alternatives development and will also be used to develop the proposed travel management plan. Also see the BLM's response in Section 6.2.1 for a discussion of multiple use and the human environment. No change has been made to the Proposed RMP/Final EIS.

6.2.3 Alternatives

6.2.3.1 Air Quality

Diesel Engine Emission Standards

Summary
The Draft RMP/EIS arbitrarily requires all drilling and completion engines to meet or exceed US EPA Tier 2 non-road diesel engine emission standards

Comment
Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Table 2-2. page 2-25. Description of Alternatives. (Minimize Emissions)
(40 CFR Part B9) BLM is requiring all drilling and completion engines to meet or exceed US EPA Tier 2 non-road diesel engine emission standards.
COMMENT: This will likely cause issues with certain classes of rigs, although, to Oxy's knowledge, the impact has not been fully assessed. All engines manufactured in 2006 and later are required to meet this standard. It is Oxy's understanding that this will be an issue with older rigs and likely with service companies due to the age of the equipment. The BLM has arbitrarily proposed this change without providing any analysis as to the economic extent of the proposed change. Oxy requests more analysis be considered to justify the need as well as the economic impact of this requirement. Furthermore, as mentioned before, BLM lacks the jurisdictional authority to impose conditions that supersede the State's or EPA authority. Thus, this guideline should be revised, consistent with State and EPA rules and guidelines.

Response
The US EPA Tier 2 non-road diesel engine emissions standard management action in Chapter 2 has been recategorized as a BMP in the CARPP (see Table VI-1 in Appendix G). The BMPs listed in the CARPP are not meant to be exhaustive in terms of available or acceptable emissions reduction/control technologies or techniques, but provide a baseline of construction design features and mitigation options for project-specific or regional analyses. Project-specific air quality analyses and other modeling studies including CARMMS will be used to establish requirements for controlling emissions, and these requirements will be defined via project-level analyses (e.g., APD, development plans, etc.).

Dust Control

Summary
The BLM should implement additional measures and provide clarification on how operators will be required to reduce PM_{10} emissions from dust.

Comments
Submission No: cfc0122
Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee
Comment: MCQAPC PM10 comments concerning Volume 1, Section 3.2.1, of the draft RMP include the following.
2. Mesa County Land Development Code §7.16.1 Streets and Roads
The MCAQPC recommends the BLM incorporate this section of the Mesa County Land development Code into the RMP to address unpaved roads that are on Federal lands within the Grand Valley Airshed to reduce associated PM10 pollution. The relevant section reads "All new public or private roads constructed within the Grand Valley Airshed shall be paved. Only farm service and canal/ditch/drainage maintenance roads are exempt from this paving requirement." Specifically, MCAQPC recommends paving of roads leading to trail heads in the desert area north of the populated area of Grand Junction. These roads have heavy traffic from mountain bike and off-road vehicle users. They are paved up to the point at which they enter federal lands. A continuous paved surface to the trailheads would significantly reduce PM10 emissions, and would provide uniformity with existing local control strategies. Priority should be given to roads which have a high level of traffic and/or are located close to populated areas.

Submission No: fla0001
Commenter: American Motorcycle Association Form Letter
Comment: In addition to the areas identified with wilderness characteristics, the BLM GJFO's RMP creates a new way to prohibit OHV use on the entire 1.1 million acres of the surface planning area. The preferred alternative will allow the BLM to temporarily close off-highway vehicle (OHV) open areas and designated routes as needed during wind events to reduce particulate matter. Particulate Matter is nuisance dust commonly known as farm dust. I understand there is an airport and interstate near Grand Junction and am willing to work with the BLM for safety reasons.

In other words, the BLM solely blames the use of OHV for disturbing nuisance dust. What about other potential sources of nuisance dust, such as mountain bikes, humans, passenger and light-duty vehicles? What if there is a high wind warning when it is raining or snowing?

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Table 2-2. page 2-25. Description of Alternatives (Particulate Matter Emissions): BLM will require proper road design, construction, and surfacing on BLM authorized roads to reduce particulate matter emissions.

COMMENT: Oxy requests clarification for this proposed rule. For instance, is this limited to typical industry use of road dust control measures?

Response
The range of alternatives in the Draft RMP/EIS includes several measures to reduce fugitive dust, including closing designated routes and OHV open areas during high wind events. There are also several proposed SOPs and BMPs to reduce fugitive dust (see Appendix H). Multiple Colorado-based near-field modeling assessments show that dust emissions controls are required in order to protect air quality. Depending on site-specific resource conditions and weather conditions, the BLM can select appropriate management responses to limit fugitive dust and resource degradation. Road design, construction, and surfacing requirements would be proposed and analyzed during implementation level planning. No change has been made to the Proposed RMP/Final EIS.

Interagency Air Quality Memorandum of Understanding

Summary
The BLM has a responsibility under the 2011 National Air Quality MOU to address management decisions that may impact air resources on federally managed lands outside of the planning area.

Comment
Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page G-1, Section G.1, Purpose
This section indicates that the scope of the ARMP is limited to just air resources within the planning area. Please add here that the BLM has a responsibility under the Air Quality MOU to also address management decisions that may impact air resources on federally managed lands outside of the planning area.

Response
The Air Resources Management Plan (ARMP) has been replaced by the CARPP (see Appendix G), which states that the BLM will follow the MOU processes when applicable. The BLM has fully complied with the provisions of the 2011 National Air Quality MOU and is currently preforming analysis via the CARMMS study to address impacts beyond the GJFO boundaries (see the analysis of CARMMS high scenario modeling results in Section 4.3.1). When making oil and gas implementation decisions that may impact air quality outside the planning area, the BLM will consider or apply, as appropriate, the provisions of the Memorandum of Understanding Among the US Department of Agriculture, US DOI, and US Environmental Protection Agency, Regarding Air Quality Analyses and Mitigation for Federal Oil and Gas Decisions Through the NEPA Process, signed June 23, 2011 (see Appendix G). No change has been made to the Proposed RMP/Final EIS.

Percentage Compliance Measures

Summary
The Air Resources Management Plan (Appendix G) in the Draft RMP/EIS excessively and arbitrarily relies on the use of percentage compliance measures.

Comment
Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Percentage Compliance Measures for Infrastructure (ARMP):
COMMENT: The use of a percentage measure is excessively and arbitrarily relied on for many infrastructure requirements throughout the action alternatives such as: completion fluids; well pad tank and gas treatment; fugitive emissions; disposal of produced water; liquids gathering system; waste gas control from well stimulation and completion; disposal of drilling/completion fluids and electrifying field compression. As a practical matter percentages are not reasonable, and such a measure may be useful as a goal but not as an enforceable requirement.

Oxy requests information on how the basis of the percentages were developed. The BLM presents no analysis. Infrastructure requirements need to be based on logistics, access and topography, yet such analysis is completely absent in the RMP/DEIS. Instead, the BLM should use 0000 requirements rather than this general statement and arbitrary percentage figures. Further, existing CDPHE and EPA requirements are more than sufficient here.

Response
The use of percentage compliance measures was proposed in the ARMP (Appendix G of the Draft RMP/EIS). That document has been replaced with the CARPP (Appendix G of the Proposed RMP/Final EIS). There are no percentage compliance measures in the CARPP.

CARMMS Modeling Effort

Summary
The Draft RMP/EIS does not explain the approach that the BLM would use to incorporate the CARMMS modeling regime.

Comments
Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: The Division further recommends that the Final EIS explain the approach that the BLM intends to utilize to follow the initial West-CARMMS modeling regime. The Division would appreciate having the BLM further articulate how the agency plans on implementing decisions for leasing and development based upon further iterations of the West-CARMMS modeling and/or the Three State Study (3SAQS) modeling and monitoring frameworks currently being developed. Clarification on these modeling issues would be helpful, as the Division would like to see the implementation of an approach that insures a modeling platform that is updated regularly with recent information and data on oil and gas development rates and practices, in addition to having updated emissions inventories.

Response
The CARPP (Appendix G of the Proposed RMP/Final EIS) explains the process to be followed for model evaluation and future modeling studies. The BLM will cooperate in an interagency process to develop a comprehensive strategy to protect air quality from the impacts of future oil and gas development within the region. As part of that strategy, the local, state, federal, and tribal agencies involved in the regulation of air quality and the authorization of oil and gas development will evaluate modeling results from CARMMS or other future modeling studies and identify potential air quality concerns and necessary reductions in air emissions. If the modeling predicts significant impacts, these agencies would use their respective authorities to implement enhanced emission control strategies, operating limitations, equipment standards, and/or pacing of development as necessary to ensure continued compliance with applicable ambient air quality standards, including those BMPs listed in Section VI.

Future iterations of the CARMMS or initiation of a similar regional modeling study to assess impacts from oil and gas development may be conducted through a collaborative interagency funding and management mechanism (see Appendix G, Sections III.C.4 and III.C.5). No change has been made to the Proposed RMP/Final EIS.

Following Applicable Laws and Regulations

Summary
Rather than define specific prescriptions and mitigation requirements, the BLM should simply require operators to comply with all applicable laws and regulations.

Comments
Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: Draft EIS/RMP at 2-25 and ARMP - delete defined air quality management prescriptions and defined mitigation requirements with: "All air emissions in the planning area will be subject to applicable state and federal emissions requirements."

Response
The BLM cannot locate the text to which the commenter refers, but the ARMP has been replaced with the CARPP and a discussion of mitigation requirements and compliance with laws and regulations can be found in Appendix G of the Proposed RMP/Final EIS.

Green Completions

Summary
Green completions may not be feasible or appropriate in all cases.

Comments
Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: Proposed Green Completion Management Direction Should Recognize the Limitations on Adoption of this Technology.

The RMP/EIS proposes the following management "Action": Require that oil and gas operators use reduced emission completion technology (i.e. "green" completion) as defined in COGCC Rule 805 and the New Source Performance Standards for Crude Oil and Natural Gas Production at 40 CFR Part 63 Subpart 0000 at all wells on BLM-administered lands and wells that access federal minerals. An exemption may be granted on a case-by-case basis.

Draft RMP/EIS at 2-25. Piceance Energy appreciates that the RMP/EIS references the COGCC Rule for Green Completions, and that it provides for exemptions on a case by case basis. But the RMP should better appreciate and disclose that green completions may not be appropriate in all circumstances.

For example, COGCC Rules provide that green completion practices are only required in certain circumstances:

Green completion practices are required on oil and gas wells where reservoir pressure, formation productivity, and wellbore conditions are likely to enable the well to be capable of naturally flowing hydrocarbon gas in flammable or greater concentrations at a stabilized rate in excess of five hundred (500) MCFD to the surface against an induced surface backpressure of five hundred (500) psig or sales line pressure, whichever is greater. Green completion practices are not required for exploratory wells, where the wells are not sufficiently proximate to sales lines, or where green completion practices are otherwise not technically and economically feasible.

COGCC Rule 805 (emphasis added). These rules take into account the technical and operational feasibility of utilizing green completion technology. The RMP should similarly explain that green completion technology will only be required under certain conditions, and where technically and economically feasible.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: Draft RMP/EIS at 2-25 - modify management action for green completions to state that: green completions may not be suitable for all circumstances. In accordance with COGCC Rule 805, green completion practices will be required on oil and gas wells where reservoir pressure, formation productivity, and wellbore conditions are likely to enable the well to be capable of naturally flowing hydrocarbon gas inflammable or greater

concentrations at a stabilized rate in excess of five hundred (500) MCFD to the surface against an induced surface backpressure offive hundred (500) psig or sales line pressure, whichever is greater. Green completion practices will not be required for exploratory wells, where the wells are not sufficiently proximate to sales lines, or where green completion practices are otherwise not technically and economically feasible.

Response
The management action requiring operators to use reduced emission completion technology (i.e., "green" completion; page 2-25 of the Draft RMP/EIS) has been removed from the Proposed RMP/EIS. Operators will still need to comply with all applicable federal, state, and local regulations.

6.2.3.2 Climate Change

Summary
The alternatives need to address how the BLM will mitigate causes of climate change and implement adaptive management.

Comment
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: Recommendations: The revision to the Grand Junction RMP provides BLM with an excellent opportunity to analyze the impacts from climate change to the planning area over the next two decades, as well as the contribution to climate change from management decisions made in the plan. The Draft RMP takes an important first step with its qualitative and quantitative discussion of climate change impacts in the environmental consequences analysis. However, this analysis should in turn lead to the development of thoughtful management prescriptions and alternatives in the land use plan that will address how BLM will mitigate these causes and adapt its management over the coming years to prevent permanent impairment and unnecessary or undue degradation to the resources in the face of climate change.

Response
The impacts of climate change are discussed in the document at a level of detail appropriate to landscape-level analysis. The lack of scientific tools designed to predict climate change on regional or local scales limits the ability to quantify potential future impacts. Currently, the BLM does not have an established mechanism to accurately predict the effect of resource management-level decisions from this planning effort on global climate change. Further, the EPA has not developed a regulatory protocol or set of emission standards regarding global climate change. Consistent with the NEPA, the public will have the opportunity to participate in the environmental analysis process for actions implementing the Proposed Plan. The Proposed RMP/Final EIS includes best management practices in Appendices G and H that may reduce emissions of greenhouse gases.

Climate change analysis for the purpose of this document was limited to the accounting and disclosing of factors that contribute to climate change, such as GHG emissions. These factors are described in Section 4.2.4. Chapter 4 in various places also discusses how climate change may impact resources in the planning area. The BLM will consider new information about climate change at the site-specific level, when there is a new proposed action in the planning area that will require the BLM to complete a new NEPA analysis. No change has been made to the Proposed RMP/Final EIS.

6.2.3.3 Water Resources

Range of Alternatives

Summary

Different protections should be applied to municipal watersheds, Local Source Water Protection Planning Areas where delineated in a Source Water Protection Plan, and drinking water protection areas as defined by Source Water Assessment Areas evaluated by the State. As an alternative, NSO or CSU stipulations should be applied for groundwater and groundwater under the direct influence of surface water resources.

Comments

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: In order to ensure public drinking water supply sources (e.g., surface water sources, including groundwater under the direct influence of surface water (GWUDI) sources, and groundwater sources) are fully protected from potential impacts associated with oil and gas leasing, the EPA provides the following recommended NSO language. This language is consistent with the CDPHE Source Water Protection Program (SWPP) recommendations:
Municipal Supply Watersheds- NSO within any of the following areas as deemed appropriate by the BLM:
• The entire watershed;
• Local Source Water Protection Planning Areas where delineated in a Source Water Protection Plan; or
• Drinking water protection areas as defined by Source Water Assessment Areas evaluated by the State.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: For groundwater and GWUDI sources, if the Municipal Supply Watersheds NSO is not deemed feasible by the BLM, we recommend a minimum one-half mile (2,640 feet) NSO or Controlled Surface Use (CSU) concentric buffer for these sources. This recommendation is based on the professional judgment of the CDPHE SWPP. Please contact the CDPHE SWPP Coordinator for additional information.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: The EPA commends the BLM for including in the Draft EIS a thorough analysis of potential impacts to surface waters resources and mitigation measures to avoid or minimize these impacts. Our additional recommendation in this area relates to characterization and mitigation measures related to impaired water bodies. The Draft EIS references Colorado's 2010 303(d) List for impaired waters not meeting water quality standards and Colorado's 2010 Monitoring and Evaluation (M&E) List for water bodies where there is reason to suspect water quality problems. The updated 2012 versions of these lists are available. Colorado's 2012 303(d) List indicates that water quality has become further impaired in the GJFO planning area since 2010. The number of impaired stream segments doubled from 16 in 2010 to 32 in 2012. The EPA recommends that BLM include in the Final EIS the information contained in Colorado's draft 2012 303(d) List and M&E List related to impaired water segments in the GJFO planning area, as well as a qualitative discussion regarding the changes in water quality in the planning area between 2010 and 2012. We also recommend that protective measures be applied to these impaired water segments. Surface disturbances near impaired water segments identified on Colorado's 2012 303(d) List are likely to impact water quality due to shorter travel distances for salts and sediment, potentially exacerbating

exceedances of water quality standards. We recommend that a 500' No Surface Occupancy (NSO) stipulation be applied for water segments on the 2012 303(d) List. We note that the BLM recently included a 500' NSO for impaired water segments in the White River RMP Draft EIS (August 2012) for the Preferred Alternative.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Under the Preferred Alternative, BLM proposes closing the Palisade and Grand Junction municipal watersheds to fluid mineral leasing as well as prohibiting surface occupancy in these areas. The DEIS does not clearly define the areas closed to fluid mineral leasing. It also ignores the numerous existing federal and state laws in place to protect water resources and to ensure safe and responsible oil and gas development.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Lease Prohibition Palisade and Grand Junction Watershed - The prohibition to new leasing and retiring of expired leases within the Palisade and Grand Junction watersheds is proposed in this RMP without consideration for the effort and money that Mesa County, BLM, the town of Palisade, Genesis Oil and Gas LLC and the public put into the Palisade/ Grand Junction Watershed Plan. Genesis Gas and Oil owns the current leases in this area and in this plan. Genesis has committed to measures to protect the water resources through buffers around water resources, water sampling and management practices. The proposed RMP removes the area for leasing without a discussion or consideration of the stakeholders. New technologies and practices are evolving every day to make oil and gas drilling cleaner and safer for the environment and this trend is not taken into account in this RMP.

Submission No: rmc0069
Commenter: Roger Granat, Mayor, Town of Palisade
Comment: The Town supports the exclusion of all leasing activities within the Palisade Municipal Watershed for Fluid Leasable Minerals, Locatable Minerals, Saleable Minerals, Solid Minerals, both Energy & Non-Energy under Alternative C. The sensitivity of the Town's water resource quality to both surface and sub-surface disturbance has been documented in the Watershed Monitoring Plan. Established in 2007, this document has established a continuous data stream chronicling the high quality of the Town's water resources. The Town's Rapid Creek Drainage and its tributaries have been designated as "Outstanding Waters" by the Water Quality Control Division (WQCD) of the Colorado Department of Public Health & Environment (CDPHE). It is the only such designation of a water supply in the State. The following data table shows the water chemistry that was performed and how these data supported the outstanding waters designation. Ultimately, this shows how sensitive the Town's water supply would be to degradation.

Submission No: rmc0069
Commenter: Roger Granat, Mayor, Town of Palisade
Comment: The Town supports specific exclusions such as "No Surface Occupancy" on Fluid Leasable Minerals with the Town's Municipal Watershed as proposed under both Alternative B and Alternative C. The Community Plan of Development for the Town of Palisade and City of Grand Junction Watersheds, co-written by the Town, the City, Genesis Gas & Oil and the BLM among others specifically calls for a 500 foot no occupancy zone around critical water resources. This level of protection must be supported and maintained. Given the opportunity, the Town would support the petitioning the Secretary of the Interior for withdrawal from mineral entry and close the area to mineral location and development within the Palisade watershed under Alternative C.

Response
The BLM is not proposing a 500-foot buffer NSO stipulation for impaired streams. The range of alternatives includes NSO stipulations based on four types of stream/drainages: Major Rivers (e.g., Colorado, Dolores, and Gunnison), Lotic Systems, Lentic Systems, and Definable Streams (e.g., ephemeral washes with no riparian communities). The State's list of impaired waters changes based on periodic reviews. Likewise, streams can be impaired for various contaminants that may or may not be associated with actions on BLM-administered lands (e.g., irrigation of private lands leading to selenium impairments). Implementation of BMPs on a site-specific basis combined with these NSO stipulations is sufficient to protect water quality. The Proposed RMP/Final EIS has been updated to incorporate the more recent 2012 list of 303(d) impaired waters. Please see Table 3-8.

Table 3-8 has been updated with the 2012 list of all 303(d) listed streams in the planning area. The Proposed RMP/Final EIS proposes to protect streams through stipulations, conditions of approval, and BMPs for water resources, regardless of 303(d) listing. For example, NSO stipulations for major river corridors extend to 400 meters (1312 feet) of the ordinary high-water mark (bank-full stage) or within 100 meters (328 feet) of the 100-year floodplain (whichever area is greatest) and NSO stipulations for streams possessing lotic riparian characteristics apply within a minimum distance of 100 meters (328 feet) from the edge of the ordinary high-water mark (bank-full stage; see Appendix B). Stipulations designed to protect other resources, such as those for steep slopes or riparian areas, often overlap or extend the stipulation buffers for water resources, creating a larger area where surface-disturbing activities are limited or prohibited.

The range of alternatives considers managing the two municipal watersheds as closed to fluid mineral leasing (Alternative C) and as a mixture of closed to leasing (Palisade and Grand Junction municipal watersheds) and applying NSO (Palisade and Grand Junction municipal watersheds) and CSU stipulations (Collbran and Mesa/Powderhorn Source Water Protection Areas, and Jerry Creek Watershed) in Alternative B. In addition, Source Water Intake Zone 3 is protected by an NSO stipulation under Alternative C and a prohibition on hazardous chemicals in Alternative B. The area identified near Collbran is a source water protection area as defined by the State's source water protection plan. The Mesa/Powderhorn source water protection area is also derived from the State's source water protection plan. However, in the case of Mesa/Powderhorn, the State's protection area has been expanded by the BLM based on topography, geology, and domestic water well densities. No change has been made to the Proposed RMP/Final EIS.

COGCC Regulations

Summary
At a minimum, oil and gas operations must comply with Colorado Oil and Gas Conservation Commission (COGCC) Regulation 317B for protecting surface water drinking water supplies.

Comments
Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: For surface water sources, if the Municipal Supply Watersheds NSO is not deemed feasible by the BLM, then at a minimum, we recommend the Final EIS cite the Colorado Oil and Gas Conservation Commission

(COGCC) Regulation 3 1 7B and incorporate its requirements for protecting surface water drinking water supplies. See the COGCC website for information on regulations and maps, as follows:
• COGCC Rules - http://cogcc.state.co.us/RR Docs new/rules/300Series.pdf
• Public Water Supply Surface Water Supply Area Map - http://cogcc.state.co.us/RR Docs new/rules/Appendix VI.pdf

Response
Page 3-45 has been updated to clarify that operators must comply with all COGCC regulations, including 317B. COGCC regulations would be applied under all alternatives, just as any other state regulation.

Definable Streams

Summary
The RMP/EIS should include a definition of "definable streams" and increase the stipulation buffer from 30 meters to 100 meters.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Pages 2-25; B-19. Table 2-2 Water Resources; Table B-5 NSO-3. CPW would like BLM to clarify "definable" streams; CPW recommends replacing 30 meters with 100 meters. It appears that BLM replaced NSO-3 in Alt. C with NSO-2. CPW would like clarification about the difference between "definable" streams and those streams included within NSO- 1 and NSO-2?

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: STIPULATION: Surface disturbing actions within a minimum distance of 30 meters (98 feet) from the edge of the ordinary high-water mark (bank-full stage) should be avoided to the greatest extent practicable and disturbances would be subject to site specific relocation at the discretion of the BLM.

TU recommends that this stipulation title be changed or that the BLM provide a better definition of definable streams. According to the definition within the DRMP the term "Definable Streams" is credited to Johnson and Buffler 2008 (Volume II, Glossary Page 8 - Definable Streams. Those with evidence of scour or deposition (Johnson and Buffer 2008)). Our review of the literature fails to identify where the authors defined or used this term.

Response
The 30-meter buffer protection is proposed for streams lacking riparian communities. Using the minimum buffer of 30 meters will allow flexibility for protecting these systems according to site-specific circumstances (some conditions could warrant a larger buffer). The RMP/EIS proposes larger buffers for streams with lotic or lentic riparian communities. No change has been made to the Proposed RMP/Final EIS.

The Draft RMP/EIS's definition of "definable streams" was in error. The following definition has been added to the Glossary in the Proposed RMP/Final EIS: "Definable/Ephemeral Small Streams. Streams that

contain running water only sporadically, and in direct response to precipitation. Ephemeral streams have a definable channel that is above the water table at all times, and are considered "seasonally flowing" or intermittent when they show evidence of scour and/or deposition."

Monitoring and Evaluation Efforts

Summary
The BLM should clarify the scope and cost of monitoring and evaluation efforts for important aquifers and important discharge/recharge areas.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM proposes water studies and monitoring efforts in Alternatives B, C, and D. GJ DRMP/EIS, Table 2-2, pg. 2-33. The BLM does not clearly define the scope of these studies and monitoring efforts nor the role and requirements for land users. Considering the potential cost associated with these efforts, BLM should clarify the scope, cost, and expected responsibilities.

Response
Monitoring and evaluation efforts for important aquifers and important discharge/recharge areas are considered implementation-level efforts. As the action (page 2-33, Draft RMP/EIS) states, the BLM would work with stakeholders to develop site-specific plans and actions to protect these resources. The BLM would continue existing monitoring efforts at established surface water locations as funding and staffing allows. The cost of additional monitoring would depend on the scope of land use actions proposed. No change has been made to the Proposed RMP/Final EIS.

Domestic Water Supplies

Summary
The action restricting oil and gas development near domestic water supplies is vague and unnecessary.

Comments
Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: Proposed Management Direction for Oil and Gas Development "Near" Domestic Water Supplies is Unduly Vague and Unnecessary. The RMP proposes a new management "Action" that states: "Oil and gas operations near domestic water supplies using a groundwater well or spring will be restricted." Draft RMP/EIS at 2-32. This proposed management direction is unduly vague because it is unclear what "near domestic water supplies" means. It is also unclear what it means that oil and gas operations will be "restricted." The BLM should delete this vague, unworkable, and unnecessary standard from the RMP.

The COGCC recently adopted comprehensive regulations for the protection of groundwater and drinking water. See COGCC Rule 609. The new rules require operators to conduct comprehensive sampling of water sources, including domestic water wells. Id. Further restrictions on oil and gas operations to protect groundwater may be

contained in the surface use agreement negotiated with the surface owner of split estate private surface/federal minerals land. See, e.g., Onshore Oil and Gas Order No. 1, 10,328 Federal Register 10,336 (Mar. 7, 2007) (requiring operators to make a good faith effort to reach a surface use agreement with split estate surface owners prior to conducting operations). The BLM should respect the groundwater protection conditions contained in the COGCC regulations and in surface use agreements negotiated with private surface owners, and should not impose an additional vague and unworkable restriction on operations "near" water supplies.

Response

The action addressing protection of domestic water supplies through proper siting of oil and gas operations is appropriate and consistent with COGCC Rule 609 and the regulations at 43 CFR 3101.1-2. Restrictions would be identified through the site-specific NEPA analysis and applicable regulations. The Proposed RMP/Final EIS has been updated to include reference to the new COGCC Rule 609 for statewide groundwater baseline sampling and monitoring. This rule was adopted in 2013 after publication of the Draft RMP/EIS. Rule 609 requires operators to collect baseline water quality samples at two different groundwater sources within 0.5-mile of the well site before drilling any new oil or gas well. The rule also requires the operator to take subsequent water samples to ensure no groundwater contamination occurred during drilling or after production. See page 4-89.

6.2.3.4 Soil Resources

Summary

The Proposed RMP/Final EIS should define "thresholds for evaluating vulnerability to erosional processes" and "climatological variability."

Comments

Submission No: emc0690

Commenter: Brian Hawthorne, Blue Ribbon Coalition

Comment: [Page 2-35, Soil Resources] The "Action" is also poorly written and open to interpretation. We suppose someone in the BLM office knows what "thresholds for evaluating vulnerability to erosional processes" means, but it is impossible for the general public to understand what you are proposing and how it may affect the implementation of site specific planning. Also, the term "climatological variability" is used exactly once in the DEIS.

Response

The action for designated "Open" areas or areas with high route densities is intentionally written to be flexible. The action has been updated to include areas of "intense use". In general, the BLM manages public lands to meet Land Health Standard 1, which evaluates erosion compared with reference ecological sites. However, in areas subject to intense recreational use (such as the North Desert OHV Open area), the BLM would use erosion models such as WEPP, RHEM, and/or the best available science to evaluate vulnerability to erosional processes and develop threshold erosion values for site specific soil conditions. This action specifically relates to areas of high OHV uses and is addressed in more detail in the Travel Management Plan (Appendix M). The action regarding climatological variability refers to the need to modify route closure dates for motorized travel in areas with fragile soils based on soil conditions due to variabitlity in seasonal weather patterns. For example, if one year is especially dry, it is possible that routes could be reopened earlier than if there was abundant precipitation or snowfall. Similarly, it may be necessary to revise seasonal closure dates based on multi-year climatological

patterns, but the action is clear that the need for this would be driven by a mandate to protect watershed health and water quality. No change has been made to the Proposed RMP/Final EIS.

6.2.3.5 Vegetation

Cheatgrass Control

Summary
The action on page 2-41 regarding cheatgrass control activities is too fine-scale for an RMP.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: Regarding a proposed "Action" for the Salt Desert Shrub Desired Plant Community, Table 2-2, page 2-41. This seems a very fine scale management distinction for an RMP. As noted above, we encourage programmatic land use plans to default to the least specific direction possible. We recommend removing this provision altogether because it is overly specific for a RMP.

Also, we could not determine the rationale for this provision. However, with the information provided in the DEIS, and assuming the methods could be employed without unacceptable impacts to recreational uses, we would support new cheatgrass control-methods in the Grand Valley open area. While such large open areas do have more route densities than surrounding areas, the entire 12,000 acres certainly not denuded and may benefit from new cheatgrass control methods.

Response
This management action prioritizes future vegetation treatments as funding allows. These types of actions help the BLM direct management in the future. In addition, the action does not specify types of treatments to be implemented or specific locations for such treatments, which would be too fine-scale for this RMP. The North Desert Open area is not included in the list of cheatgrass control areas in Alternative B because this area receives higher level of human disturbance than other areas identified for treatment, making it lower priority for treatment. The BLM is focusing efforts on treating areas where land health is not being met due to the presences of cheatgrass and not due to recreation use. Therefore, no change has been made to the Proposed RMP/Final EIS.

Natural Processes

Summary
The ability of natural processes to manage vegetation conditions needs to be included in the alternatives.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-45, Goal, Objective, and Actions: These are fine looking, except that beetles and disease are not recognized to also be management tools, or at least natural processes with legitimacy. Why recognize the place of

fire (Fig. 2-76) and not this other natural disturbance factor? Local woodlands and forests have taken and are taking hits from beetles, yet they come out of them looking significantly better than do woodlands following the fires we have seen.

Response

Natural processes, including beetle infestations, wildland fire, and disease, play a role in ecosystem health and vegetation conditions (see Sections 3.2.6, 3.2.10, and 3.3.1). The RMP focuses on those natural processes that can be more readily influenced by management such as wildland fire. The range of alternatives contains actions to improve ecosystem health and vegetative conditions; the effects of natural processes or a particular location's susceptibility to certain natural processes will be assessed at implementation-level planning when specific vegetation treatments are proposed. No change has been made to the Proposed RMP/Final EIS.

Weed Control Methods

Summary

There should be a more detailed explanation of the proposed weed control methods and protections to guard against impacts on wildlife.

Comments

Submission No: emc0924

Commenter: Megan Kram, The Nature Conservancy

Comment: We encourage BLM to add specifics about weed management to Table 2-2 (p.2-49) on what will be required (for example, requiring contractors to wash equipment before entering BLM lands, to reduce new introductions and maintain weed free areas). BLM currently cites specifics for invasive fish and wildlife species (see Table 2-2, p.2-75) but does not do so for weeds (Table 2-2, p.2-49). We also recommend that BLM modify the weed SOPs (p.H-20-H-24) to match the other sections where the SOPs are listed first, followed by the BMPs.

Response

Appropriate weed control methods are dependent upon site-specific conditions and resource concerns. As a result, specific methods are developed on a case-by-case basis using the methods described on page 2-49 of the Draft RMP/EIS and, where applicable, using BMPs in cooperation with project applicants. The GJFO Integrated Weed Management Plan contains specific weed management actions and is a dynamic document updated more often than an RMP. The BLM's Integrated Pest Management Program is designed to consider potential impacts on other resources, including wildlife. SOPs for weeds are identified as such in Appendix H. The list is short enough that the reader should be able to quickly distinguish the two. Stipulations (e.g., vehicle washing) are identified when a particular use is authorized through the project-specific NEPA and permitting process, or within various plans such as the Fire Management Plan. No change has been made to the Proposed RMP/Final EIS.

Vegetation Protection and Benefits for Wildlife

Summary

There should be stronger protection for vegetation types and recognition of specific vegetation conditions that are beneficial to wildlife.

Comments

Submission No: emc0904

Commenter: Chris Jauhola

Comment: There are some changes that could be made to Alternative B, BLM's preferred alternative, which would increase its benefits for fish, wildlife and riparian habitat. The first recommendation is for the 123 miles of lotic riparian areas that are not achieving proper functioning condition. The factors causing these areas to be non-functioning or functioning at risk should be immediately addressed, through adjustments in livestock grazing, road closures or other measures. Since riparian areas are such a limited resource in this desert climate and have such an inordinate value to fish and wildlife, they should all be considered for designation as Wildlife Emphasis Areas or Areas of Critical Environmental Concern.

Submission No: emc0924

Commenter: Megan Kram, The Nature Conservancy

Comment: We recommend that BLM identify the largest patches of individual vegetation types (e.g., pinyon juniper) and largest patches of native vegetation regardless of type; choose which patches warrant protection to ensure naturally functioning vegetation where possible; and protect them through any variety of means such as No Surface Occupancy, designation of Lands Managed for Wilderness Characteristics Outside Existing WSAs, ACEC designation, and/or closure to or withdrawals from uses (fluid minerals and other, including when leases expire).

Response

The RMP/EIS contains numerous actions that protect vegetation communities. For example, stipulations to be applied in lotic and lentic riparian areas and old growth forests and woodlands directly protect those important vegetation communities. Stipulations applied to protect other resources provide indirect protection to vegetation by limiting activities that may damage or fragment vegetation. Other actions, such as managing lands for wilderness characteristics or designating ACECs, also protect vegetation through limitations on surface-disturbing activities.

Protective measures for vegetation are built into all facets of BLM management. Lentic and lotic riparian areas determined to be not functioning or functioning-at-risk are managed by the BLM to meet or exceed BLM Colorado Land Health Standard 2. If livestock are determined to be a causal factor for not meeting Standard 2, the BLM must implement management changes to improve the stream reach within one year. When other factors such as recreational use or wildlife are compromising PFC, more collaborative approaches must be used. Management of vegetation resources, including riparian and wetland areas, is designed to enhance and maintain sustainable ecological condition within plant communities. The RMP/EIS also proposes applying NSO stipulation to lotic riparian areas to prohibit new surface-disturbance. No change has been made to the Proposed RMP/Final EIS.

Management actions for vegetation are designed to protect or improve vegetation conditions and, as a result, provide for wildlife habitat. Vegetation types listed in the RMP were isolated and analyzed as they pertain to wildlife habitat. Actions are based on the best available science, which may evolve over the life

of the plan. As such, flexibility in the actions is necessary to accommodate changes in science and best practices. No change has been made to the Proposed RMP/Final EIS.

Sagebrush

Summary
Revise the RMP/EIS to better address the relationship between sagebrush and sage-grouse.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-42, "Goal: Manage the sagebrush biome. . . while maintaining a mosaic of canopy cover and successional stages." How about adding, "recognizing that mature shrub stages typically form the best sage grouse habitat." The goal statement as written will encourage the diminution of sage grouse habitat. It's an attractive, but, on many sites, erroneous belief that sagebrush reduces livestock forage potential on a range and those that hold this belief will lobby for funds to treat as much sagebrush as possible citing wildlife, even sage grouse, as the justification.

Response
The commenter's request is already covered under the objective (page 2-41 of the Draft RMP/EIS) that states, "Maintain or improve high-quality sagebrush habitats consistent with the natural range of variability for sagebrush communities. Restore the species composition and diversity of seral stages of sagebrush communities." Sagebrush treatments are prioritized based on sage-grouse habitat, utilizing the most current sage-grouse habitat guidelines. No change has been made to the Proposed RMP/Final EIS.

Pesticides

Summary
The BLM should limit the use of pesticides detrimental to sensitive species.

Comments
Submission No: cfc0221
Commenter: Sandra Kiser
Comment: Consider adding statement to limit. where practicable, the use of broad kill pesticides to protect bees and other beneficial (or not insects. This could, in tum, protect sensitive species that may consume the poisoned insects such as birds, fish, reptiles/amphibians.

Response
The BLM does not apply pesticides to control insects. The specifics of herbicide use are covered in the Integrated Weed Management Plan. The BLM is unsure what is meant by broad kill pesticides. Herbicides are used for treating weeds, which are designed to kill plants and not animal life. Pollinators do utilize weedy species at times, but most of the flowering weed species targeted in the GJFO planning area are very small infestations in the greater landscape, so the majority of pollination is on native species. When the county, USFWS and USDA-APHIS have a need to control insect pests, they are

coordinating their efforts to minimize the damage to beneficial insects. No change has been made to the Proposed RMP/Final EIS.

6.2.3.6 Fish and Wildlife

Well Pad Placement

Summary
The BLM should limit well pad placement to protect wildlife.

Comments
Submission No: emc0927
Commenter: Michael Saul, National Wildlife Federation
Comment: At a minimum, throughout all big game and sage-grouse habitat, BLM should allow no more then one well pad per square mile. There is evidence that 160-acre spacing for well pads may not be sufficient to conserve crucial big game habitat, especially in calving and fawning areas. See Wyoming Game and Fish Department, Recommendations for Development of Oil & Gas Resources Within Crucial & Important Wildlife Habitats 2004 [http://gf.state.wy.us/downloads/pdf/og.pdf]. Given current technology, it is unclear why this density is even necessary. Using directional drilling with a 2,500ft reach reduces surface density dramatically, and is currently used in the industry. One well pad per section is not out of the question and 320-acre spacing is clearly attainable.

Response
Well pad spacing will be determined at the implementation level on a project-specific basis subsequent to completion of the RMP process. Analysis of proposed well pad spacing will also occur on a project-specific basis using the best available science, which may be different than what is available when the RMP is adopted. Best Management Practice M&E-67 (see Appendix H) provides guidance for future implementation level decisions. No change has been made to the Proposed RMP/Final EIS.

Wildlife Emphasis Areas

Summary
Commenters requested fewer and additional protections for wildlife emphasis areas.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-92, Prairie Canyon WEA: Long-eared Owls use old magpie nests in both salt cedar and Utah juniper. The juniper is key for Scott's orioles and gray vireos, two high-interest species of this area and so if long-eared owls have enough "clout", the other two species will be taken care of by BLM management. If there's doubt about the clout, then the oriole and vireo should also be named key species too, so as to increase the rationale to preserve the desert edge junipers. For example, proposed solar emphasis should never justify removing junipers in this area.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The information presented in the GJ DRMP/EIS overwhelmingly demonstrates that big game species such as elk, mule deer, and pronghorn appear to be thriving within the Planning Area. GJ DRMP/EIS, pg. 3-94. The EIS actually demonstrates that the elk population is 13 times higher than the current herd goals with an estimated 93,000 elk in the Planning Area. Id. The mule deer population similarly appears to be thriving as they are above the current population objectives. These dramatic increases have occurred despite significant oil and gas development within the GJ Planning Area over the past several years. Given the stable populations, the BLM must justify its decision to create wildlife management areas where oil and gas development would be limited, curtailed, or eliminated entirely. GJ DRMP/EIS, Table 2.2, pgs. 2-86 - 2-98. Given the population numbers, the BLM has not demonstrated the necessity of limiting oil and gas development which, as described earlier, is a principal or major use of the federal lands under FLPMA. U.S.C. § 1701(l).

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW recommends that the Glade Park WEA be expanded to the south, along the Colorado-Utah State border so that it includes Lost Horse Basin, Ryan Park and Spring Creek-Spring Canyon. The expanded area is crucial winter habitat for elk on Pinon Mesa. The Glade Park WEA should also be expanded to include the area of Kings and Toms Canyons to add crucial elk winter habitat on Pinion Mesa.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Energy development protections for a WEA designation should be designed to defend the habitat values or serve the purposes for which the WEA was created The WEAs do not preclude multi-use or energy development activities and while some degree of habitat protection is provided through No Surface Occupation (NSO), Controlled Surface Use (CSU) or Timing Limitation (TL) stipulations, CPW believes they do not provide protection levels commensurate with the high value habitat that they possess. CPW requests that the following land use strategies and management actions be included in the preferred, final RMP/EIS to provide added guidance and assurances for WEA protections. Every individual WEA should be managed similar to a Geographic Area Plan (GAP) for energy development activities CPW recommends that an operator submit a proposed development plan to the BLM and CPW annually, including activities to be conducted during the ensuing drilling season; including requests for exceptions for winter or production closures. The plan should specify the proposed wells, well pads, access roads, pipelines, and other facilities to be constructed and used in the ensuing winter's drilling program, initiation dates and durations of the various activities associated with those locations, anticipated traffic volumes on project roads and wildlife mitigation measures proposed and or developed cooperatively with the BLM and CPW. An operator would provide such information annually and 6 months prior to anticipated approvals for permits.

Response
The BLM agrees that Scott's orioles and gray vireos should be added to the Prairie Canyon Wildlife Emphasis Area. These species have been added on page 2-117.

Wildlife emphasis areas are polygons where more management emphasis is placed on protection and enhancement of the wildlife resource. Potential wildlife emphasis areas were identified through a screening process that included mapping important habitat areas and an assessment of potential threats (i.e., vulnerability). Management of wildlife emphasis areas is needed to protect against habitat degradation, avoidance, fragmentation, and direct mortality from these activities. Wildlife emphasis areas

were designed not just for common species such as mule deer but also for more imperiled species such as the federally threatened Gunnison Sage-Grouse, Greater Sage-Grouse, Kit Fox and Cutthroat Trout. No change has been made to the Proposed RMP/Final EIS.

Reference to Lease Notice 5 (Working in Wildlife Habitat) has been added to Chapter 2 (page 2-101) to clarify operators' obligations when working in wildlife emphasis areas. NEPA analysis would happen on a project-specific basis once a project has been proposed to the BLM.

Backcountry Wildlife Emphasis Areas

Summary
The RMP/EIS should administratively designate Backcountry Wildlife Emphasis Areas to protect a variety of recreational and wildlife values.

Comments
Submission No: emc0827
Commenter: Nick Payne, Theodore Roosevelt Conservation Partnership
Comment: We propose that the following areas be allocated as [Backcountry Wildlife Emphasis Areas] in the GJFO RMP. These areas represent much of the last best remaining generally intact and undeveloped backcountry areas in the GJFO and deserve conservation safeguards for the benefit of hunters, anglers and many other users of public lands. All of these lands possess high-quality fish and wildlife habitat and provide high-quality non-motorized recreation opportunities and are of sufficient size to allow their conservation: Bangs Canyon, Blue Mesa, Calamity, Granite Creek, Hill Creek, Kings Canyon, Little Dolores, Little Maverick, Lumsden, Mesa Creek, Payne Wash, Renegade Point, Sewemup, Snyder Flats, Tenderfoot, Unaweep.

Response
The Draft RMP/EIS range of alternatives contains numerous protective measures in these geographic areas that would protect quiet backcountry recreation and wildlife resources. Examples include wildlife emphasis areas, RMAs targeting quiet recreation, lands managed to protect their wilderness characteristics (including solitude and outstanding opportunities for primitive and unconfined recreation), stipulations limiting or prohibiting surface-disturbing activities in many types of wildlife habitat, and ACECs that protect relevant and important values germane to this public comment. The Bangs SRMA was modified between the Draft RMP/EIS and the Proposed RMP/Final EIS, adding RMZ 4 with specific objectives for backcountry/wilderness recreation. Also, the Bangs LWC unit was added to the Proposed RMP, and adjustments were made to the Gateway ERMA to eliminate overlap with WEAs in the area. These actions provide similar experiences to those requested by the commenter. As such, the BLM feels the range of alternatives adequately addresses the commenter's request for administrative protection of backcountry recreation and wildlife resources. No change has been made to the Proposed RMP/Final EIS.

General Protections for Wildlife

Summary
The BLM should adopt a suite of more stringent protections for wildlife.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW believes that the highest level of wildlife protection that can be provided to a State Wildlife Area is a "closed to lease" provision. CPW requests that BLM place a closed to lease condition for federal minerals under Horsethief Canyon, Jerry Creek Reservoir, and Plateau Creek State Wildlife Areas. CPW made this same no lease request in our scoping comments dated January 2009. CPW urges BLM to give this request the highest possible consideration. These properties were acquired and are specifically managed for wildlife because they either protect crucial habitats or provide unique opportunities for wildlife conservation. Oil and gas development is generally incompatible with wildlife management goals in these crucial areas. Additionally, CPW requests that BLM, at a minimum, assign a closed to lease provision and a NSO stipulation to the surface of any future State Wildlife Area that might be developed.

Page B-6, Section B 2.2. CPW recommends adding the following language to the paragraph below. "In situations where a surface-disturbing activity is excepted, the activity could be subject to additional conditions of approval, reclamation measures, or BMPs or mitigation Measures required would be based on the nature and extent of resource values potentially affected by the surface-disturbing activity. Excepted surface-disturbing activities/lease stipulations are granted on a one-time case-by-case basis and will not necessarily constitute subsequent approvals."

Landscape Scale Protection Efforts for Wildlife and Wildlife Habitats.
• CPW requests that BLM require Master Development Plans (MDP) for multi-well pad developments and limit single, one-at-a-time APDs across large areas of development.
• Lease stipulations on individual permits only provide adequate site level protections: likewise, COAs and standard lease terms do not provide sufficient protections on a permit-by-permit basis as cumulative impacts occur across the landscape.
• CPW would like to see the BLM, CPW and large land owners/ranchers create partnerships in energy development that will afford a more orderly & timely development pattern and result in more protections to wildlife and wildlife habitats. CPW recommends that the BLM, CPW, energy companies and interested landowners work together to develop a coordinated, phased development plan across large landscapes and multiple operators.
• CPW believes that BLM should take the opportunity to describe and define full field development. It would also be helpful to describe how the term is used and interpreted in the context of this RMP. It appears that projected well numbers are already in excess of what was projected in the previous RMP and in the RFD.

CPW would like to see a threshold developed so that as oil and gas wells continue to be developed adequate mitigation is provided to offset the impacts. CPW requests that the BLM more fully unitize the enabling authority that is granted in the standard lease terms and conditions as well as the direction provided by the "Yates decision" to more fully protect wildlife and their habitats.
• Oil and gas development is subject to standard terms and conditions of the lease.
Onshore Oil and Gas Order No. 1 (Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Approval of Operations) regulations (43 CFR 3160) give the BLM the ability to relocate proposed operations up to 200 meters (656 feet) and prohibit surface-disturbing operations for a period not to exceed 60 days.
• The Yates Petroleum Corp., IBLA 2006-213, 2006-226 and William P. Maycock, IBLA 2008-197, 2008-200) decisions established that BLM has discretion to modify surface operations to add specific mitigation measures supported by site specific NEPA analysis undertaken during the development phase on existing leases. CPW believes that BLM should use this authority as necessary and applicable on existing leases in the GJFO.

Response
The range of alternatives includes several options for reducing impacts from oil and gas development on state wildlife areas, including closing these areas to leasing. The Proposed RMP/Final EIS allows leasing with an NSO stipulation, which will prohibit future surface disturbance in these areas as a result of federal mineral development.

The stipulations appendix (Appendix B) has been revised to comply with new BLM policy regarding leasing reform and stipulation consistency. Section B.2.2 describes the standard exception process, and the BLM may apply BMPs or other COAs on a project-by-project basis according to site-specific concerns.

Master Development Plans and Applications for Permit to Drill are implementation-level decisions that are handled at a project-specific level. The BLM will continue to work with land owners and managers in the planning area when permits are received. The RMP/EIS identifies areas of federal mineral state that are either open or closed to leasing, thereby focusing future leasing in areas best suited for that use. Lease stipulations are not attached to individual permits; there can be multiple permits associated with individual leases. Lease stipulations are developed at land use planning level and are analyzed on a landscape level.

The BLM does not believe that projected well numbers are in excess of the 1987 RMP or the current RFD. Full-field development has little meaning in a large area such as the GFJO planning area. Most of the oil and gas development areas have large aerial extents with exterior boundaries that can sometimes be defined only by drilling. In the GJFO planning area, there are few designated "fields" in the normal definition of an oil and gas field. For example, the Mesa Verde and Mancos/Niobrara reservoirs extend over a large portion of the expected development area and are defined on their southern boundary where they outcrop near the Book Cliffs and on their eastern northern boundary by the Field Office boundary. The ability to develop these reservoirs is largely dependent on the ability of the operator to physically access the reservoirs in an economical manner.

The BLM agrees that the Interior Board of Land Appeals has made clear that, when making a decision regarding discrete surface-disturbing oil and gas development activities following site-specific environmental review, the BLM has the authority to impose reasonable protective measures not otherwise provided for in lease stipulations, to minimize adverse impacts on other resource values. See 30 USC 226(g); 43 CFR 3101.1-2; Yates Petroleum Corp., 176 IBLA 144 (2008); and National Wildlife Federation, 169 IBLA 146, 164 (2006).

No change has been made to the Proposed RMP/Final EIS.

Demonstration Project

Summary
The BLM should perform as part of the RMP a "demonstration project" guided by provisions in House Bill 1298 and the Habitat Stewardship Act of 2007.

Comments
Submission No: emc0931
Commenter: Steve Belinda, High Lonesome Ranch
Comment: Attached is a map of the proposed "demonstration project" area boundary that we would like to recommend to BLM for inclusion into the RMP. This effort was guided by the Geographic Area Plan (GAP) approach outlined by House Bill 1298 (passed in 2007) and the Habitat Stewardship Act of 2007 (§ 34-60-128). The area includes a significant portion of HLR deeded properties and a sizeable area of BLM grazing leases held by HLR. The area is approximately 220,000 acres which includes 50,000 private land acres of which 28,965 acres are owned by HLR (the largest landowner in the proposed area). This area is a good scale to work at landscape level energy development and has been developed based on the geography of the area, biology/ecology of important focal species (mule deer, elk, sage grouse, federally protected plant species), hydrology, ownership, and access. Managers and biologists from the Colorado Parks and Wildlife (CPW) and Grand Junction BLM provided input into the boundaries based on the ability to manage fish and wildlife populations and associated habitats for important focal species. HLR owns strategic access to BLM lands within portions of the demonstration project boundary and is willing to work with BLM and mineral lease holders on access to currently inaccessible areas. The area also has a significant amount of "no surface occupancy" for most of the area which creates a major problem for development when only BLM lands are considered without adjacent private lands. The boundary is adjustable based on further review and analysis and what makes better opportunities for collaboration during the RMP process.

Response
This project lies within the larger South Shale Ridges and Canyons MLP area, which has similar objectives and protective measures. Based on current collaborative efforts between the CPW, the BLM, and High Lonesome Ranch, development of the demonstration project will be consistent with the RMP and MLP. Note that the demonstration project is an implementation action and not a planning decision, and is therefore outside the scope of the RMP. No change has been made to the Proposed RMP/Final EIS.

6.2.3.7 Special Status Species

The BLM has a mandate to protect federally listed and BLM sensitive species. Per BLM Manual 6840.02 (Special Status Species Management):

> The objectives of the BLM special status species policy are:
>
> A. To conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species.
>
> B. To initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA.

The manual further states that the BLM must "identify appropriate outcomes, strategies, restoration opportunities, use restrictions, and management actions necessary to conserve and/or recover listed species, as well as provisions for the conservation of Bureau sensitive species" in land use plans (BLM Manual 6840.04[D][5]). Finally, "Actions authorized by the BLM shall further the conservation and/or recovery of federally listed species and conservation of Bureau sensitive species" (BLM Manual 6840.06).

Greater and Gunnison Sage-Grouse

More Protections are Needed

Summary

Habitat Designation. Additional priority and restoration habitat for Greater Sage-Grouse should be identified in the plan.

Closure to Land Use. Greater Sage-Grouse priority habitat should be closed to all forms of land use.

Fluid Mineral Leasing and Rights-of-Way. Greater and Gunnison Sage-Grouse habitat should be closed to future mineral leasing, NSO for existing leases, and ROW exclusion areas.

Oil and Gas Development. A Geographic Area Plan, Master Development Plan, or Master Leasing Plan should be required for proposed oil and gas development within Greater or Gunnison Sage-Grouse habitat or a wildlife emphasis area.

Motorized Recreation. All motorized recreation should be subject to seasonal route closure to protect sage-grouse lek and nesting habitat.

Fencing. All fencing with areas identified as preliminary priority habitat should be "sage-grouse friendly."

Seasonal Habitat. Seasonal sage-grouse habitat should be subject to NSO stipulations, and surface-disturbing activities should be prohibited.

Best Available Science. The BLM did not use best available science and thus does not have an adequate range of alternatives by not considering recommendations for Greater Sage-Grouse published in the Report on National Greater Sage-Grouse Conservation Measures (also known as the National Technical Team [NTT] report). Although a separate in-depth effort is considering ways to prevent the listing of Greater Sage-Grouse under the Endangered Species Act, if that effort does not come to fruition, the RMP for the GJFO will be insufficient to protect the species.

Livestock Grazing. Grazing privileges should be retired in and adjacent to sagebrush steppe/mixed grassland communities. Livestock grazing should be deferred for long periods (5 to 10 years) in some sagebrush steppe/mixed grass communities that support or have supported leks. Allotments in sagebrush steppe/mixed grass community and adjacent woodlands should provide at least 15-month of continuous rest from domestic livestock grazing once every 3 years. Livestock should be immediately removed from allotments once a 35 percent utilization level is reached within any given year.

Comments

Submission No: emc0822

Commenter: Mark Salvo

Comment: The plan should designate additional priority sage-grouse habitat. The Grand Junction Field Office contains only 16 greater sage-grouse leks, and only three leks are located on BLM-administered land (3-108). Only 125 greater sage-grouse were counted in the field office in 2007 (3-110). A measly .02 percent (5,600 acres) of habitat are identified as preliminary priority habitat for greater sage-grouse in the planning area, with an additional .04 percent (8,900 acres) as preliminary general habitat (3-108). Given the importance of public land to sage-

grouse conservation, the DRMP/EIS should designate a maximum amount of priority sage-grouse habitat to conserve the species. This may include elevating some or all general habitat to priority habitat status.

The plan should prohibit new disturbance in priority sage-grouse habitat. Given the miniscule amount of sage-grouse habitat in the planning area, the DRMP/EIS should close priority habitat to all forms of land use. No surface occupancy, controlled surface use and timing limitation stipulations for fluid minerals development may be inadequate to conserve sage-grouse, since they can be waived or modified under applicable best management practices (B-5). Sage-grouse winter habitat is key to sage-grouse persistence and should be protected from disturbance (Braun et al. 2005, citing Connelly et al. 2000 and others; Moynahan et al. 2007); mere timing limitations on development in winter habitat are inadequate to conserve this seasonal habitat (2-70).

The plan should designate restoration sage-grouse habitat. The DRMP/EIS indicates that sage-grouse once occupied more habitat in the planning area (3-108). The BLM should designate restoration sage-grouse habitat to focus habitat restoration efforts to extend sage-grouse habitat and mitigate for future loss of priority habitat in the planning area (BLM Memo MT-2010-017). Restoration habitat may be degraded or fragmented habitat that is currently unoccupied by sage-grouse, but might be useful to the species if restored to its potential natural community. Restoration habitat should be identified in management planning based on its importance to sage-grouse and the likelihood of successfully restoring sagebrush communities (Meinke et al. 2009; Wisdom et al. 2005a). Passive restoration is preferred for restoring these areas over active restoration methods.

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: BLM should carry forward all 13 WEAs described in Alternative C with the application of NSO and ROW Avoidance stipulations, with the exception of all Greater and Gunnison's Sage grouse habitat should be withdrawn from future mineral leasing, NSO for all existing leases and ROW exclusion areas. BLM should also require a GAP, MDP or MLP for any proposed oil and gas development proposal within the boundary of a WEA and such a multi-well plan should include phased leasing and development analysis.
B. Gunnison and Greater Sage-grouse
The Grand Junction Field Office is the only BLM field office in the state of Colorado that contains both Gunnison and Greater Sage-grouse and their habitats, placing a premium on prescription laid out in this RMP and its subsequent implementation. In general, all priority habitat (or Preliminary Priority Habitat, or PPH) identified by BLM and/or Colorado Parks and Wildlife should be managed in the following manner:
- Closed to all future mineral leasing.
- NSO for all existing leases. (The Yates Petroleum Corp., IBLA 2006-213, 2006-226 and William P. Maycock, IBLA 2008-197, 2008-200) decisions established that BLM has discretion to modify surface operations to add specific mitigation measures supported by site-specific NEPA analysis undertaken during the development phase on existing leases. The fact that BLM has routinely ignored that discretion in the past does not mean it should not be applied in the future).
- ROW Exclusion area. The impacts to Greater and Gunnison's Sage grouse do to site-specific and cumulative disturbance, increased predation and increased access to motorized vehicles from transmission ROW in particular, is well documented.
- All motorized recreation be subject to seasonal route closure to protect sage grouse lek and nesting habitat.
- All fencing with areas identified as PPH be "sage-grouse friendly."
- Seasonal sage grouse habitat should be subject to NSO stipulations and overall prohibit any surface disturbing activities.

Submission No: emc0927
Commenter: Michael Saul, National Wildlife Foundation
DRMPA/EIS 2-18.This flat refusal to even consider the BLM's own experts' guidance on sagegrouse conservation contravenes BLM's obligations under NEPA to consider best available scientific information and a reasonable range of alternatives, its multiple-use management obligations under FLPMA, and its duties under the Endangered Species Act to avoid contributing to the likelihood of extinction of a species eligible for listing under that Act. The reasoning proffered for rejecting the NTT Report out of hand is untenable. The fact that the BLM is currently considering a multiple-office plan amendment considering the NTT recommendations does not excuse its obligation to consider them now for the Grand Junction area, particularly because immediate decisions in this plan (for example, to authorize issuance of oil and gas leases absent NTT-recommended safeguards) may foreclose the ability to adopt NTT recommendations and safeguard grouse habitat at a later date.

Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy
Comment: Provide a map of federal mineral ownership and, if BLM has not already done so, ensure that sage-grouse land use allocations and management actions for federal minerals protect sage-grouse to the maximum extent possible. Since much of the greater sage-grouse habitat within the GJFO is on private lands, we encourage BLM to apply the most protective allocations and actions possible relative to the exploration and development of federal minerals, and other activities as appropriate, within the limits of the Bureau's authority. For example, consider closing split-estate lands within occupied sage-grouse habitat to leasing (p.2-70). It appears that this was done for 5,400 acres in Alternative C but not for Alternative B.

Also and if BLM has not already done so, compare the proposed actions for greater sage-grouse in the GJ RMP area with those of the adjacent White River and Colorado River Valley Field Offices. Much of the occupied habitat for greater sage-grouse lies along the border for the White River Field Office in particular.

Submission No: emc0965
Commenter: Edward Arnett, Theodore Roosevelt Conservation Partnership
Comment: Sage Grouse: Greater sage-grouse require sufficient cover over large landscapes for nesting (April and May), brood rearing (May through July) and survival. Without adequate cover for nesting and brood rearing, it is our opinion that greater sage-grouse population in this area could decline unnecessarily. Although we realize that the National Technical Team Report recommendations are not the "end all" for sage grouse management and conservation and new science is emerging, we were disappointed that the GJFO RMP alternatives did not include more conservation measures for sage grouse from this report. Additionally, GJ RMP does not include them as part of the "best available science" in the sage grouse discussions nor alternative development. This could potentially represent a violation of NEPA and FLPMA - which could be challenged in court. We appreciate the fact that the BLM Northwest Colorado District Office is completing a possible Plan Amendment/EIS that considers and analyzes the NTT report recommendations in detail and addresses BLM-managed lands in the GJFO planning area, and are hopeful this plan fully addresses necessary measures to increase populations of sage grouse in the GJFO area, as we are not convinced the necessary requirements for sage grouse nesting cover, available in the scientific literature, were incorporated to determine stocking rates and AUM usage, for example.

Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy
Comment: Recommendations - Protect all occupied Gunnison sage-grouse habitat from multiple impacts through stipulations, closures, and other means as appropriate. For example, we recommend closing the occupied habitat to the following:
• Mineral material sales (Map 2-59),
• Non-energy leasable minerals (Map 2-62),
• Areas withdrawn or petitioned for withdrawal for locatable minerals (Maps 2-54 and 2-55).
We also recommend adding an ACEC for Glade Park and/or instituting an NSO stipulation for the area in order to better protect Gunnison sage-grouse.

Submission No: emc0965
Commenter: Edward Arnett, Theodore Roosevelt Conservation Partnership
Comment: 1. We recommend that the GJFO reconsider the decision to exclude recommendations from the NTT sage grouse report in the final RMP and include appropriate NTT recommendations (and the new CO Plateau Rapid Ecological Assessment) in the Final EIS and make adjustments to the proposed alternatives.

2. We believe that all grazing systems employed in this RMP that could impact sage grouse habitat incorporate adequate rest or low livestock stocking rates (less than 35% annual utilization) to enable the native sagebrush steppe/mixed grass community to maintain its health and vigor and to provide adequate cover for greater sage-grouse and other grassland/shrub land birds. To provide for successful reproduction, good cover is needed in the spring from the previous years' growth for nesting and in the spring and summer from the current year's growth for brood rearing. Even with less than 35% utilization, many areas near water sources, roads, and fence-lines will be over-grazed and ultimately will result in poor nesting and brood-rearing success.

3. We recommend that the BLM assess and modify their respective livestock grazing permits if needed, leases and grazing allotment management plans in the sagebrush steppe/mixed grass community and adjacent woodlands to incorporate grazing systems that provide at least 15-month of continuous rest from domestic livestock grazing once every 3 years. A less-desirable alternative would be to require immediate removal of livestock once a 35% utilization level is reached within any given year.

4. Lek attendance declines have consistently been reported when well-pad densities exceed 1 pad/section (mi2]) and within approximately 2 mi of a lek (Naugle et al. 2011). Moreover, Naugle et al. (2011) reported that impacts to leks were most severe when infrastructure occurred near leks and were discernible out to distances of 3.8–4 mi. Disturbances from energy exploration and development activities are a major threat to the long-term stability of greater sage-grouse, and restricting or eliminating these activities within 4 mi of leks and other important habitats is the only viable solution to minimizing these threats unless other measures are taken to mitigate impacts to leks and sage grouse breeding activity.

5. Livestock-free portions of our greater sage-grouse range may be necessary to ensure viable populations are maintained in otherwise disturbed landscapes, particularly in sagebrush steppe/mixed grass communities adjacent to oil and gas developments. We believe that closing these areas to livestock grazing through the permanent retirement of existing grazing permits should protect them from the risk of overgrazing, greatly reduce the risk of invasion by undesirable vegetation (invasive plants), ameliorate the negative impacts of oil and gas developments, and enable federal land managers to compare these lands to other grazed areas, enabling them to better evaluate the effects of livestock grazing and energy developments on these sagebrush steppe/mixed grass communities and

greater sagegrouse populations. We recommends that the BLM seek opportunities for retirement of grazing privileges as an option in and adjacent to sagebrush steppe/mixed grass communities when base property is transferred or the current permittee is willing to retire grazing on all or part of an allotment or leases. As an alternative to complete retirement of grazing privileges, we recommend that livestock grazing be deferred for long periods (perhaps 5-10 years) in some sagebrush steppe/mixed grass communities that support or have supported leks.

Response

Habitat Designations. Preliminary priority and general Greater Sage-Grouse habitat is mapped by Colorado Parks and Wildlife. Greater Sage-Grouse habitat is loosely defined in the NTT report attached to IM 2012-044 as:

> Areas that have been identified as having the highest conservation value to maintaining sustainable sage-grouse populations. These areas would include breeding, late brood-rearing and winter concentration areas. These areas have been identified by state fish and wildlife agencies in coordination with respective BLM offices.

The BLM is utilizing data and information provided by CPW, as it does with many species. Habitat restoration is addressed under vegetation (upper- and lower-elevation sagebrush). Sage-Grouse habitat is given first priority in both upper and lower elevation sagebrush (see Draft RMP/EIS, pages 2-42 and 2-43). No change has been made to the Proposed RMP/Final EIS.

Closure to Land Use. NSO-25 applies to all areas within 4 miles of a lek or within Sage-Grouse nesting and early brood-rearing habitat for Alternatives B and C. Also the NSO definition in the Draft RMP/EIS includes more than just fluid minerals (see Draft RMP/EIS at B-2). Alternative C also considers a ROW exclusion area within 0.6-mile of a lek and up to 4 miles of a lek for above-ground facilities, which includes priority habitat. No change has been made to the Proposed RMP/Final EIS.

Fluid Mineral Leasing and Rights-of-Way. Occupied Sage-Grouse habitat is considered closed to fluid mineral leasing under Alternative C (see Draft RMP/EIS at 2-70 and 2-173). Alternative C also considers a ROW exclusion area within 0.6-mile of a lek and up to 4 miles of a lek for above-ground facilities, which includes priority habitat. Alternative C considers ROW avoidance for the remainder of Sage-Grouse occupied and suitable habitat. No change has been made to the Proposed RMP/Final EIS.

Oil and Gas Development. The Proposed RMP/Final EIS includes a proposed Master Leasing Plan. The proposed Master Leasing Plan covers the north half of the field office where Greater Sage-Grouse habitat is located. Potential for oil and gas development in Gunnison Sage-Grouse habitat is unlikely; this area has been identified as having very low mineral potential. Under the Proposed RMP/Final EIS, Gunnison Sage-Grouse critical habitat and occupied Greater Sage-Grouse habitat within one mile of lek will not be leased. No change has been made to the Proposed RMP/Final EIS.

Motorized Recreation. Spring closures (March 1 to June 30) are considered for all modes of travel under Alternative C (see Draft RMP/EIS at M-15). In addition, the Roan and Carr Creek ACEC is proposed to be closed to motorized travel year-round. The ACEC encompasses much of the Sage-Grouse lek and nesting habitat in the GJFO. Additional habitat on BLM-administered land near the ACEC is generally inaccessible to the public due to fragmented landownership.

Fencing. Sage-Grouse friendly fencing is considered by the following actions:

- Remove/modify raptor perches (e.g., trees, fences, dry-hole markers, and power poles) in PPH Sage-Grouse habitat. (Draft RMP/EIS at 2-67)
- Design any new structural range improvements to conserve, enhance, or restore Sage-Grouse habitat through an improved grazing management system relative to Sage-Grouse objectives. Structural range improvements, in this context, include but are not limited to: cattleguards, fences, enclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels, and spring developments. (Draft RMP/EIS at 2-130)
- To reduce Sage-Grouse strikes and mortality, remove, modify, or mark fences in high risk areas. When fences are necessary, require a Sage-Grouse-safe design. (Draft RMP/EIS at 2-130) No change has been made to the Proposed RMP/Final EIS.

Seasonal Habitat. TL-16 for occupied Sage-Grouse winter habitat is considered under Alternatives B and C (Draft RMP/EIS at 2-70) and NSO-25 for Sage-Grouse leks, nesting and early brood-rearing habitat is considered for Alternatives B and C (Draft RMP/EIS at 2-70). No change has been made to the Proposed RMP/Final EIS.

Best Available Science. The actions proposed in the range of alternatives are sufficient to conserve the portion of the range in GJFO, and the actions in the Draft RMP/EIS were based on the same science that the NTT report is based on. Because new information has since become available, the species' baseline information has been updated accordingly. See page 3-112.

Livestock Grazing. Proposals for changes in livestock grazing management practices such as intensity of use (utilization levels) and numbers of livestock (including temporary non-use or livestock removal) are implementation-level decisions to be made at the time of permit renewal. These types of decisions can also be made as part of an allotment management plan. These types of implementation-level decisions are outside of the scope of decisions to be made in this RMP revision. The suggestion to allocate relinquishments as closed is addressed in criteria contained in Action LG-A8 (Livestock Grazing section of Chapter 2). No change has been made to the Proposed RMP/Final EIS.

Fewer Protections are Needed

Summary
Restrictions to protect Gunnison and Greater Sage-Grouse are unnecessary and unwarranted.

Comments
Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: The combination of ROW avoidance and exclusion areas for sage-grouse occupied habitat leks is excessive, unreasonable, and will unnecessarily encumber oil and gas development in the planning area. BLM failed to document the need for ROW avoidance and exclusion areas of this size in the DEIS with any scientific justification, nor have they shown that the needs of local Sage-grouse populations require these protections. Furthermore, given the topography of the planning, there is substantial acreage with 4 miles of a lek that is not sage-grouse habitat. We urge BLM to carefully reconsider its proposal to take such issues into account.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: For example, the GJFO DRMP/DEIS proposes NSO stipulations for the Greater sage-grouse and the Gunnison sage-grouse to create buffer zones around sage-grouse habitat. GJFO DRMP/DEIS Table 2-2 at 2-70. NSO stipulations were excessive given the fact that there is no scientific basis for the proposed removal of large swaths of land from oil and gas development. Further, the use of NSO stipulations is unnecessary when appropriate protection can be achieved through the use of CSU and TL stipulations, which provide for greater operational flexibility.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil and Gas Inc.
Comment: Encana is concerned about the BLM's proposal to radically increase timing restrictions under Alternatives B and C to protect sage-grouse within the Planning Area. GJ DRMP/EIS, Table 2.2, pg. 2- 70. BLM has not justified the significant increase in timing prohibitions within four-miles of a lek during sage-grouse nesting and early brood-rearing habitat. Similarly, the BLM has not justified the timing limitations from December 16 to March 15 to protect sage-grouse winter habitat within the Planning Area. This is particularly concerning given the fact the BLM has not identified or mapped sage-grouse winter habitat. GJ DRMP/EIS, Table 2.2, pg. 2-70. These limitations could significantly curtail oil and gas development even on existing leases. The BLM must justify these significant new limitations on development.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: BLM's proposal to prohibit surface disturbing activities within four miles of sage-grouse leks, nesting, and early brood-rearing habitat year round is unfounded. Moreover, no scientific evidence has been presented which support the need for additional protections within four miles of a lek, nor has the need for year-round NSO stipulations in early brood-rearing habitat where seasonal restrictions have already been proven successful. In addition, there is substantial acreage within 4 miles of a lek that is not sage grouse habitat, but would nonetheless be designated as NSO. Clearly, these restrictions are excessive, unjustified, and are designed to impede development on valid existing leases in the planning area, and are far more onerous than other recently-revised RMPs across the West.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Gunnison Sage-Grouse. BLM is proposing to close all federal mineral estate (10,600 acres) and private and state surface with federal mineral estate (12,200 acres) with occupied Gunnison sage-grouse habitat to future fluid mineral leasing and geophysical exploration. These closures are excessive and unjustified. Even if the Fish and Wildlife Service ultimately determines that the species warrants protection under the ESA, that is not reason enough for BLM to completely close all occupied Gunnison Sage-Grouse to fluid mineral leasing and geophysical exploration because oil and gas leasing, exploration, and development in Gunnison Sage-Grouse habitat can be performed in a manner that avoids, minimizes, and mitigates impact to the species and its habitat.

Greater Sage-Grouse. Surface disturbing activities would be prohibited within four miles of sage-grouse leks, nesting, and early broodrearing habitat year round. The need for additional protections within four miles of a lek has not been substantiated, nor has the need for year-round NSO stipulations in early brood-rearing habitat. These restrictions are excessive, unjustified, and are far more onerous than other recently-revised RMPs across the West.

Response
The Draft RMP/EIS considered a range of alternatives designed to meet the BLM's legal duties and purpose and need for action. Section 1.7 of the Draft RMP/EIS states:

> Decisions in the RMP will strive to be compatible with the existing plans and policies of adjacent local, state, federal, and tribal agencies as long as the decisions are consistent with the purposes, policies, and programs of federal law and regulations applicable to public lands (page 1-14).
>
> The National Sage-grouse Strategy directs that impacts on sagebrush habitat and sagebrush-dependent wildlife species be analyzed and considered in BLM land use planning efforts for public lands with sagebrush habitat in the planning area (page 1-14).
>
> The National Sage-grouse Strategy criteria should state that impacts on sagebrush-dependent wildlife will be minimized whenever possible. Current scientific information should be used, especially regarding buffer areas around leks, nesting areas, and brood rearing areas for both sage-grouse species (page 1-16).

A brief literature review that includes reference to the 4 mile distance is provided in Section 4.3.6, Special Status Species, of the Draft RMP/EIS. Specifically, the Draft RMP/EIS states, "Impacts occur in lekking, nesting, brood rearing, and winter habitat (Crompton 2005; Doherty et al. 2008), and negative effects have been shown to occur from 0.5 mile to 4 miles away from oil and gas development (Walker et al. 2007; Naugle et al. 2009)" (Draft RMP/EIS at 4-165). Buffers are scientifically supported and supported by BLM direction. No change has been made to the Proposed RMP/Final EIS.

<u>Range of Alternatives</u>

Summary
The RMP fails to include in the range of alternatives adequate protection of Gunnison Sage-Grouse and analysis of impacts on the species from management. A supplemental EIS is needed to address these issues.

Comments
Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Failure to consider and analyze recommendations of the Greater Sage-Grouse National Technical Team Report Recommendations and the Gunnison Sage Grouse Conservation Plan.

1. Greater Sage Grouse. Section 2.5.7 of the DRMP acknowledges that the "BLM published a Notice of Intent in the Federal Register on December 9, 2011, initiating a range-wide planning process that would analyze the National Technical Team Report recommendations in detail. The GJFO RMP alternatives do include some measures that are similar to the NTT recommendations, however many of the recommendations are not included. The BLM Northwest Colorado District Office is completing a possible Plan Amendment/EIS that considers and analyzes the NTT report recommendations in detail and addresses BLM-managed lands in the GJFO planning area. Therefore, an alternative(s) to analyze the Greater Sage-Grouse NTT Report recommendations in detail was considered but eliminated from detailed analysis in this EIS."

Across the West, BLM field offices are updating their RMPs with sage grouse amendments. Many RMPs currently under revision have opted to implement a supplemental RMP EIS due to the considerable environmental changes the sage grouse recommendations require (the Wyoming Buffalo BLM Field Office is one recent example). Our concern is that the DRMP states that a "possible" Plan Amendment is being completed. Since the BLM is not positive that there will be an amendment, it should not rely on the NTT to provide the adequate sage grouse analysis. The BLM must include, to the best of their abilities, sage grouse analysis, including Gunnison sage grouse analysis, in the DRMP. Failure to complete the analysis of the recommendations of the NTT in the DRMP violates NEPA.

2. Gunnison Sage Grouse. The DRMP fails to acknowledge the status and implications of the Gunnison sage grouse as a threatened and species of concern in Colorado. With habitat in the GJFO planning area, the BLM must include thorough analysis, abide by the Gunnison Sage Grouse Rangewide Conservation Plan, and implement stipulations that protect this species habitat. The USFWS proposed to protect the Gunnison sage grouse in January 2013 (Federal Register Notice: January 11, 2013 "Endangered Status for Gunnison Sage Grouse"). The GJFO contains a significant amount of habitat for this species and therefore, a "hard look" at the environmental consequences of oil and gas drilling and other impacts must be addressed. Because the DRMP does not contain such information, we request a supplemental EIS be developed which can encompass this topic and the numerous other environmental topics the current DRMP does not address.

Response

The Draft RMP/EIS considered a range of alternatives designed to meet the BLM's legal duties and purpose and need for action. Section 1.7 of the Draft RMP/EIS states:

> Decisions in the RMP will strive to be compatible with the existing plans and policies of adjacent local, state, federal, and tribal agencies, as long as the decisions are consistent with the purposes, policies, and programs of federal law and regulations applicable to public lands (page 1-14).
>
> The National Sage-grouse Strategy directs that impacts to sagebrush habitat and sagebrush-dependent wildlife species be analyzed and considered in BLM land use planning efforts for public lands with sagebrush habitat in the planning area (page 1-14).
>
> The National Sage-grouse Strategy criteria should state that impacts to sagebrush-dependent wildlife will be minimized whenever possible. Current scientific information should be used, especially regarding buffer areas around leks, nesting areas, and brood rearing areas for both sage-grouse species (page 1-16).

According to the CEQ regulations and the DOI NEPA regulations:

> The range of alternatives includes those reasonable alternatives (paragraph 46.420(b)) that meet the purpose and need of the proposed action, and address one or more significant issues (40 CFR 1501.7(a)(2–3)) related to the proposed action. Since an alternative may be developed to address more than one significant issue, no specific number of alternatives is required or prescribed (43 CFR 46.415(b)).

The BLM's range of alternatives in the Draft RMP/EIS represented a full spectrum of options. The BLM acknowledges many variations of alternatives could be included in the RMP analysis process. However, the BLM is not required to analyze in detail each variation, including those variations determined not to

meet the RMP's purpose and need or those determined to be unreasonable given BLM mandates, policies, and programs. The CEQ states that only a reasonable number of examples covering the full spectrum of alternatives must be analyzed and compared in the EIS (Forty Most Asked Questions Concerning CEQ's NEPA Regulations, 46 Federal RegisterFederal Register 18,026, 18, 03 (March 23, 1981). Alternatives analyzed include a no action alternative and three action alternatives. The No Action Alternative is a continuation of current management as written.

The Draft RMP/EIS proposes several management actions to protect sagebrush plant communities specifically to maintain or improve Sage-Grouse habitat (see pages 2-41 to 2-44). Critical habitat for Gunnison Sage-Grouse was published on November 20, 2014, after the publication of the Draft RMP/EIS. A listing decision to designate the Gunnison Sage-Grouse was federally threatened was published on November 12, 2014. The Draft RMP/EIS considers several protective measures for Gunnison Sage-Grouse habitat (see Draft RMP/EIS at 2-67 through 2-71). The RMP/EIS is consistent with Colorado IM 2013-033, Gunnison Sage-grouse Habitat Management Policy on Bureau of Land Management-Administered Lands in Colorado. Issued on July 15, 2013, this guidance provides updated direction regarding management and ongoing planning actions in Gunnison Sage-Grouse proposed critical habitat. It also reiterates BLM Colorado's existing policy to defer leasing of occupied Gunnison Sage-Grouse habitats until RMP Revisions, including the GJFO RMP revision, or Amendments have been completed. The Proposed RMP/Final EIS has been updated to close Gunnison Sage-Grouse critical habitat (instead of occupied habitat as in the Draft RMP/EIS) to fluid mineral leasing and non-energy leasable mineral exploration and/or development.

Significant Plant Communities

Summary

The objective for special status plant species should be modified to more explicitly address significant plant communities.

Comments

Submission No: emc0924

Commenter: Megan Kram, The Nature Conservancy

Comment: Recommendations - Modify the objective in Table 2-2 (p.2-57) to also address significant plant communities, such as by making the changes shown in italics below: "To conserve plants (and their habitats) listed by federal and Colorado governments as threatened and endangered species, and to conserve plants that are candidates and significant plants and plant communities." This change provides a foundation for the actions that BLM already includes in Table 2-2 about rare plant communities (e.g., NSO and CSU stipulations).

Response

The BLM agrees with the commenter that the objective could more clearly address significant plant communities. The revised objective is included in the Proposed RMP/Final EIS (see page 2-63).

Special Status Species Plants

Summary

Restrictions on surface-disturbing activities for Colorado hookless cactus, DeBeque phacilia, and other special status plants are overly restrictive and not based in sound science. Restrictions create de facto critical habitat, which contradicts the language of the Endangered Species Act, relevant US Fish and Wildlife Service regulations, and case law.

Comments

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Buffer zones surrounding special status plant species are arbitrary and not supported by relevant analysis within the GJFO DRMP/DEIS. GJFO DRMP/DEIS Section 3.2.8 at 3-94 -3-98. There are insufficient data, studies and information for BLM to justify exclusion areas around these plants. The studies BLM does rely on are inapplicable to all of the species found in the GJFO, yet are applied broadly to the species BLM overreaches and fails to provide proper scientific support to justify the use of BMPs, COAs, and other restrictions attempt to create de facto critical habitat for special status plant species where critical habitat has not already been designated.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: FWS has not designated critical habitat for the Colorado hookless cactus. Instead, BLM is here attempting to create de facto critical habitat through imposition of NSO stipulations for lands within 200 meters of current and historically occupied and suitable habitat for the species. This de facto creation of critical habitat absent the requisite regulatory and statutory procedures is contrary to the plain language of the ESA, relevant FWS regulations, and case law. Section 4 requires a concurrent designation of critical habitat with the final listing of a threatened species unless imprudence or emergency. There was no such designation with the Colorado hookless emergency. Furthermore, the "best available science" FWS relies upon for current application of buffer zones is outdated and inapplicable and FWS never presented any findings as to the economic impacts of a critical habitat designation.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The RMP must be amended to clarify that FWS -and not BLM- designates critical habitat for threatened and endangered species. It should also clarify that BLM does not manage or protect suitable and potential habitat as if it is "critical habitat." BLM should also remove the onerous NSO and CSU lease stipulations and COAs for unoccupied lands.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: With readily-available scientific studies contradicting the data relied on by FWS to support critical habitat designation for the DeBeque phacelia, BLM should be wary I applying the same studies and underlying data as justification for expansive and unwarranted buffers and de facto critical habitat of special status plant species within the GJFO Planning Area. Further, BLM can cite to no authority that oil and gas development has actually negatively impacted the critical habitat of the DeBeque phacelia.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM should remove overly burdensome restrictions surrounding habitats of the DeBeque Phacelia because BLM lacks any scientific basis to apply such restrictions.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Requested Action: BLM must update its scientific information on the alleged impacts of oil and gas on natural resources, including its data and scientific analysis specific to the Colorado hookless cactus and DeBeque phacelia, before applying onerous lease stipulations and COAs for the protection of these species.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: For example, in designating critical habitat for the DeBeque phacelia, data relied on was not publicly available, in direct contravention of the Information Quality Act's guidelines requiring data and method transparency. Studies relied on were not peer-reviewed and inaccurately stated conclusions of other studies.

Data regarding dust effects on the DeBeque phacelia incorporate studies from the Alaskan tundra and the Mohave Desert, neither of which replicate conditions within the GJFO Planning Area. Additionally, data on pollinators focuses on a study indicating a threat to a specific pollinator from oil and gas development while fully disregarding an alternative study indicating that a variety of pollinators exist for the species.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Generally, the proposed lease stipulations in Appendix B to protect special status plants are not supported by the data. For example, existing studies actually provide that dust impacts from oil and gas development have very little impact on pollination of plants. The studies relied on by BLM in Section 3.2.8 do not support the conclusions that long-term effects of oil and gas have any connectivity to the viability of the sensitive plant populations found in the GJFO Planning Area.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM's use of NSO and CSU stipulations on non-designated "critical" habitat is arbitrary and unsupported. The GJFO DRMP/DEIS provides minimal reference to scientific studies that are not applicable to its proposed restrictions. Through preferred Alternative B, the GJFO DRMP/DEIS is unlawfully, and unjustifiably, attempting to create de facto critical habitat. BLM cannot impose such lease stipulations as COAs without site-specific analysis and a scientific basis to support it.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Threatened & Endangered Animal and Plant Species. BLM proposes to use the same NSO restrictions on candidate and proposed species as it would for species listed under the ESA in its NSO stipulation for Current and Historically Occupied Habitat of Threatened, Endangered, Proposed, and Candidate Species (NSO-13). Imposing the same restrictions for non-listed species as listed species is excessive, unwarranted.

Response
Restrictions for Colorado hookless cactus and DeBeque phacilia do not create de facto critical habitat. Critical habitat is a term defined and used in the Endangered Species Act. Critical habitat is a specific geographic area that contains features essential to the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include areas that are not currently occupied by the species but that will be needed for its recovery. A critical habitat designation does not necessarily restrict further development. It is a reminder to federal agencies that they must make special efforts to protect the important characteristics of these areas. For these reasons, the application of restrictions to protect a species does not equate to the designation of de facto critical habitat. No change has been made to the Proposed RMP/Final EIS.

Furthermore, US Fish and Wildlife Service has designated critical habitat for DeBeque phacelia within the GJFO. The BLM, in accordance with its mandates to protect federally listed species as described above, has based restrictions to protect the plant on information obtained in coordination with US Fish and Wildlife Service, ongoing seedbank and parentage studies, and habitat field work. Restrictions are based on the suitability of habitat and the potential for habitat modification or seedbank disruption to occur. Impacts such as accelerated erosion, dust deposition, weed infestation, fragmentation, and habitat conversion are of concern. Protections are evolving based on consultations and new information from ongoing studies and habitat analysis. The Recovery Outline for DeBeque Phacelia, published by the Western Colorado Ecological Services Field Office (Western Colorado Ecological Services Field Office 2013), identifies threats that are occurring within or near DeBeque phacelia habitat. No change has been made to the Proposed RMP/Final EIS.

Long-term effects on special status plant species are outlined in Section 3.2.8. Since development of the Draft RMP/EIS, preliminary results from additional ongoing studies seem to indicate that DeBeque Phacelia and Colorado Hookless cactus reproduction is reduced closer to areas of disturbance (BIO-Logic 2012). The BLM is not aware of, nor does the commenter provide, published research suggesting oil and gas or other long-term development has no or negligible impact on special status plant species. No change has been made to the Proposed RMP/Final EIS.

White-Tailed Prairie Dogs

Summary
There should be more information on how the BLM will map and identify white-tailed prairie dog towns.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 74, Stipulation NSO-30, Occupied Prairie Dog Towns (no buffer)
Does GJFO have and use a definition of such towns in terms of den density or active den density, so as to determine town boundaries? Are there criteria that would allow consistent mapping? Figure 2-73 can only give a general picture of where prairie dogs are active. Activity on any site is on and off over time. The distance between active dens that constitutes a break between towns has to be arbitrary. When a solar farm is proposed in the emphasis areas, it is certain that prairie dog dens will be encountered no matter where the structures are cited. If no criteria are set before a project is proposed, the project will overwhelm prairie dog interests.

Response
The BLM will utilize CPW data to map white-tailed prairie dog towns. BLM biologists will also provide on-the-ground confirmation of prairie dog town status when needed. The Prairie Canyon Solar Emphasis Area is not being carried forward in the Proposed RMP.

Raptors

Summary
Buffers for stipulations should be justified based on species characteristics and/or agency guidance. Stipulations for raptors should be strengthened.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-62, Stipulation TL-6. Given Ferruginous Hawks' well known sensitivity to human activity near their nests consider increasing the distance beyond the 0.33 mile provided the much more common and somewhat less sensitive Redtailed Hawk nest sites. You could say 0.33 to 0.5 mile depending upon nest site screening characteristics.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: BLM proposes timing limitations and conditional surface use stipulations for activities within ¼ and ½ miles of Golden and Bald Eagle nests. The U.S. Fish and Wildlife Service recommends only a 200 meter (660 feet) buffer for oil and gas operations around eagle nests. BLM has not justified the need for this additional buffer.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW requests that BLM include NSO stipulations for osprey nests (NSO-16), ferruginous hawk nests (NS0-17). red-tailed hawk nests (NSO-18), Swainson's hawk nests (NSO-19), peregrine falcon nest sites (NSO-20), prairie falcon nest sites (NSO-21) and other raptors (as defined in the RMP stipulation table) (NSO-22) in the preferred selected final alternative. As proposed these species are afforded minimal protection (timing limitation) through development stipulations. Adding a NSO stipulation would provide a tiered and significantly more meaningful level of protection for these species.

Response
Buffers for raptor stipulations were developed to be consistent with the best available science, including CPW's Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (CPW 2008). No change has been made to the Proposed RMP/Final EIS. The TL-6 stipulation for ferruginous hawks in the Draft RMP/EIS included a typographical error; its buffer should be 0.5-mile (the same as the CSU and NSO stipulations) to be consistent with CPW guidance. Per CPW, TL stipulations are sufficient to protect these species, such that the majority of individuals within a species will continue to occupy the area. The buffer distance has been corrected (see Appendix B, Table B-7), but no other changes have been made to the Proposed RMP/Final EIS.

Special Status Species Fish

Summary
The alternatives should include additional consideration of fish, their habitat, and their predators.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW requests that control of predatory nonnative fishes (such as smallmouth bass. Largemouth bass, and northern pike) should be addressed in this section in regard to critical habitat for listed and non-listed native fishes of the Colorado/Gunnison Rivers (reference should be made to the Upper Colorado River Endangered Fish Recovery Program). In addition, white sucker and longnose sucker should also be identified as threats to native sucker populations.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 2-66, Table 2-2 Fisheries and Aquatic Wildlife-Objective. Warm-water and coolwater sport fisheries including smallmouth bass and largemouth bass should only be promoted outside of designated critical habitat areas for Colorado River listed and nonlisted native fishes, and only in impoundments with proper outlets and screening as described in CPW's stocking protocols. These fisheries should not be promoted in lotic systems anywhere on BLM lands in the GJFO. CPW is concerned that on page 2-75, BLM limits discussion of coldwater species (rainbow trout, brown trout, brook trout); and does not include cutthroat trout or warmwater fishes. CPW would like to see the reference expanded to include all of the above mentioned species and concerns.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 2-66, Table 2-2 Fisheries and Aquatic Wildlife-Action. Disturbances in upland areas have direct and indirect impacts on water sources and associated habitats. Protection of these areas should be a priority, and included within the final, selected alternative.

Response
The Proposed RMP/Final EIS has been updated to include an action (Action FW-I-A4) to support the removal of predatory nonnative fishes. See page 2-93. Objective FW-I-O1 was also revised to clarify that managment of sport fishes would occur where it does not conflict with special status fish. Further discussion in the alternatives is not warranted because fish management is primarily a state action and any BLM action is performed only in close coordination with the State of Colorado. While all lands within a watershed, including uplands, are important with regard to stream conditions, uplands do not need to be highlighted as priority aquatic habitats. The range of alternatives already includes protections for the more important upland areas (e.g., steep slopes) via select stipulations.

Range of Alternatives

Summary
Not all alternatives include an objective to conserve sensitive species.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-54, SSS-Plants and Terrestrial Wildlife, Objective: Doesn't the BLM Manual make sensitive species conservation mandatory and thus Alts. A and D would constitute non-feasance (same issue on Page 2-57)?

Response
While the 1987 RMP does not explicitly mention Sensitive Status Species, the BLM is directed by Manual 6840 to promote the conservation and reduce the likelihood and need for future listing of BLM Sensitive Species under the ESA. Alternatives A and D have been updated to include Sensitive Species in the Objectives on pages 2-62 and 2-67.

Special Status Species Reptiles and Amphibians

Summary
The long-nosed leopard lizard should be protected under the alternatives.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 2-62 Table 2-2 Reptiles and Amphibians. CPW restates our desire to have BLM add longnose leopard lizard to all alternatives.

Response
The long-nosed leopard lizard is a state-listed Species of Concern and a BLM Sensitive Species with habitat in the planning area (page 3-110). It has been added to the list of species covered under stipulation NSO-26. Exemptions, modifications, and waivers apply (see Appendix B, Table B-5).

6.2.3.8 Paleontological Resources

Summary
Additional information is needed to better define post-inventory actions and mitigation for paleontological resources.

Comments
Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: Page 2-109, Manage paleontological resources according to their Potential Fossil Yield Classification - The DEIS indicates that paleontological resources will be managed within a spectrum from Class 1 formations (low potential) to Class 5 (very high potential). Class 4 and 5 (high and very high potential) areas will require an inventory from a permitted paleontologist prior to surface disturbing activities.

COMMENT: The DEIS provides no discussion of activities subsequent to an inventory. If fossil resources are discovered, how will they be evaluated scientifically, and what levels of protection and mitigation will be required

as per any evaluation? How does BLM propose to manage vertebrate vs. invertebrate/plant remains? Are some vertebrate fossils to be afforded higher protection? Will fossils lacking established provenience be afforded a lesser level of regulatory protection, etc.? Some level of regulatory certainty is imperative for operations planning purposes. Therefore, we recommend that BLM provide direction in the final planning documents.

Response

The types of information requested by the commenter are implementation-level decisions for paleontological resources. Appendix C of the BLM Land Use Planning Handbook (H-1601) says the following about implementation decisions for paleontology, "Identify appropriate protection measures and scientific, educational, and recreational use opportunities for paleontological localities." The levels of protection and required mitigation would be commensurate with the resource discovered. Additional guidance is provided in BLM Manual 8270, Paleontological Resource Management and BLM Instruction Memoranda 2008-009, Potential Fossil Yield Classification (PFYC) System for Paleontological Resources on Public Lands, and 2009-011, Assessment and Mitigation of Potential Impacts to Paleontological Resources. The alternatives do not propose a change in current levels of protection for vertebrate or invertebrate fossils. Pre-construction paleontological surveys are currently required for PFYC Class 4-5 geologic formations where bedrock is exposed. No change has been made to the Proposed RMP/Final EIS.

6.2.3.9 Forestry

Summary

It is unclear whether the prohibition on deadwood harvest in the East Demaree Canyon and East Salt Creek areas is being carried forward.

Comments

Submission No: emc0845

Commenter: Ron Lambeth

Comment: Page 2-119, East Demaree Canyon and East Salt Creek areas are within the "no deadwood harvest" area prescribed in the Book-to-Roan Cliffs HMP. Will that commitment continue to be honored under Alt. B? This question is not answered in the Forestry section. The purpose of the prescription was to provide one area in the GJFO domain that retains down wood for soil richness, retard erosion on steep slopes and maintain habitat for species that thrive or require large woody ground litter. This may be a big weakness in activity plans, perhaps not consulted when RMPs are renewed.

Response

The Book-to-Roan Cliffs HMP was reviewed and no reference to a "no deadwood harvest" area was found. However, the Demaree Wilderness Study Area will continue to be managed for wilderness characteristics and deadwood harvest will not occur in this portion of the area previously covered by the Book-to-Roan Cliffs HMP. No change has been made to the Proposed RMP/Final EIS.

6.2.3.10 Lands with Wilderness Characteristics

Manageability Concerns

Summary
The BLM should not manage lands for protection of their wilderness characteristics when manageability concerns are present.

Comments
Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Where lands are unsuitable for management for wilderness characteristics because of valid leases and other impediments, BLM must remove such management from the GJFO DRMP/DEIS.

Response
In accordance with BLM Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process, the BLM must consider a range of alternatives for managing lands inventoried and found to have wilderness characteristics. Manual 6320, page 3 states:

> The BLM will evaluate lands with wilderness characteristics through the land use planning process. When such lands are present, the BLM will examine options for managing these lands and determine the most appropriate land use allocations for them. Considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to: (1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; (2) emphasizing other multiple uses while applying management restrictions (conditions of use, mitigation measures) to reduce impacts to wilderness characteristics; (3) the protection of wilderness characteristics as a priority over other multiple uses.

The BLM considered a range of alternatives regarding areas found to contain wilderness characteristics. The BLM also considered the manageability and conflicts with other resources and uses in the range of alternatives and analysis.Areas proposed for management to protect their wilderness characteristics in the Proposed RMP/Final EIS all contain wilderness characteristics. Managing them as such is consistent with BLM Manual 6320. No change has been made to the Proposed RMP/Final EIS.

Allowable Uses

Summary
Lands adjacent to those managed to protect their wilderness characteristics should not include allowable uses, such as motorized travel, that would degrade wilderness characteristics.

Comments
Submission No: rmc0044
Commenter: Debra Cahill
Comment: It is really not possible to include motorized traffic near a canyon that is for non-motorized recreation, without destroying the wilderness experience of those on foot. Sounds echo for miles through canyons, sometimes reverberating and being magnified by the walls.

Response
The BLM's inventory accounted for the impact of actions on nearby lands that would degrade wilderness characteristics. Actions on nearby lands can determine whether an area contains solitude or outstanding opportunities for primitive and unconfined recreation, for example. The BLM considered a range of alternatives regarding areas found to contain wilderness characteristics. The BLM also considered the manageability and conflicts with other resources and uses in the range of alternatives and analysis. The BLM will consider the potential for impacts to lands with wilderness characteristics during site-specific analysis where actions are proposed on adjacent lands. No change has been made to the Proposed RMP/Final EIS.

Tailored Management

Summary
The BLM should consider tailoring management actions for lands with wilderness characteristics to the specific needs and threats of the area rather than the same management actions for all lands with wilderness characteristics.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: To overcome prospective conflicts between managing lands with wilderness characteristics and other uses which are potentially consistent with LWC protection, we recommend BLM consider adapting management prescriptions to different areas where appropriate to permit a wider range of uses. While we support the management prescriptions proposed in the draft RMP preferred alternative (Draft RMP p. 2-119-120), which are protective of lands with wilderness characteristics, it is not necessary to ascribe the same management prescriptions to all LWCs. Much like BLM manages Areas of Critical Environmental Concern, BLM could identify the specific values, including recreation values, and threats to individual LWCs and ascribe management prescriptions that address those needs. This would give BLM greater flexibility to manage wilderness resources and achieve multiple use and sustained yield.

Response
The BLM has considered comments about tailoring management actions for lands with wilderness characteristics and has developed alternatives specific to each unit (see the Lands with Wilderness Characteristics section starting on page 2-150).

Maverick Unit

Summary
The BLM should include the top of Flat Top Mesa in the Maverick lands with wilderness characteristics unit.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-119, Zone V in Alt. B is quite accessible by motorized vehicles. To reserve 17,800 acres as non-motorized in the Maverick Canyon area is important. However, including some mesa top area would round out the offering of a non-motorized-mechanized experience in Zone V. The best area to include in this addition would be Flat Top Mesa, the obvious hole, like an "OHV inholding", in both Alts. B and C. This would be about 640 acres. The difference between the alternatives is that Alt. B removes all the mesa tops that Alt. C has as non-motorized (2600 acres), keeping just the lower benches, ravines, and steep slopes as non-motorized. Flat Top Mesa top offers better views of Maverick and Dolores River canyons, La Sal Mountains, and the Uncompahgre Plateau than Alt. B currently offers to visitors in a motor-free environment. Around the rim of Flat Top Mesa are abandoned mines with bat gate closures, which would be more secure with only foot, horseback, and non-motorized mechanized access. Adding to Alt. B a mesa top that is now in Alt. C, such as Tenderfoot Mesa, so as to provide a motor-free mesa top environment would not be as satisfactory as including Flat Top Mesa into the Maverick unit. Flat Top Mesa's isolation makes it easier to close to motorized use. The access road once was filled with boulders as an attempt to close the mesa top to motorized traffic. This closure should be bolstered and signed. Keeping Flat Top Mesa as a motorized intrusion to the Maverick management unit visibly diminishes the quality of BLM's management intent. So this is a request that the RMP team include the top of Flat Top Mesa into the Maverick wilderness character management area.

Response
The top of Flat Top Mesa was not identified to contain wilderness characteristics (see Appendix F). This area provides provides important and unique motorized and mechanized access to an important scenic overlook and non-motorized access to Juanita Arch and historic mines. No change has been made to the Proposed RMP/Final EIS.

6.2.3.11 Livestock Grazing

Seasonal Restrictions

Summary
Seasonal restrictions would preclude successful grazing because of concerns related to the calving season and pond maintenance, and the specific needs and conditions of individual allotments. Closing allotments would harm local grazing operations.

Comments
Submission No: cfc0153
Commenter: Ben Nicols, III
Comment: [Little Salt Wash allotment] I don't believe any of the plans will work as they have been written. "B" could work for our operation if the ending date was pushed back 14 to 20 days to the first week of May. April 15th is just too early, at that time we are only 60% to 70% calved out. Hauling and working calves that small and cows so close to the end of gestation is too stressful for our livestock.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners (attachment from the Mesa County Cattlemen's Association)
Comment: We strongly disagree with and object to references to the BLM standards in a general and blanket manner without consideration of specific individual circumstances of individual allotments under specific conditions. We oppose any blanket policy to eliminate any grazing allotments, specifically including those below 6,000 ft. in elevation.

Response
The alternatives were created based upon consideration for resource use and resource protection with different emphases and goals across the alternatives. Due to low precipitation, soil types, and land health problems attributed to livestock grazing during the critical growth period in the spring, seasonal limitations are proposed in the Grand Valley and Kannah Creek areas under some alternatives. However, as stated on page 2-169, the dates could change based upon grazing management plans, grazing agreements, or monitoring. The BLM also considered a reasonable range of alternatives in regards to closing allotments, including continuing current management and closing those allotments below 6,000 feet in elevation to mitigate land health, riparian, and rare plant issues. The economic impact of implementing each alternative is disclosed in Section 4.6.3. No change has been made to the Proposed RMP/Final EIS.

Terms and Conditions of a Lease

Summary
The term "periodically" has been used throughout the Livestock Grazing section of Chapter 2 but the BLM has not included a discernible timeframe during which adjustments may be made. Closures should be made in cooperation with permittees and adjacent landowners.

Comments
Submission No: cfc0183
Commenter: Howard and Janie VanWinkle
Comment: In the 6th Action under Alternative B, the term "periodically" is used again. We would propose a time frame to be included with the suggestion of 3-5 years. It also states that the Authorized Officer can make the decision to close an allotment. We would add that it be in cooperation with the permittees in the area. There is also a point that areas could be closed to grazing due to conflicts with adjoining private lands. Is the BLM organization aware that Mesa County has a "Right to Farm" ordinance? This should be considered when determining a closure such as this.

Response
The alternatives were created based upon consideration for resource use and resource protection with different emphases and goals across the alternatives. As stated in grazing regulations found at 43 CFR 4130.3-3, authorized BLM representatives "may modify terms and conditions of the permit or lease when the active use of related management practices are not meeting land use plan, allotment management plan, or other activity plan or management objectives." As stated in Chapter 2, the BLM may make needed adjustments based on land health studies, vegetation inventories, mandatory rangeland and riparian monitoring, and other pertinent information such as utilization and distribution

reports (see page 2-168). The mentioned studies are done at different times within the permit, and the results may indicate changes or adjustments are needed throughout the life of the 10-year permit in order to graze public plan in a responsible manner. The BLM cannot set a definitive timeframe for making adjustment within permits, especially if changes are needed immediately.

The action in Chapter 2 describes how the BLM will evaluate closing allotments that have conflicts with adjoining private lands with the emphasis on development (see pages 2-203 and 2-204 of the Draft RMP/EIS). The BLM finds it necessary to relinquish grazing in whole or in part within areas of fast development in the rural areas surrounding Grand Junction. This will help reduce conflicts with private land owners and BLM livestock operators. Most of the areas being developed are of very little grazing value so there will be negligible impacts to the livestock operators. No change has been made to the Proposed RMP/Final EIS.

Biological Soil Crusts

Summary
The BLM should limit grazing in order to protect sensitive biological soil crusts.

Comments
Submission No: rmc0048
Commenter: Eric Rechel, Conservation Colorado
Comment: The biggest reason to limiting grazing on desert lands is the presence of cryptobiotic soils. These soils are so important. They hold the soil in place thus reducing erosion. The organisms that make up this soil are able to fix nitrogen thus allowing other plant species to survive the desert environment. The BLM needs to start consider these soils when it comes to grazing allotments and your management under Alternative C would be a fantastic start.

Response
Resource concerns, including biological soil crusts, involving livestock grazing are evaluated using the BLM Colorado Standards for Rangeland health and Guidelines for Grazing Management for BLM Lands in Utah on an allotment-specific basis during permit renewal. Page 2-17 of the Draft RMP/EIS details the grazing alternatives considered but dismissed from further analysis. It is BLM policy to monitor existing livestock use levels, forage utilization, proper functioning condition of riparian areas, inventories of threatened and endangered species habitat, and other resource condition trends in order to make necessary adjustments on an allotment or watershed basis. Soil health, which takes into account biological soil crusts, is one of the variables that is measured and considered during land health assessments and ongoing grazing monitoring.

These activity-based actions are part of the implementation of an RMP to assure that Rangeland Health Standards are met, as well the other objectives of the RMP. Regulations at 43 CFR 4130.3 require that the terms and conditions under which livestock are authorized "ensure conformance with the provisions of subpart 4180" (the Standards for Rangeland Health). Further, 43 CFR 4130.3-1 requires that "livestock grazing use shall not exceed the livestock carrying capacity of the allotment." The GJFO is actively monitoring allotments. The RMP provides for changes in management to correct these existing resource conditions. As this process continues, allotments found not to be meeting Rangeland

Health Standards will be evaluated and changes will be made to the applicable grazing permit in order to meet these standards and prevent damage to other resource values in the planning area. No change has been made to the Proposed RMP/Final EIS.

Closing Specific Areas

Summary
The North Fruita Desert Campground and Sewemup Mesa should not be closed to grazing.

Comments
Submission No: cfc0102 and cfc0104
Commenter: April Nichols and Ben Nichols
Comment: Fencing off the North Fruita Campground, which has been in existence for only a couple of years, would take away a large portion of excellent grazing land. And as I noted previously our cattle are not on the permit during the busiest time for most of the other users.

Submission No: cfc0160
Commenter: Andrew Massey
Comment: I think it would be a bad idea to shut down any allotment as a potential grazer, even if it hasn't been used in a long time…I strongly disagree closing Sew-em up mesa because it may be possible for us to obtain a right to trail through private holdings in Sinbad Valley if we can obtain a lease agreement sometime in the future.

Response
The BLM is faced with the complicated task of managing a balance among the many competing uses of public land. The BLM's multiple use mandate does not require that all uses be allowed on all areas of public lands; that would preclude any kind of balance. FLPMA requires the BLM to evaluate and choose an appropriate balance of resource uses, which involves tradeoffs between competing uses. Fencing the North Fruita Desert Campground is provided as a hypothetical example in Sections 4.4.2 and 4.4.3 to illustrate the impacts of trading a long-term loss of grazing opportunities for improvements in recreation experiences and settings. The North Fruita Desert Campground is not currently proposed to be fenced. Implementation of any livestock closure would first require project-level analysis to determine specific resource impacts. Any proposed action to implement a livestock grazing closure would be planned in coordination with range managers and grazing permittees in order to minimize impacts on range resources, while achieving the objectives of other resources (recreation, in this case.) The closing or relinquishing of an allotment is based on a variety of reasons, including not being suitable for livestock grazing, low AUMs, isolated tracks of land, and management to avoid resource conflicts. The Sewemup area meets most of the criteria listed in last sentence. No change has been made to the Proposed RMP/Final EIS.

Cooperation with Permittees

Summary
The BLM should cooperate with permittees for all range management planning efforts and management decisions.

Comments
Submission No: cfc0114
Commenter: Celia Eklund
Comment: In LG7 page H 54 it is critical that part of the operating procedure includes the direct transmission of the monitoring data to the permit holders so that they can help the BLM make informed decisions. Issues of particular importance are the establishment of campgrounds in a time when state campgrounds are being closed and government spending is decreasing.

Submission No: cfc0113
Commenter: Larry and Celia Eklund
Comment: Make certain that all range management decisions for grazing are indeed made in cooperation with the grazing permittee.

Response
As stated in the Draft RMP/EIS in Appendix H, page H-55, "[t]he federal grazing regulations at 43 CFR 4130 require the BLM to contact and coordinate any rangeland management planning decisions with the affects livestock operators (see BMP LG-8)." This standard operating procedure is part of all current grazing permits. While the BLM makes all grazing decisions for allotments on BLM-administered lands, the BLM intends to continue working directly and cooperatively with permittees regarding trends in monitoring data. BMP LG-8 has been reworded for clarity; see page H-56.

6.2.3.12 Energy and Minerals

Range of Alternatives

Summary
The range of alternatives for energy and minerals is too narrow. Alternatives B, C and D increase restrictions (specifically NSO stipulations), and no alternative incorporates less restrictive measures.

Comments
Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Oxy is specifically concerned about the NSO stipulations proposed for Oxy's developed and undeveloped leases in the Cascade Creek Mesa, Logan Walsh and Collbran (East Plateau and Brush Creek) areas. Oxy finds all alternatives unsuitable, as Alternative C increases the restrictions and Alternative D is very similar to Alternative B, which increases NSO areas in all of Oxy's operating areas. The BLM has failed to analyze whether less restrictive measures would in fact accomplish their same goal of multiple uses on public lands.

Response
The Draft RMP/EIS considered a range of alternatives designed to meet the BLM's legal duties and purpose and need for action. The purpose and need section in the Draft RMP/EIS clearly states that the purpose of the agency action includes compliance not with only the FLPMA but with all applicable laws (Draft RMP/EIS at page 1-2). According to the CEQ regulations and DOI NEPA regulations:

> The range of alternatives includes those reasonable alternatives (paragraph 46.420(b)) that meet the purpose and need of the proposed action, and address one or more significant issues (40 CFR 1501.7(a)(2–3)) related to the proposed action. Since an alternative may be developed to address more than one significant issue, no specific number of alternatives is required or prescribed (43 CFR 46.415(b)).

The BLM's range of alternatives in the Draft RMP/EIS presented a full spectrum of options. Alternatives analyzed include a no action alternative and three action alternatives. The No Action Alternative is a continuation of current management as written, and provides a less restrictive alternative that does not meet the purpose and need. Issues were identified (see Sections 1.2 and 1.6) that needed to be addressed with new management decisions, leading to the need to revise the RMP. No change has been made to the Proposed RMP/Final EIS.

Stipulations are discussed in **Section 6.2.7.1**, Stipulations. This section also includes additional discussion explaining that stipulations in this RMP would only apply to new leases and explains that valid and existing rights would be protected.

Domestic Energy Production

Summary
The alternatives violate law because they increase impediments to domestic energy production.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: When finalizing the GJ RMP, the BLM must ensure compliance with the Energy Policy Act of 2005 ("Energy Policy Act"), Energy Policy and Conservation Act of 2000 ("EPCA"), the National Energy Policy, and Executive Order Number 13212 (66 Federal Register 28357 (May 18, 2001)) to reduce rather than increase impediments to federal oil and gas leasing and development. As currently presented, the BLM has failed to comply with this policy because it is proposing huge new impediments to domestic energy development, especially under Alternatives B and C. The BLM must reconsider Alternatives B and C in particular because existing policies clearly require the BLM to decrease rather than increase impediments to domestic energy production.

Response
In addition to the laws cited in your comment, the BLM also has to comply with many other laws to protect resources (e.g., ESA, NHPA, Clean Air Act, and Clean Water Act). The Energy Policy Act of 2005, Energy Policy and Conservation Act of 2000, the National Energy Policy, and Executive Order Number 13212 provide direction for the BLM to improve its inventory of oil and gas resources and to expedite its review of permits and accelerate completion of oil and gas projects. In 2008, the BLM published the "Inventory of Onshore Federal Oil and Natural Gas Resources and Restrictions to Their Development PHASE III Inventory – Onshore United States" per the requirements of the Energy Policy and Conservation Act. This inventory and other efforts aided in the development of the Reasonably Foreseeable Development Scenario, available on the RMP website. As a programmatic planning document, the RMP cannot accelerate the completion of project-level permit analysis; that would occur

at implementation-level planning when projects are proposed and analyzed. No change has been made to the Proposed RMP/Final EIS.

Master Leasing Plans

Summary
There should be MLPs for more areas than just the Shale Ridges and Canyons area.

Comments
Submission No: emc0813
Commenter: Mike Fiebig, American Rivers
Comment: 5. The BLM should give full and meaningful consideration to establishing master leasing plans for all areas in the Grand Junction Field Office where oil and gas development could threaten fish and wildlife habitat, recreational resources, water quality, scenery, cultural and historic sites, and other river-related values in the area, especially adjacent to previously identified Wild and Scenic "eligible" streams.

Response
The preparation of an MLP is required when all four of the following criteria are met:

- A substantial portion of the area to be analyzed in the MLP is not currently leased.
- There is a majority federal mineral interest in the area to be analyzed.
- The oil and gas industry has expressed a specific interest in leasing, and there is a moderate or high potential for oil and gas confirmed by the discovery of oil and gas in the general area.
- Additional analysis or information is needed to address likely resource or cumulative impacts if oil and gas development were to occur where there are:
  - multiple-use or natural/cultural resource conflicts
  - impacts on air quality
  - impacts on the resources or values of any unit of the National Park System, national wildlife refuge, or National Forest wilderness area, as determined after consultation or coordination with the NPS, the US Fish and Wildlife Service, or the US Forest Service
  - impacts on other specially designated areas

An MLP may also be completed under other circumstances at the discretion of the Field Manager, District Manager, or State Director. The Shale Ridges and Canyons area does not meet the four criteria and is being prepared at the discretion of the BLM. Other areas in the field office did not meet the criteria, either. For example 75 percent of the decision area with oil and gas potential has already been leased (539,300 out of 721,800 acres with oil and gas potential).

The BLM is preparing an MLP for the Shale Ridges and Canyons area, and no other areas have been identified that meet the criteria listed above. The range of alternatives includes many tools that would reduce impacts on sensitive resources, including stipulations, closure of areas to future leasing, BMPs, and SOPs. These tools are similar to those that are included in the Shale Ridges MLP. No change has been made to the Proposed RMP/Final EIS.

6.2.3.13 Recreation

Target Shooting in Demaree WSA

Summary
Demaree WSA should be closed to target shooting to protect wildlife.

Comments
Submission No: emc0632
Commenter: John Strand
Comment: Demaree Wilderness Study Area is a remote area of high desert terrain known for its solitude. It has rich animal life such as deer, elk, antelope, lion, etc. and various species of birds. It is suggested that routine target practice shooting be restricted in whole or in part to maintain solitude and encourage wildlife and bird watching experiences. Restrictions should not affect hunting season activities.

Response
There are few reported incidents of concentrated litter, vandalism, or death or injury to wildlife resulting from recreational target shooting in this area. Target shooting may become restricted in the future if it precludes congress from designating this area as Wilderness or if there are other management concerns (e.g., wildlife and public safety) that warrant analysis of such action. No change has been made to the Proposed RMP/Final EIS.

Special Recreation Permits for Target Shooting

Summary
Clarify whether SRPs are required to engage in recreational shooting in developed shooting areas.

Comments
Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: Appended to the Recreational Shooting chart in Chapter 2 Alternatives page 136 is a narrative regarding the issuance of Special Recreation Permits (SRPs) as a discretionary action to help meet management and other objectives and that recreation fees could be implemented to maintain visitor services and facilities through management of sites or areas as a US Fee Area. Although it appears in the chart for shooting, there is no explanation of how SRPs or fees would be applied to the existing shooting ranges, informal shooting sites, or any future developed shooting range.

Response
The BLM believes there may be confusion stemming from the fact that the commenter appeared to interpret the actions for SRPs and fees in Table 2-2 to be a subset of the shooting actions and allowable uses since they follow immediately after. In fact, the SRP and fee actions are generic to the Recreation and Visitor Services section of Table 2-2. There is not a "chart for shooting" and no fees would be charged for recreational target shooting. No change has been made to the Proposed RMP/Final EIS.

New Shooting Facilities

Summary

The BLM needs to address the process by which it will proceed with proposals to create new shooting facilities.

Comment

Submission No: emc0536

Commenter: Boone and Crocket Club

Comment: The narrative also states that "providing a formal shooting area in the WUI (Wildland Urban Interface) setting would alleviate issues associated with non-designated areas (e.g., public safety, trash, etc.) near residential areas." No further discussion is found in the RMP/EIS on how the BLM would proceed with the development of a new shooting range, in addition to the 27 1/4 Road Shooting Range.

Similarly, on page 4-311 it states that the "Grand Valley Target Shooting ERMA (800 acres) would provide visitors close-to-home, day-use recreational target shooting" and recommends constructing appropriate facilities (e.g. backstops, shade shelters, and shooting benches) to "sustain the principal recreational activity and provide a setting conducive to target shooting." As with the above narrative, there is no further discussion found as to how the BLM would proceed with this project.

Submission No: emc0536

Commenter: Boone and Crocket Club

Comment: We support the BLM's "open unless closed" policy toward recreation, but are concerned that leaving areas open to shooting will not necessarily address long range management of this popular pursuit. Over time we believe that further expansion of the urban interface and increasing numbers of recreationists pursing a wide variety of activities will threaten shooters access to the land that remains open to them. We believe a proactive approach should be taken.

The BLM should identify areas that may be particularly suitable for the development of a new shooting range, or areas that could accommodate more shooters even though they may be more informal settings. It would help to prevent future actions (e.g. trail development, livestock improvements, rights-of-way) from compromising areas that would be especially suitable for recreational shooting. This is important for BLM lands adjacent to Grand Junction and other growing communities. More intensive but informal recreational shooting is akin to picnicking and camping; it is site specific and largely dependent up a variety of resource characteristics.

Response

Per BLM Land Use Planning Handbook 1601-1, decisions in land use plans guide future land management actions and subsequent site-specific implementation decisions such as the development of recreational shooting ranges or designation of protected shooting areas. Implementation decisions require appropriate site-specific planning with the appropriate level of NEPA analysis and any procedural and regulatory requirements for individual programs. See 40 CFR 1500-1508, the BLM NEPA Handbook (H-1790-1), and DOI Departmental Manual (DM) 516 1-7 for detailed descriptions of NEPA procedures. Recreation management areas with complex implementation issues may require a subsequent plan that addresses implementation-level management, administration, information, and monitoring actions. Development of recreational shooting ranges would be classified as an implementation decision and

subject to the process described above. The objectives for the Grand Valley Shooting Ranges ERMA and the Horse Mountain ERMA shooting area (RMZ 3) were revised and refined to better define and protect desired recreational target shooting opportunities (see Table 2-2).

Clay Targets

Summary
The requirement to clean up clay targets is infeasible and should not be included in the Proposed RMP/Final EIS.

Comment
Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: In addition, the Respected Access campaign promotes packing out what you packed in which would include targets, spent shells, food wrappers, etc. The RMP/EIS states in Chapter 2 Alternatives page 135 that "All targets, clays and shells are considered litter after use and must be removed and properly discarded." We are concerned over how literally and consistently this will be enforced. We believe that a good faith effort to pick up clays and spent shells is the proper standard. It is impossible and unreasonable to expect a shooter to recover every shell or shot that falls to the ground and every shard or fragment of a clay target.

The BLM further states that targets "shall be constructed of wood, cardboard, and paper or similar nonbreakable materials (emphasis added). Clays are designed to break apart so it is unclear if their use is allowed, in spite of what is stated about clean-up of clay targets. We recommend that clay targets be included in the list of targets approved by the BLM. The organizations that are signatories to the MOU have successfully assisted both the BLM and Forest Service in encouraging hunters and shooters to volunteer when organized clean-up efforts at shooting ranges and informal shooting sites are scheduled. We also have expertise to offer in reviewing shooting venues where recommendations for improving shooting safety or enhancing shooting opportunities is sought.

Response
The alternatives are consistent with federal regulations, which state that target shooting may not facilitate and create a condition of littering, refuse accumulation, and abandoned personal property (43 CFR 8365). Clay targets would still be allowed on BLM-administered lands under the Proposed RMP. Users are responsible for cleaning up the debris from clay targets. Chapter 2, Allowable Use AU10 in the Recreation section of Table 2-2 has been updated to clarify the intent: "Clay targets and similar aerial targets shall be allowed. All targets, clays and shells are considered litter after use and must be removed and properly discarded."

Motorized Recreation in the Castle Rock Area

Summary
The Castle Rock area should be managed as an SRMA to maintain existing and promote expanded motorized and mechanized recreation activities.

Comments
Submission No: cfc0133
Commenter: John Howe
Comment: My comments are focused on Zone F. I support Alternative D for Zone F, which calls for designation of the Castle Rock SRMA in the triangular area bordered by V.2 Road on the North and S Road (referred to as CV1 Road on the Zone F maps). I urge the BLM to not adopt Alternatives B or C for this area because these alternatives appear to close off completely the unique recreation opportunities offered by this area. Although Alternative B proposes the establishment of an ERMA for the Castle Rock area, the alternative recommends closing the single track trail network. The single track trail network is one of the key reasons for creating a recreation management area in the first place.

I have used the single track trails in the proposed SRMA for mountain biking. I value the feeling of remoteness, the lack of crowds, the unique terrain and the high desert environment. In particular, the terrain offers a high degree of difficulty and unique rock features concentrated in a relatively small area that are not available together in other areas managed by the Grand Junction Field Office. The single track trails in the proposed SRMA have been compared favorably to Gooseberry Mesa, Utah, a world famous mountain biking destination. In an area already renowned for mountain biking opportunities, the Castle Rock trails offer an experience that should be preserved.

Submission No: emc0614
Commenter: James Solomon
Comment: Zone (F) is an area managed by the BLM that has seen extensive gas, oil, mining and grazing for the past 100 plus years. The area is dominated by gas & oil roads and gas & oil drilling pads. Currently there is considerable new gas & oil exploration in this area. As of recently, probably within the past 15 years the area has been discovered as a significantly interesting and enjoyable recreation area. The area offers terrain and experiences that are not available anywhere else in the Field Office area. We feel that the BLM should make an extra effort to giving this area a SRMA designation so that development of future recreation will be an emphasis for this area.

Submission No: emc0614
Commenter: James Solomon
Comment: K-33, Vo. III, Castle Rock SUPPORTING INFORMATION FOR SRMA ALLOCATION
The Castle Rock SRMA is bounded by V.2 Road and S Road (4,400 acres) and provides a unique opportunity for single track motorized and mechanized recreation on slick rock benches. This general area of the Bookcliffs is rich in cultural, biological and scenic resources. By proposing a small area for designed, purposefully built single track trails, and providing easy access to those opportunities the remaining area will be managed primarily to protect resources and limit recreation. This final statement needs further definition. It sounds like the BLM is forcing mechanized recreation into small consolidated areas which has already been proven to be unproductive in meeting the "multi use" mandate. This strategy will only lead to big problems for the BLM in the future because it does not give sufficient consideration to present as well as future demand for motorized recreation. Option (B) may also be outside the CEQ directives. Thus the BLM is creating a doctrine that they do not have the authority to create.

Volume III, p. K-62, Castle Rock ERMA: The DRMP recommends that the Castle Rock area be designated as an ERMA. The designation goes on to offer visitors a singletrack, trailbased recreational opportunity. The issue is that the TMP then closes the trail system to motorized recreation. This designation appears to be biased toward non-motorized recreation in this area and needs to be changed to include motorized recreation.

Submission No: emc0614
Commenter: James Solomon
Comment: The DeBeque area historically was a mining development consisting of gas and oil exploration thus creating a system of roads throughout the area.

On or about 2005, a small group of trail riders discovered what looked like a single track trail that traversed an area bounded by V.2 & S Roads. This was a team of BLM employees and myself as we were looking for an area that would be applicable to a Vintage Motorcycle Trial Event.

As we explored more of this trail system it was apparent that it had been in existence for some time but had not seen a lot of activity. Because this Zone was labeled "Open to Cross county travel", it didn't take long for other riders to learn about the unique characteristics that his trail system and topography offered for mechanized recreation.

The BLM started to inventory the trail system in 2007-2010. According to their documentation the trail system expanded over that time. Again, the area was labeled "Open", so it was easy to expand the trail. As a note, the riders seemed to be staying on the existing trail with very little impact to surrounding areas.

The motorcycle trail riding representatives met with the BLM staff on numerous occasions to try and find a workable solution to the growing trail system. We even attempted to construct an MOU. This did not materialize. We then agreed to close some of the routes per the BLM staff recommendation. We posted signs as to a voluntary closure and asked riders to use only the trails that were left open. This did not work. The BLM staff applied for an OHV grant in 2010, to complete Cultural, Plant and Wildlife survey work. This grant was not approved.

The next step that we took was to organize a work group in conjunction with the BLM staff to erect signage that would help keep people on the approved trail. This entailed about half a day and 8-10 participants. We erected signs and flagged the route with engineer tape. This effort did not keep people from riding all of the trail system. The overall issue and solution as I see it:

- The area was designated as "Open" as per the 1987, RMP.
- The area has been used for gas and oil exploration as well as grazing for the past 100 years. There are 13 gas pads in this quadrant and previous NEPA surveys have all indicated that no issues were found.
- The terrain that the trail traverses provides for a "world class" single track mechanized riding experience. It consists of a very tight trail, lots of slick rock with climbs, drop-offs, steps, and incredible overlooks. A good rider can really challenge their skill level on this trail and that is why it has gained in popularity.
- The trail appears to be sustainable with maybe some rerouting in certain areas.
- The trail is bounded by a road system that provides a good means of controlling further trail proliferation.
- Because this trail system has become so popular, the BLM's preferred option to close it to motorized would inflame the riders who are passionate about this area. This would come at a time when the BLM needs to be developing a partnership with the motorized trail riders.
- Closing the trail to riders would be very difficult if not impossible. The cost would be inhibiting.
- It would be in the BLM's interest to work with the mechanized recreation user groups to keep as much of the trail system open as possible. This could be accomplished by reaching out to the user groups and working through the issues and concerns.

THE PROPOSED ACTION
The members of motorized trail riding groups are proposing that the DeBeque area be developed as an Off Road Motorized Trail Riding area. The terrain lends itself to continued motorized trail riding use while utilizing existing oil and gas access roads.

The socioeconomic benefit to the surrounding communities could be considerable. My personal feelings about this area are, "World Class Single Track Experience". The challenges created by the natural terrain, and the views of the Slick-Rock and sandstone formations create a experience that is hard to duplicate. The Town of DeBeque is very close and would benefit by increased activity. Grand Junction is about 20 miles distant. Many of the current visitors come from adjoining counties as well as the front range. Easy access from Interstate 70 and county roads would continue to service a regional attraction like the proposed trail system.

The sum of these motorized trail ridership groups have the potential to collaborate with the BLM for trail maintenance, design, mapping and skill level identification while applying best management practices (and lessons learned) from other federally managed rider areas.

Response
The Draft RMP/EIS notes that the Castle Rock area is becoming more popular for mountain biking and trials motorcycle riding (see Section 3.3.4). The BLM has presented a range of alternatives for recreation management within the Castle Rock area. This range includes designating the area as an SRMA under Alternative D and providing a mechanized and motorized trail system while acknowledging the presence of sensitive resources in the area and the need to consult with the appropriate government agencies to ensure protection of these resources (see Section 4.4.3). Concerns regarding impacts to sensitive cultural and special status plant species require analysis of a range of management options. An area has been identified for potential RMA designation; it is located nearby, but outside of the proposed Castle Rock SRMA boundary that is proposed in Alternative D. All of the routes in in this area have been designated for certain uses, but the designation of routes may change in some areas after additional data is collected and after further consultation with appropriate agencies and governments is completed.

Sensitive Resources in the Castle Rock Area

Summary
The Draft RMP/EIS does not contain proof that the Castle Rock area contains sensitive natural and cultural resources.

Comment
Submission No: emc0614
Commenter: James Solomon
Comment: Chapter 4, Environmental Consequences, p 4-309, Castle Rock SRMA: "Expanses of exposed rock provide a durable surface for this activity, but the area is also rich in sensitive cultural resources and special status plant species." There is no data in the DRMP to substantiate this claim. Please address this and elaborate.

Chapter 4, Environmental Consequences, p 4-5, Incomplete or Unavailable Information. Per the implication in the statement above as to "rich in cultural resources" but no data to substantiate. The CEQ directs the BLM: If the

information is essential to a reasoned choice among alternatives, it must be included or addressed in an EIS. For the Castle Rock Trail area I do not find this EIS data to be comprehensive. Please comment on this.

Response
By law, the BLM cannot disclose the exact location of cultural resources. A field survey would identify cultural sites not already known, and any route development would need to avoid those sites. Section 3.2.11 explains the Class I analysis of cultural resources in the GJFO planning area, which was used to analyze site density in numerous resource management units. The site-density information allows the BLM to make reasonable assumptions for analysis when information is incomplete or unavailable. It is not legal to disclose known sites to the public where the potential exists for increased risk to these resources. The assumptions developed based on site density allow the agency to evaluate potential impacts based upon theoretical approaches or research methods generally accepted in the scientific community (40 CFR 1502.22). The Castle Rock area is included in the analysis of the Book Cliffs resource management unit. A summary of the known cultural resources in this management unit is located in Table 3-21 and sites are listed in Appendix I. No change has been made to the Proposed RMP/Final EIS.

In 2011 and 2012, a rare plant survey/inventory was completed on 58 miles of trail in the Castle Rock area. Additional survey/inventory is needed on the remaining portions of the trail system to identify areas occupied by rare plants, ensure accurate impact analysis, and develop adequate mitigation measures to protect and conserve special status plants. This information has been added to page 4-336.

Bangs SRMA Boundaries

Summary
Commenters suggested several boundary changes for the Bangs SRMA and its RMZs to accommodate different types of recreational activities and experiences.

Comments
Submission No: emc0665
Commenter: Sherry Schenk
Comment: With the current plan for dividing Bangs SRMA into 3 areas, it seems like it would make more sense to change the boundary of unit 1 and 3 so that the area in unit 3 extends to Little Park Road because unit 3 would then form a contiguous area.. The map that I have has heavy red, blue and green lines marking off the 3 areas so it is hard to tell exactly were the boundaries are. I also ask that you protect both Bangs Canyon and Bangs West as one continuous LWC. Limit travel to existing trails/old roadways (Tabeguache) except for foot and horse travel. Do not add additional motorized trails to this wonderful area. I've hiked out along the Tabeguache, to Horse Mesa, on Clark's bench, and also started from highway 141 mostly along the Tabeguache and find many features to enjoy in this LWC area.

All existing (recognized) trails were planned and hopefully are sustainable and not in need of repair. There are new trails being made by mountain bikers and hikers that should be stopped or if they are acceptable and reasonable, be designated as a trail. The piece of private property on Clarks Bench that stops people wanting to walk on that trail should be bought by the BLM so that people can legally walk all of the trail.

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: BLM considers an insufficient range of alternatives by not considering an action alternative that manages to protect the primitive backcountry attributes and the concomitant recreational opportunities for former Area 5. The final RMP should adopt an alternative that manages current Areas 4 & 5 separately and prohibits new motorized trail building in former Area 5. This is best accomplished by adding the areas of concern in proposed Zone 2 to Zone 3, or creating a new RMZ that is managed for primitive backcountry recreation that encompasses all remaining portions of former Area 5 that remain in the SRMA (see Figure 2).

Submission No: emc0835
Commenter: Janice Shepherd, The Quiet Trails Group
Comment: [Bangs Canyon area] Instead of what is proposed in the alternatives, we would support dividing Zone 2 in half to create two distinct recreation areas. The north half past Billings Canyon SRMA should be managed for motorized use, while the south half of the SRMA should be managed for horse and foot only, as originally proposed in the 1999 plan. There are enough other areas for motorized and mechanized use in this area and more needs to be done to create quiet use opportunities in the Bangs area.

Submission No: emc0835
Commenter: Janice Shepherd, The Quiet Trails Group
Comment: [Bangs SRMA] While we agree with the expansion of Zone 3 into West Horse Mesa, we believe that Zone 3 should also extend up to Little Park road in the northwest corner and should allow off trail travel for horse and foot.

Submission No: rmc0032
Commenter: Bill Hamann
Comment: Although the zone concept of management has been retained for the Bangs SRMP, the number, size, boundaries and management approach of some of the original management 'areas' has been revised. In reviewing the plan, I noted three major modifications from the original (1999) Plan. First, the total Plan Area has been greatly reduced, primarily through the elimination of most of Area 6 and the south half of Area 5 (the latter was comprised primarily of the Bangs Canyon Wilderness Inventory Unit). I agree with this modification. Opportunities for intensive recreation use were limited in the the south 1/2 of Area 5 (Bangs Canyon LWC unit). In area 6, the presence of valuable natural, biological and historical resources, rugged terrain, and mixed public/private land ownership has precluded development of both access and recreation trails and roads.

Second, the new plan calls for 3 management zones, which result from both combining existing zones, and shifting boundaries, on the 5 remaining 'areas'. (Note: It is difficult to determine exact revised boundaries on the maps provided, so some have been estimated). I agree with the boundaries and management plans proposed for the new Zone 1, which combines the old Areas 1 and 2. These have similar management directives i.e., an emphasis on non-motorized and mechanized (mountain bike) activities ,with a higher density, mixed use trail system on the north, and a lower density trail system on the south end. The new Zone 3, which previously included the upper Rough Canyon/lower Ladder Canyon area, and portions of Clarks Bench appears to have been expanded in its NE corner to include the upper Billings Canyon drainage and West Horse Mesa. I agree with that expansion; I also suggest that Zone 3 be expanded on the NW corner to the Little Park Rd, since that makes a more natural boundary. It will be managed for hiking and experiential learning, a continuation of the previous policy. It should be noted there is only one hiking-only trail in Zone 3, the 1/1/2 mile Mica Mine trail, which is heavily used. There is a great need for more hiking (and horse) trails, both to Clarks Bench and to the West end of Horse Mesa. BLM

should work to acquire the private parcel above Gunsight Notch, since the landowner is blocking access to thousands of acres of BLM land. The new Zone 2 combines the old Area 4 (where motorized use was emphasized) and north '/2 of Area 5 (where the management objective was to retain its primitive character and allow only low impact recreational uses). The draft RMP states that the focused activities for all of Zone 2 will be rock crawling, all-terrain vehicle use and motorcycle riding, I strongly disagree with the concept of converting existing Area 5 to intensive motorized use. Unfortunately, BLM does not provide any reasons to justify this decision in the draft RMP.

Submission No: rmc0032
Commenter: Bill Hamann
Comment: The EA erroneously justifies building motorized trails in Area 5 because planned, motorized trails could not be built in Area 6 The management directives for the 6 sub-areas in the Bangs SMRA are specific to that area. This management concept is similar to a city using zoning to control type of development in designated areas; i.e., a city cannot allow a factory in a residential zone simply because soil conditions were not acceptable in the industrial zone. I am concerned that BLM did not seem to have any consideration for the present users of Area 5 (nature hikers, birdwatchers, etc.) , which would be 'bumped' out of Area 5, (an area targeted for them in the 1999 Plan) with no optional areas for their activities.

Submission No: rmc0032
Commenter: Bill Hamann
Comment: Statements in the Bangs SMRA management plan (Table 3) may be misleading or incorrect Under the categories of 'Management Focus, Activities, Experiences and Benefits', there appear to be several misleading or incorrect statements. Under the Alternative A column (continuation of present management position), the table states 'no similar objective' for all 4 criteria. However, the present (1999) Plan indicates that the Management Focus for Area 5 (South half of Zone 3) is to recognize "the remote nature of the area" and to emphasize "the goal of minimizing environmental impact (in the consideration of new trails and recreational opportunities)" (in other words, no new motorized trails!). For "Activities', Alternative A should read 'The focused activities in the south half of Zone 2 are hiking and horseback riding'; also, based on statements in the 2006 Bangs Canyon Implementation Plant; i.e. "No new motorized trails ...would be developed and 'hike and horse trails would be considered" Adding statements to the Alternative A column is important since it shows to the reader that a critical region in Zone 2 is being converted from quiet use to motorized. This is not apparent otherwise.

Under the 'Operational' criteria, Table 3 incorrectly states that Zone 2 is a motorized zone; only the north 1/4 of Zone 2 is motorized. (Note: A comparison of the present operation (Alt A) with Alternative B and C statements in the Zone 2 portion of Table 3 is complicated by the fact that Zone 2 comprises two areas that presently have totally different management policies. BLM should redo the Zone 2 boundaries to have a Zone 2 and a Zone 4).

BLM has only one reasonable option now. Revise the draft Bangs SRMA Management Plan (Table 3 in Appendix K) in the draft RMP, separate Zone 2 into two separate Zones (Zone 2 and 4, with the former being old Area 5) and reinsert the original management directive for this area. If RRF persists in pursuing its motorized trails, the plan can be reopened and submitted to a thorough analysis under NEPA regulations.

Response
Per BLM Handbook H-1601-01, SRMAs are administrative units where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance, and distinctiveness, especially compared with other areas used for recreation. In SRMAs, specific management objectives and actions are identified to protect and enhance a targeted set of

activities, experiences, beneficial outcomes and associated recreation setting characteristics. In response to public comments, the Bangs SRMA and RMZ boundaries and management objectives have been modified to encompass a larger area and to provide a diverse range of recreation opportunities and outcomes such as those identified in the comments above. Please see the Bangs SRMA section starting on page 2-231.

Current Management in the Bangs Area

Summary
There is no need to modify current management for Bangs SRMA. Disregarding current management would also disregard the public involvement that resulted in creation of the current management plan.

Comments
Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: Alt C proposes a vast non motorized zone in the south portion of Bangs Canyon SRMA. Areas 5 and 6 would no longer be considered for future motorized route development. This would not allow area 5 and 6 to be considered to accommodate the growing number of motorized visitors forecasted. BLM gives no rationale for proposing to "change its mind" about the Bangs Canyon Plan. This would also be another piece of the withdrawal.

The area is already covered by an implementation level Decision and as such the Bangs Canyon SRMA need not be addressed in this TMP (as stated in Chapter 1). Areas 5 and 6 must remain under the management of that Decision. To disregard that Decision would be to disrespect the investment already made by BLM, and hard work and public participation that went into developing a good wildland-urban interface recreation area with a diversity of opportunities.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The DRMP provides no analysis or evidence that the Bangs Plan is not an adequate Plan. The DRMP states that "this plan has generally helped facilitate beneficial recreation outcomes." In other words, this is an adequate Plan; several ongoing adjustments prove that it is in conformance with existing law and regulation. The urban interface recreation objectives are appropriately allotted. This will not be possible if the Bangs SRMA is shrunken to the extent that this RMP proposes. Two complete RMZ's are proposed to be withdrawn. This is not acceptable. It would preclude finishing the Plan, which would lead to unmet recreation demands. BLM invested a great deal of energy into this Plan, including organizing a major community volunteer project to flag the proposed singletrack. The community expects to see the Bangs Plan finished. In fact, the Project record will show that during scoping, the subject of the unfinished Plan came up numerous times.

The growing demand for motorized trail experiences is just as real as the mountain bike demand; the DRMP must recognize that shrinking this area is ill-advised and will lead to unsatisfactory recreation outcomes because of the growing demand. The DRMP itself states that demand will outstrip BLM's ability to maintain the setting. Crowding more people into such a small area will most definitely exacerbate that problem. The SRMA Objective as stated on page K-15 will be impossible to meet. The implementation strategy for RMZ 2 can't be met (construct new system trails to create additional motorized opportunities) if the SRMA is shrunken by the removal of two RMZs (5 and 6). The trails are short and are not destination-oriented in the present configuration. More trails in this confined

space would only provide more short segments connecting to other short segments, and increase the route density to the point of overcrowding the area. There just isn't room for more trails without Areas 4 and 5, and the topography severely inhibits very much more construction. Areas 4 and 5 must be retained and detailed in Appendix K.

Submission No: rmc0032
Commenter: Bill Hamann
Comment: The proposed motorized trail system described in the 2012 EA would result in displacement of the existing user group in Area 5 (nature hikers, wildlife watchers, seekers of solitude, etc) but provides no alternative locations for them. The 1999 Plan for the Bangs SMRA was crafted to provide a balance of recreational opportunities for all user groups, while protecting the 'unique, scenic and cultural resources of the area'. This has been largely achieved, with higher density hiking and mountain bike trails in present Areas 1, 2 and 3, an extensive network of motorized trails in Area 4, lengthy motorized trails on the perimeter of Area 5, and a primitive backcountry experience for hikers seeking solitude, primitive route-finding type of recreation and quiet in the north half of Area 5. Equestrians could also use this area if connector trails were built.

The proposed plan would essentially eliminate recreational opportunities for the 'nature hiker' and equestrian in the Bangs Canyon area. BLM presumes this group could find recreational opportunities in nearby areas. However, there are no nearby areas with reasonable accessibility for shorter day hikes and horse rides-certainly not in the Bangs Canyon wilderness unit, where it takes a day hike just to reach the edge of the canyons due to rugged terrain and private property problems.

Response
Per BLM Handbook H-1601-01, SRMAs are administrative units where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance, and distinctiveness, especially compared with other areas used for recreation. In October 2010, BLM IM No. 2011-004 directed the BLM to begin implementing revised guidance for recreation planning in conjunction with land use planning efforts (i.e. RMP revisions). The 1999 Bangs Canyon Plan and 2006 Bangs Implementation EA (CO-130-2004-018-EA) provide recreation management direction for the area, as identified by the commenters, but do not contain the level of detail required by the new guidance. The BLM received new information on recreational use in this area during the public comment period for the Draft RMP/EIS, prompting reevaluation of the SRMA. To conform with the new guidance, and in response to public comments, the Bangs SRMA and RMZ boundaries and management objectives have been modified to encompass a larger area and to provide a diverse range of recreation opportunities and outcomes such as those identified in previous planning efforts and in the comments above. Please see the Bangs SRMA section starting on page 2-231.

Clarks Bench Parcel

Summary
The Clarks Bench parcel should be acquired by the BLM to aid in trail access.

Comment
Submission No: emc0665
Commenter: Sherry Schenk
Comment: The piece of private property on Clarks Bench that stops people wanting to walk on that trail should be bought by the BLM so that people can legally walk all of the trail.

Response
The Proposed RMP/Final EIS for Bangs SRMA (RMZ 3) states, "Pursue opportunities with landowners, either through purchase or exchange, for acquisition of private properties or easements within or adjacent to the RMZ that enhance public access and recreation opportunities consistent with RMZ objectives." Please see Action REC-SRMA-A19 on page 2-260. If determined to be consistent with this text, acquisition of the Clarks Bench parcel would be performed as a future action, separate from the RMP.

Marked Trails in the Bangs and North Fruita Desert Areas

Summary
Trails and their markings should be kept to a minimum.

Comment
Submission No: emc0604
Commenter: Randee Bergen
Comment: [in reference to North Desert and Bangs Canyon] I don't feel that established and named trails are necessary out there. It is nearly impossible to get lost. If main trails are created and named, please keep them the a minimum. The thing that makes the North Desert unique- and what should make it marketable if handled properly - is that it is different from all other areas in the valley. It's vast and open and "wild." I think many, many locals as well as tourists find this appealing.

Response
The BLM has a responsibility to reduce public health and safety risks where possible. Marking trails in these areas will help users with wayfinding and ensure that each route carries only appropriate modes of travel. For visitors desiring fewer marked trails or signage, the Grand Valley OHV focuses on the freedom to participate in unrestricted OHV use and operational setting description states that management is less prominent away from trailheads.

Palisade Rim Area

Summary
The Palisade Rim SRMA should be enlarged and there should be opportunities for future trail connections between the Palisade Rims area and surrounding areas such as Grand Mesa.

Comments

Submission No: emc0788

Commenter: Scott Winans, Colorado Plateau Mountain Bike Trail Association

Comment: Critically, Zone O includes the areas of the Palisade Rims, The Blowout, Mesa Slopes, and Horse Mountain. These regions are adjacent each other, and together form a bounding region of contiguous parcels to the east, southeast, and south of the town of Palisade. These geographic areas have trail access via multiple points, and together can be utilized to form a recreation management area that would be the cornerstone of trail based recreation for the town of Palisade and the east end of the Grand Valley. Important steps will be to assure access to and from the Zone to adjacent lands, and to establish a cohesive Recreation Management Area in which to plan future trail development. I advocate that due to the location and access points near Palisade, variety of terrain options available, ability to easily and quickly access a wide variety of both remote and front country land/trail characteristics, and the profoundly positive quality of life and local economic impacts, that this noted region be designated as an SRMA for multiple types of trail based recreation.

Key points are:

- Access to the Grand Mesa and Zone N, and a contiguous region surrounding the town of Palisade.
- Trails are accessible directly from town in multiple locations without driving required.
- The noted areas offer a tremendous opportunity to expand existing routes and create new routes within topography that supports a full variety of skill levels and trail experience ranging from simple and near town to extreme and back-country.
- Overall, I advocate for SRMA designation for a region within Zone O and adjacent portions of Zone N, extending beyond the northern Zone O boundary into portions of Zone N, generally bounded to the East by the ridgeline W of Cottonwood Cr. drainage and the NFS boundary continuing further southward, Lands End road to the South, and the generally contiguous BLM parcel boundary to the West. This region would be inclusive of Horse Mtn, Mesa Slopes area, The Blowout, the bench containing Palisade Rims, and further northward into Zone N (as described elsewhere).
- Epic route or network options linking the Mesa top with the valley floor will be a huge economic draw for the area. The SRMA will support much of that, and I want to protect access from the out of zone areas (Mesa top) into the area.

Submission No: emc0868

Commenter: Scott Winans

Comment: Zones M, N, and O contain a broad variety of landscape and near-town and back-country trail access opportunities. These zones allow for 2-track and trail access to the Grand Mesa (O and N), and the Bookcliff (M) areas, and are critical for recreation activity at the east end of the valley. Planning for future trail development and use of existing routes is important now to retain connectivity among these zones and to the adjacent countryside. In addition, the ability of users to access trails conveniently and close to the central region of the town of Palisade is unique, and a strong asset to the community and recreation visitors to the area. The Palisade area is a natural location for future development of nonmotorized trails, building upon the existing route base, the natural landscape found in the area, and the ability to readily access these regions from town in multiple locations. The creation of an SRMA in this area would be a beneficial direction for several reasons; an SRMA in the east end of the valley would distribute the areas available for focused recreation throughout the region evenly, and it would provide local healthy lifestyle benefits and improve the economic base of the communities in the East end of the valley.

Submission No: cfc0042
Commenter: Josh Duerst
Comment: Future trail expansion should be allowed to be built from Grand Mesa that run down into Palisade as this would increase economic growth in the area through tourism.

Submission No: emc0749
Commenter: Juliann Adams, Palisade Chamber of Commerce
Comment: We feel Zones M, N, and O provide an excellent location to situate a proposed SRMA as these zones functionally surround the Palisade end of the Grand Valley. They contain a broad variety of landscapes and near-town and back-country trail access opportunities. Further, they allow for double track and trail access to the Grand Mesa (Zones O and N), and the Bookcliff (Zone M) areas, and are critical for recreation use at the east end of the Grand Valley. It's important that planning for future trail development and use of existing routes occurs now, in order to retain connectivity among these zones and adjacent countryside.

In addition, the ability of users to access proposed SRMA trails conveniently by being close to the central business district of the town of Palisade would be unique among SRMAs in the GJFO, and a strong asset to recreation visitors to the area and thus the Town's overall business health.

Submission No: rmc0069
Commenter: Roger Granat, Mayor, Town of Palisade
Comment: Furthermore, the Town supports the designation of 10,000 acres south of the Palisade Rims including Horse Mountain in the SRMA with certain conditions. We are aware that a portion of this proposed area is either owned by the City of Grand Junction or is in the City of Grand Junction Watershed. We submit that Grand Junction is reasonably the right entity to have say on what goes on in these areas and will support their recommendations in those areas.

Inclusion of this 10,000 acre area would create multiple points of access and allows the Palisade Rims to be more broadly connected. This creates the opportunity for the development of multiple skill level routes along well built, contour single track trails. This type of trail development promotes the safety of all users and minimizes erosion and conflicts with wildlife. This area is unique in topography and provides spectacular views of both the Grand Mesa and Mt. Garfield. Expanding the SRMA allows for protective planning with the intent to create a strong focus on recreation management in an area that has been unfortunately overlooked through this planning process. The proposed expanded SRMA would stop at the western boundary of the Palisade Watershed and does not include the Town's watershed.

Response
Per BLM Handbook H-1601-01, SRMAs are administrative units where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance, and distinctiveness, especially compared with other areas used for recreation. In SRMAs, specific management objectives and actions are identified to protect and enhance a targeted set of activities, experiences, beneficial outcomes and associated recreation setting characteristics. In response to public comments which identified specific recreation outcomes, the Palisade Rim SRMA from Alternative D in the Draft RMP/EIS is being carried forward (with a boundary adjustment to the south end of the unit) into the Proposed RMP/Final EIS. Please see the Palisade Rim SRMA section beginning on page 2-321. Additionally, the Horse Mountain ERMA (formerly 34 and C Road ERMA) was expanded to include Horse Mountain (RMZ 1) with recreation management objectives to provide a variety of trail-

based recreation activities. Please see page 2-205. Other resource concerns (wildlife, plants, fluid minerals) precluded a larger RMA designation as requested by commenters, however, specific action items were added to the general recreation management guidance (see page 2-176) in support of the trail connectivity requested by commenters. Management actions for the Palisade Rim SRMA, Horse Mountain ERMA and the general recreation section specifically identify devlopment and maintenance of partnerships with local stakeholders.

Objectives and Actions

Summary
Few of the objectives and actions do anything to implement the guidance to provide a diversity of quality recreational opportunities.

Comment
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: The Objectives inappropriately stray from the Goal for Recreation and Visitor Services page 2-132

Few of the objectives and actions in this section seem to do anything to implement the guidance to provide for a diversity of quality recreational opportunities. Most of your guidance is related to restricting use based solely on the fact the route passes through an area containing one or more natural resources, and guidance is provided to limit use based on dry and windy conditions, climactic changes and wet conditions.

Some of the guidance strays unlawfully from BLMs regulations. For example, the guidance in this section elevates BLM's directive to minimize conflict to "achieve a minimal level of conflict." This improperly modifies BLM's guidance in 43 CFR 8340.

Response
The Recreation and Visitor Services section in Chapter 2 has been revised to include the management actions and allowable uses for each RMA (previously found in Appendix K, Recreation). This new format shows the direct relationship between the proposed actions and allowable uses and the goals guiding the Recreation and Visitor Services program. The objective addressing user conflict has been revised to state, “Maximize positive interactions between a wide range of recreation users to protect a variety of recreation opportunities” (see page 2-181).

Backcountry Airstrips

Summary
The Proposed RMP/Final EIS should contain a comprehensive inventory of all backcountry airstrips and a discussion of their importance to the planning area.

Comment
Submission No: emc0883
Commenter: Vern Burke
Comment: In addition, I would ask that additional sites be identified and studied to see if there would a possibly to add to the current inventory of back country airstrips. It would be benefit to the public to allow more of the federal lands to be opened to use for fishing, hiking, camping, and other low impact activities.

Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: Backcountry airstrips not only serve a purpose of recreation and enjoyment, but are also a safe haven for pilots in distress. The airstrips in question are in a primitive and remote location and could be a life saving alternative to the rugged terrain in the event of an in flight emergency. These established mining airstrips are native to the area and were built decades ago; the historical aspect is also something to consider. Accessing the backcountry by aircraft is a green, low impact mode of transportation and brings a positive economic impact to the local communities. In addition, Colorado has a strong pilot network that would maintain these airstrips via volunteers and donations, resulting in no burden to the tax payer.

Once again, please consider stronger protection and advocacy for the following airstrips: Dolores Point, Hubbard, Little Dolores, West Creek Bluff, Arrow Head Camp, Calamity Camp, Flat Top Mesa, and Blue Mesa.

Submission No: emc0856
Commenter: Sean Farley
Comment: If the [backcountry air] strips are kept open to the public they also provide necessary access for agency use, such as for wildlife management, medical evacuations, fire suppression, hunting and fishing guides, and even back-country hiking. There are likely uses yet to be discovered for these strips. Keeping the strips open is not an expensive option, and in fact there are several volunteer organizations willing to assist in that task. These strips are also a point of refuge for aircraft experiencing problems. While likely a very rare occurrence, nevertheless closing the strips will certainly remove them as a possible safe landing spot.

Response
The Draft RMP/EIS route inventory, which includes backcountry airstrips, encompasses all backcountry airstrips identified in the internal route inventory process and via commenter submissions during scoping and the Draft RMP/EIS public comment period. The Hubbard airstrip was found to be missing from the original inventory and has been added to the Proposed RMP/Final EIS (see the route designation maps on the RMP website). No known backcountry airstrips are proposed for closure.

6.2.3.14 Comprehensive Travel and Transportation Management

Travel Designations

Summary
The BLM should change travel designations in some areas and preserve the opportunity for future travel system expansions.

Comments

Submission No: emc0835

Commenter: Janice Shepherd, The Quiet Trails Group

Comment: Quiet Trails Group supports the Lumsden Canyon LWC and Granite Creek ACEC outlined in Alterative C and the supporting travel area designations with slight tweaks as regards the Lumsden Canyon LWC. Specifically, we support a closed to motorized and mechanized designation for the entire unit save the following. The lower reaches of the Lumsden LWC - ie below the 1450 topo line and adjacent to the existing trail system to the north should be closed to motorized but open to mechanized, horse and foot use on designated routes as this would be a nice complement to the established bike trail complex around Gateway and to leave room for expansion of this system along the canyon road, but not up the canyon itself, anticipating a potential need to provide for a bike route heading north of Gateway which can take bikes off 4.1 Rd.

Submission No: emc0357

Commenter: Jacob Hildebrand

Comment: My name is Jacob Hildebrand and I'm writing about the maintaining full access to the Otto's Ridge site, Reeder Mesa site, and the Peanut Point site for paragliding and hang gliding. I live on the front range but utilize these sites several times per year. I love this area due to its different geological features and energy, relative to the front range area. I have several paragliding friends that frequent these site with me. I urge the BLM to continue to allow full access to these sites for paragliders and hang gliders.

We have a minimal impact on land, and other than a few footprints we may temporarily install a wind sock or other similar temporary wind indicators. Other than this we often drive to the sites and from what I've experienced, pilots are quite respectful in staying on designated roads and trails.

Submission No: cfc0032

Commenter: Warren Gore

Comment: Please keep “round trip” ATV routes open, and routes with the best scenic values. Some longer, dead end routes into key hunting areas may need to be open to retrieve big game.

Submission No: emc0442

Commenter: Tracey Rohde

Comment: Included in the BLM’s recently released DRMP, each of the proposed alternatives include some very concerning road & trail closures. Proposed alternatives B & C are especially detrimental to motorized travel & OHV use. I am concerned about the adverse effect these significant closures will have on the citizens who recreate on public lands, managed by the BLM Grand Junction field office. Within the DRMP "preferred" or "balanced".Alternative B, 67% of existing roads and trails will be closed to the general public. This is not an acceptable action. In 1987, when the last RMP was finalized, the studies concluded that more OHV roads and trails were needed, for anticipated increased public use. 26 years later, OHV use has definitely not decreased, but has substantially increased. Closing existing roads and trails makes no sense. Populating new trails is a very slow process (years), and most times getting a new trail created is near impossible, so the trails that do exist today should not be taken away from public use. The proposed closures of roads & trails will essentially cause adverse impacts on public lands, due to overuse in more concentrated areas. Fewer recreation areas available will also potentially create user conflicts. Many of these roads & trails have existed for decades, or longer. Grandma’s and grandpa’s now take their grandchildren to ride in those places, sharing with them the splendor and history that our valley has to offer.

Submission No: emc0439
Commenter: Ralph Alger
Comment: I am writing to voice my opinion regarding proposals by the Bureau of Land Management (BLM) to restrict vehicle access to portions of Mesa County that generally encompass the area S of I-70, N of Unaweep Canyon, W of Hwy 50. Of immediate and specific concern are the roads and trails around Ryan Park, Lost Horse Basin, Granite Creek, Steamboat Mesa, and the flats north of the Palisade Wilderness Study Area.

I am strongly opposed to closing roads and trails in this area or limiting public access by additional regulation. I am particularly concerned that these areas may be closed to some forms of motorized traffic (jeeps) and open to others (OHVs). This is simply wrong! Modern OHVs are often larger than many "jeeps". While both have impact on trails, I would submit that jeeps are significantly quieter (by many orders of magnitude) and typically travel at much slower speeds and are less likely to tear up the corners as badly or create huge dust clouds. To restrict one and not the other is simply unacceptable. It would further restrict access to only those citizens that have enough disposable income to buy OHVs which have become prohibitively expensive for many citizens.

I raise these concerns because this part of Mesa County is in Game Management unit 40; a unit that takes more than 5 preference points to draw an elk license in. The low altitude and mild weather during the hunting season make unit 40 a unique unit that can accommodate hunters with disabilities that may not be able to access other high altitude and colder units. I have been planning and waiting since 2008 to get my wife into this specific unit to hunt for just those reasons. Units like this take years of planning and preparation. Licenses to these kinds of units realistically only happen at best a few times in ones life. Limiting vehicle traffic and the ability to bring in supplies (mainly water) would virtually eliminate any real chance of being able to hunt, camp, or enjoy these areas for more than a day at a time. If that happens, the public looses.

I love coming in here, even when I am not hunting. Please don't take that away. If the BLM is concerned about environmental impact, I would propose closing these roads and trails for parts of the year and have them open other parts of the year. I would also propose a phased approach that takes place over many years. Posting signs on DS road at the CO/UT border years in advance would be very appropriate if open and honest public input is valued as would asking the Division of Wildlife to include these changes in their annual application booklet.

Submission No: cfc0229
Commenter: William Hubbard
Comment: Keeping the roads open will also prevent the traffic from concentrating in one area which would cause more damage to those concentrated areas.

Submission No: emc0634
Commenter: JanPotterveld, Back Country Horsemen of Colorado
Comment: [Refers to Zone F] Due to the nature of this land with its canyons, draws, gulches, mesas and wildlife and plants, it is not reasonable to have an Open classification. Neither is it reasonable to close this area to all motorized traffic because of the number of existing roads and trails. The 'Limited' classification seems to work.

Submission No: emc0835
Commenter: Janice Shepherd, The Quiet Trails Group
Comment: [Hunter Canyon] Quiet Trails Group supports different management alternatives for different sections of Zone H.

Specifically we support the designation of Hunter Canyon LWC as shown in Alternative C and the corresponding travel management decisions. This is a very unique area. For example there are chemosynthetic bacteria that are normally only associated with deep sea vents, and hot springs. There are research projects into better understanding chemosynthetic bacteria, so its occurrence here should be preserved. Running water is also a rarity out here in the desert and is clearly a draw to local wildlife. We have seen first-hand that the Hunter Canyon LWC also supports eagles, bears, elk and deer winter range and has other wilderness qualities. It deserves protection and sound travel management. The current motorized route situation in this area is poor, with lots of erosion and duplicative routes. It is the experience of the Quiet Trails Group that the number of other hikers and mechanized users enjoying the canyon can outnumber the motorized users by as many as 2 to 1. There is plenty of opportunity for solitude.

However, we do support Alterative B for the area outside of the LWC; it shows sensible seasonal closures and reduces redundant routes. Our only recommendation would be to leave the area west of County Rd 205 open to mountain biking and the possible construction of a loop trail.

Submission No: emc0899
Commenter: Barbara Hawke
Comment: [Lumsden Canyon – Zone U] Due to the somewhat more stable soils and vegetation in much of this zone, appropriate travel could include not only foot and horse, but also mountain bike. Motorized use should be excluded as that use would be incompatible with retaining a sense of wild character, and could exacerbate existing gullying in the canyon.

Response
The BLM developed a range of alternatives for travel management. This range was influenced in part by two public scoping periods devoted solely to travel management. Commenters specifically mentioned the lower reaches of the Lumsden Canyon area, the Castle Rock area, and the area between the Grand Mesa and Palisade. Different travel management designations were analyzed for these areas, including designations compatible with the commenters' requests. Route designations must adhere to guidance in BLM Manual 1626 and the minimization criteria defined in 43 CFR 8342.1; resource concerns that drove the proposed route designations for each route can be reviewed on the RMP website: guidance in BLM Manual 1626 and the minimization criteria defined in 43 CFR 8342..1 Commenters also requested loop trails, which are considered as a route designation criterion (Section M.2.7.2 of the Draft RMP/EIS). Maps showing revised route designations for these areas are available on the RMP website: http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp.html.

Future Route Designations

Summary
The travel management plan should include criteria for future route designations.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The TMP should include criteria for future route designation. The TMP states that "Standards and guidelines will be developed for BLM road and primitive road maintenance, new construction, or reconstruction"

and that only "minor realignments" of the plan network would be allowed without a plan amendment, defined as "a change of no more than one quarter (1/4) mile of one designated route" (Draft RMP, M-28). This seems to indicate that no new routes will be constructed without a plan amendment. However, the TMP should include criteria to guide route designation and construction that would occur via a land use plan amendment. The route designation criteria utilized in development of the TMP (Appendix M, 2.7.2) could also be applied to future route designations.

Response

Per guidance in BLM Manual 1626 and the minimization criteria defined in 43 CFR 8342.1, the GJFO Travel Management Plan (Appendix M) defines the criteria used to create a range of alternatives for the travel system. These criteria, listed in Appendix M, Section 2.7.2, will be used to guide future route designations. The objective of reviewing the existing route system is to analyze those roads and trails that provide important access and are generally sited well enough to remain useable for years to come. Once an effective inventory of a roads and trail system is established and the routes that were not properly sited are removed from the system, new properly-sited roads and trails can be developed to meet recreation and access needs. Note that limiting realignments to within 0.25-mile would not apply to new routes. The Proposed RMP/Final EIS has been updated to reflect this clarification (see Appendix M, Section 5.2).

User-Created Routes

Summary

There should be an opportunity for adding user-created routes to the travel system in the future, provided that those routes undergo a NEPA analysis.

Comments

Submission No: emc0614

Commenter: James Solomon

Comment: Appendix (M) Draft Travel Management Plan, Page M-6: The paragraph at bottom of page; "The process for developing and constructing travel systems, trails or otherwise, is strictly defined by the BLM and under no circumstances will the BLM adopt user-created routes in its future systems. Routes found to be outside the defined travel system will be closed and rehabilitated." I find this paragraph very dictatorial with no leeway for any other course of action. I would propose re-writing this statement so it could allow for consideration of poached trails if proper NEPA were conducted. Please keep in mind why riders create routes without going through the proper procedure. This will be an ongoing issue until the BLM starts working to make a better more complete system of trails.

During Club 20's 2013 annual Spring Meeting Katie Stevens, BLM Field Manager said the following regarding trails on the ground and future trails: "Some BLM roads and trails were developed by users, without agency planning. Stevens said the goal of the travel portion of the planning process is to transition to a recognized system that can be maintained into the future. Once the basic framework of what routes are good enough to keep has been established, then the agency can look at what ones will be needed in the future". This statement reflects a much more open and diplomatic process to follow regarding trails that are on the ground.

Response

The process for minor modifications to the designation of existing routes is found on page M-36. If users or user groups want to create new routes in the future, they can work with the BLM through the

process for designing, analyzing, and designating new routes. Existing user-created routes that were present during the route designation process were considered and designated during the route designation process. Future routes that are not created through the BLM approved process would be considered illegal and would be created in trespass. The route inventory that formed the basis for the RMP/EIS route designations was created through a field inventory effort that ended in 2010 and two public comment periods specifically focused on travel management (in 2009 and 2010). The network has also been updated via public comment on the Draft RMP/EIS. All routes captured through these means are being considered for route designations. No change has been made to the Proposed RMP/Final EIS.

Zone L

Summary

Travel management in Zone L should be set aside until interested user groups, in collaboration with the BLM, can develop a trail plan that balances trail use and conservation.

Comments

Submission No: emc0693

Commenter: Thomas Hundtroft, Bookcliff Rattlers

Comment: Closures shown in Alternative B and D would hinder visitors from leaving the open area. Access to the remaining designated routes would be very limited. The result would be that the few through routes remaining would be so heavily used as to cause major displacement to the clay soils. Both alternatives would severely limit the potential for organized events. Alternative C would eliminate the possibility for events and therefore would not meet the goals as described in the text of the plan.

Alternatives B and C would eliminate the unique open area recreation opportunity all together. The likely result would be wide spread. The estimated 250,000-plus visitors will relocate their activities to more remote locations where it is less crowded and BLM education is too difficult. BLM must come to terms with the fact that these folks are not going to simply disappear.

The area just north of the airport has all trails closed in all action alternatives. It appears that these closures are in preparation for a future withdrawal or RMPP lease to the airport. It is premature to anticipate such an action at this time. If and when a withdrawal is requested an appropriate NEPA document must be prepared. At that time a closure may be proposed and analyzed. The present proposed closure is unnecessary and will be hard to enforce. BLM is illadvised to create enforcement problems when there is no immediate need for the closure.

Submission No: emc0908

Commenter: Frank Lillo

Comment: Travel management in zone L should be set aside from the remainder of the DRMP until such time that interested user groups in collaboration with the BLM can develop a trail plan that balances trail users and conservation.

Submission No: rmc0097

Commenter: Scott Winans

Comment: The information included for zone L is quite overwhelming in quantity and lack of formal definition of the trails, roads, paths on the ground. It seems that the gravity of the choices being considered for the

management of public lands requires that the information being considered should be consistent across all zones. While Zone L provides a greater challenge than many other areas, it still should be addressed thoroughly. We contend that the information provided is insufficient quality public comment and for a well considered choice about the management of this zone.

Response
The BLM agrees that Zone L is a complicated and complex zone that needs additional, on-the-ground analysis. This Proposed RMP/EIS has been revised to establish criteria for the road and trail system in Zone L, but route-by-route decisions will be made following this plan with opportunities for input by recreationists as recommended in these comments. Please see page 2-352. The airport withdrawal is a current proposal that is being analyzed in a separate EA.

Lynx Analysis Unit

Summary
There is no need to close Lynx Analysis Units to over-the-snow travel.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: We have tracked planning actions concerning impacts from snowmobile use on the Canada Lynx for some time. We encourage the decision maker to have staff inquire for the most management data for the adjacent Lynx habitat in the GMUG and White River NF. Previous assumptions regarding the impacts of snowmobiles have not proven out. A blanket closure to snowmobiles in Lynx habitat is not necessary to protect Lynx habitat.

Response
Research on the effect of over-snow motorized travel and snow compaction is conflicting. The Canada Lynx Conservation Assessment and Strategy (Ruediger et al. 2000) suggests that increased competition has contributed to the decline of lynx populations. As a result it was recommended in the Canada Lynx Conservation Assessment and Strategy, to which the BLM is a signatory, that federal agencies limit over snow travel in lynx habitat. Bunnell et al. (2006) confirmed that coyotes do use compacted trails to travel in heavy snow. However, research by Kolbe found little evidence of compacted trails causing increased competition (Kolbe et al. 2007). The Southern Rockies Lynx Amendment (which includes US Forest Service lands adjacent to the decision area) limits the expansion of consistent snow compaction, unless it serves to consolidate use and improve lynx habitat. To be consistent with adjacent land management the Proposed RMP/Final EIS has been updated to remove the prohibition on over-snow motorized travel in the Lynx Analysis Unit. The new action, "limit the expansion of consistent snow compaction, unless it serves to consolidate use and improve lynx habitat" provides the BLM with flexibility to monitor over-snow travel and lynx habitat and respond accordingly. This action is within the range of alternatives analyzed in the Draft RMP/EIS and can be found on page 2-91 of the Proposed RMP/Final EIS.

Route Designation Criteria

Summary
The BLM's route designation criteria are incomplete and too broad.

Comments
Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Missing from the list of criteria for the selection of designated routes is any reference to the recreation effects that are enjoyed the public.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: Since most of the routes in the planning area are used for recreation, and only some are simply used to get from point A to point B, BLM must include the following in its designation criteria:
• Does the route access good hunting areas
• What's the level of individual challenge (easy, moderate, or difficult)
• Does it have entertainment value (does it flow especially well, does it require a new skill, or does it require the visitor to utilize the attributes of his or her vehicle in a satisfying way)
• Is it part of a network which adds variety to the trip
• Are there opportunities to string together different trails to make a longer trip
• Does it have unusual scenic values
• To what degree must the visitor use orienteering skills
• Does the visitor have a sense of accomplishment after completing the trip
By adding these factors into the criteria for route designation, BLM will find that it has a far better recreational network. In its goal statement BLM seeks to achieve visitor satisfaction; therefore, these attributes must be part of the criteria for designation.

Response
The BLM's route designation criteria were informed by BLM Manual 1626 and the minimization criteria defined in 43 CFR 8342.1. They were also formed in response to public input from two public comment periods devoted solely to travel management, wherein the public was asked to provide input about the importance of specific areas and routes, including their experiences and benefits derived from traveling in these areas and on these routes. Six of the criteria are specific to recreation. The route designtion process also closely considered pubic comments on the Draft RMP/EIS and also carefully considered minimization criteria along with recreation values of routes. The general criteria that were used during route designation were also added to the Comprehensive Travel and Transportation Management section of Chapter 2. Finally, the route designations were also informed by the objectives of the recreation section in Chapter 2; new actions have been added that describe some of the recreation criteria that were used during route designations. See page 2-343. Many of the criteria that the commenter cites were used during the route designation process. Therefore, no change has been made to the Proposed RMP/Final EIS. Following completion of the RMP, the BLM will develop detailed management objectives for specific trails which may incorporate some or all of the criteria described by the commenter.

Travel Management Plan References

Summary
The GJFO travel management plan should not reference other travel management plans that are in different physical and social landscapes.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: Section 4.2 on page M-24 is illogical and does not reflect the experience of adjacent BLM offices. The California Desert District has a completely different socioeconomic landscape. In addition, the Ord Mtn. Plan of "enforcement first" was discussed and rejected by adjacent BLM offices when implementing highly controversial management plans in the Price, Richfield and Moab offices. Oddly, your implementation plan seems to suggest the opposite approach as the one taken at Ord Mtn.

Response
The BLM agrees with the commenter and has removed reference to the California Desert District's travel management plan from Appendix M.

Route Designation Maps

Summary
The route designation maps are incomplete.

Comments
Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The no action map (Alt A) is incomplete. It does not show the present open area, therefore a comparison to the action alternatives is impossible…Routes south and east of 27 ¼ Rd. are not labeled with individual route numbers. It is impossible to make route by route comments about these routes.

It appears that the routes south and east of 27 ¼ Rd outside of the open area were digitized into the map. The routes do not coincide with the commenter's experience with the area. As these routes were digitized from some other overhead source and not subjected to ground truth, the accuracy of the map is in question, and the route selection of closed and open routes in the former open area and west of 27 ¼ Rd. shows no rationale at all. It appears to be entirely random. None of the route by route decisions bear any relationship to the criteria as identified at 2.7.2.

Response
The travel management maps accurately depict the existing and proposed OHV open area boundaries. The routes within the OHV open area would remain open as the entire area is open to cross-country travel. The inventoried routes were originally included in the total number of route mileages in the Draft RMP/EIS, but have been removed because the entire area is open to cross-country travel. The range of alternatives includes retaining existing travel management designations in the area proposed for

transfer to the Grand Junction Regional Airport Authority, so no change has been made to the Proposed RMP/Final EIS.

It is appropriate to use screen digitizing to capture routes on the ground, especially with the density that exists in this area (see BLM Technical Reference 9113). The BLM did verify the accuracy of the screen digitization work with field verification sampling. Because Zone L is such a complex area, the BLM agrees that additional, on-the-ground analysis is needed. The Proposed RMP/EIS has been revised to establish criteria for the road and trail system in Zone L, but route-by-route decisions will be made following this plan with opportunities for input by recreationists as recommended in these comments. Please see page 2-352.

Bangs Canyon Area

Summary
Management in the Bangs Canyon area should be tailored to the settings and activities in the area.

Comments
Submission No: emc0868
Commenter: Scott Winans
Comment: Zone P includes the public lands immediately adjacent to the city of Grand Junction and the higher population density areas of the Grand Valley within Mesa County. The use in Zone P is crucial for a growing city to maintain both its natural resources and access to local recreation opportunities. Zone P is the daily escape from the city and is also a very important buffer to the Colorado National Monument. Most of the immediately accessible potions of Zone P are currently utilized primarily by foot and mountain biker users. Use in further reaches of the zone tends to be motorized and bike use, though large portions of the zone have little visitation.

The most heavily utilized area within Zone P is the Tabeguache Trail System. In a short period of time there has been an expansion of trails and facilities to maintain this area. Examples include a bike park, down-hill specific mountain biking trails, and 3-Sisters private property being purchased and put into conservation easement by the Mesa Land Trust to expand the "Lunch Loop" trail system. The Tabeguache trail system showcases how a trail system close to an urban area can feel "remote" with proper planning.

Zone P offers an opportunity to plan and expand trail networks to serve a variety of users. Planning has already been undertaken towards the creation or designation of nearly 20 miles of mixed use single and double track in the zone, but that work is in an undetermined status pending the results of this RMP/TMP process. In all cases, the need for expanded and well planned trail based recreation in Zone P is quite important. The further reaches of the zone are quite remote and little visited. Seclusion and quality natural settings are the norm for all areas generally south of Billings Canyon. This area is dominated by Pinon & Juniper, high elevation desert terrain with significant canyons. The proximity of the city of Grand Junction to these lands with unspoiled natural characteristics creates an emphasis on well managed access and all future route planning.

Response
Changes have been made to recreation and travel management in the Bangs Canyon area in response to public comments. The Proposd RMP/Final EIS has been updated so that the Bangs SRMA now includes

four RMZs to provide a better, diverse mix of recreation opportunities and settings. Please see page 2-231 for a detailed description of the SRMA and the travel objectives for each RMZ within the SRMA.

Closing and Rehabilitating Routes

Summary
The BLM has not analyzed the costs, process, and impacts of closing and rehabilitating routes.

Comments
Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: By having no classification in Appendix M for "close and rehabilitate," BLM has ignored the costs of such a huge job. BLM has not analyzed the cost and resource impacts of major rehabilitation efforts at any scale, and it has no criteria for doing so in Appendix M. To fairly assess the environmental impacts, we need to know whether BLM can do it, and we need to know how much damage to the natural environment will occur in the process of ripping, reseeding, and preventing and/or controlling weed infestations in the newly disturbed soils, and the length of time it will take to actually "rehabilitate" the routes back to their undisturbed state in the high desert (semi-arid) environment. Lastly, we need to know the length of time it will take BLM to accomplish this work (see footnote #2).

Response
Section 4 of the Travel Management Plan (Appendix M) outlines the prioritization process, timeline, and funding associated with reclaiming closed routes. This information has been updated in the Proposed RMP/Final EIS to further describe the closure/rehabilitation process and implementation process.

Castle Rock Area

Summary
The Castle Rock area provides many unique route-based recreational opportunities that should be preserved.

Comments
Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The existing trails are a very high value recreation resource. They are very high skill routes over large slick rock formations. Trails on rock do not erode or become braided. These trails offer a trials opportunity not found elsewhere in the region. The area is also heavily used by mountain bikers. The core trails have existed for many years. Many of the visitors come from communities to the east of DeBeque. The higher elevation communities to the east are unsuitable for trail recreation except for a few months out of the year, and that drives many visitors to this area. Because the topography forms a natural boundary, this area provides a potentially well managed opportunity for these visitors.

Response
The BLM is proposing an adaptive management framework for the Castle Rock area to look more closely at the impacts from routes, use trends, and types of use on the resources in this area. A longer-term planning process will take place to designate routes in the Castle Rock area after the RMP is finished. The BLM will be working with partner agencies to determine if recreation focused management as an RMA is feasible in the area. The routes in this area have been designated in the travel management plan. If an RMA is designated in the future, then the routes within the RMA would be revisited at the same time as the designation. Route development outside of an RMA designation process would be addressed through project-level NEPA analysis.

Zone V Area

Summary
The BLM should form a cooperative agreement with an OHV nonprofit organization to jointly develop and manage a Zone V travel plan.

Comments
Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: A cooperative agreement with an OHV nonprofit organization to jointly develop and manage a Zone V travel plan and implementation might be a more practical approach. This would necessitate a trail plan that is more visitor friendly than the proposed action, in order to get support from the public and an appropriate nonprofit. This more visitor-friendly plan could be cooperatively developed with the OHV nonprofit.

Response
The BLM conducted a comprehensive scoping process for the travel management plan, including two separate public comment periods where input on specific routes was solicited. Comments from all users were taken into consideration when developing the proposed route designations. Engagement with the public during this planning process has attempted to engage extenal parties in the travel management of the Zone V area in order to provide a holistic plan. The Proposed RMP/Final EIS route designations can be found on the RMP website. No change has been made to the Proposed RMP/Final EIS, but route designations in this zone, like all others, can be revisited after completion of the RMP if new information warrants a change.

Backcountry Airstrips

Summary
The BLM should inventory and identify backcountry airstrips as entities of their own and keep them open to aircraft.

Comments
Submission No: emc0878
Commenter: John McKenna, Recreational Aviation Foundation
Comment: The RAF would like to request that your process include the 8 airstrips that have thus far been identified and inventoried be addressed as entities of their own. Of the 8 airstrips 6 of them could potentially be affected by this current process. It is the concern that they could be closed as a part of road or trail that is not directly tied to these assets, when in fact they are separate items. In short these airstrips are not depicted as separate and distinct from the trails or roads that they are in close proximity to. The 8 airstrips are commonly known as; Dolores Point, Little Dolores, Hubbard, West Creek Bluff, Arrowhead Camp, Calamity Camp, Flat Top Mesa & Blue Mesa.

Response
Airstrips are recognized on the route designation maps available on the RMP website. The Draft RMP/EIS Appendix M, page M-30, states that the BLM would follow a specific, separate process that includes following all applicable laws, including those of the FAA, before proposing to close any airstrip. The Hubbard airstrip was identified during the public comment period for the Draft RMP/EIS and has been added to the route network. No other changes have been made to the Proposed RMP/Final EIS.

6.2.3.15 Lands and Realty

Land Tenure Adjustments

Summary
A land tenure adjustment in the Dry Fork of Roan Creek should be presented and analyzed in the range of alternatives.

Comments
Submission No: emc0931
Commenter: Steve Belinda, High Lonesome Ranch
Comment: The second area we would like to see address is a land tenure adjustment in the Dry Fork of Roan Creek for a house (the Dodden Residence) that was found to be on BLM land by approximately 30 feet. This has not been identified in the land tenure adjustments for any alternative presented in the DRMP. When the issue was identified through recent surveys, we moved to address and fix the issue immediately, but we were told by BLM staff that this would be addressed in the RMP revision.

Submission No: emc0970
Commenter: Scott Stewart, High Lonesome Ranch
Comment: Just an FYI in regards to one of the points we have provided in our comments having to do with the topic of when BLM resurveyed the Dry Fork area (I believe about 10+ years ago) it was determined that a portion of one of our long standing houses that we refer to as the Doden House was to be mentioned under the Land Tenured Adjustments. We have spoken for several years (as well as those prior to my arrival) to Catherine and others about the need to do a purchase or swap to repair this issue and have been told that it would be accounted for in this RMP. That being said, I did not see anything specific so I did add this topic to our overall comments. I understand that we will need to work thru several points, public notice etc. and would be happy to get started on that sooner versus later.

Response
The RMP revision does account for disposal of a parcel of land to High Lonesome Ranch to resolve this occupancy trespass. Although the parcel is not specifically identified for disposal on the land tenure adjustment maps, the disposal criteria on page 2-163 of the Draft RMP/EIS allows for disposal of unintentional occupancy trespasses in existence prior to 2010 in Alternatives B, C, and D. Rather than identifying such trespasses on the maps, this issue was addressed through the disposal criteria. No change has been made to the Proposed RMP/Final EIS.

Land Disposal and Retention

Summary
Several parcels should be retained because they offer valuable public access or important wildlife habitat.

Comments
Submission No: cfc0165
Commenter: Bennett Boeschenstein
Comment: Disposal properties in critical environmental areas should be retained in the BLM ownership. Such properties include the "No thoroughfare wash" area (which is subject to flash flood and contains paleo resources); the "question mark hill": parcel on State Highway 340 should be transferred to the Park Service as part of an expanded Colorado National Monument, Monument Canyon trail head parking lot; the land around the base of Mt. Garfield; in general, disposal properties should have adequate water, sewer and road access before they are sold on the open market; conservation easements should be considered on environmentally valuable disposal parcels before they are sold.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: Planning Issue # 4: What opportunities exist to make adjustments to public land ownership that would increase the benefit to the public, local communities, and natural resources, while working towards BLM management goals?
Example of BLM's "negative" answer to this question: The BLM has up for disposal a small tract of land south of Highway 50 east of Whitewater. This area has trails in it, which provide close to home trail riding opportunities for motorcyclists and equestrians. BLM has no management investments in this area, so it is a "no cost to BLM" recreation amenity. Neither the visitors or the resource require any BLM attention; by any reasonable reviewer's standards this would seem to be a win-win. Disposing of this land would not benefit the public which uses that area. So, BLM's answer to that issue is, "BLM is not particularly concerned about increasing the benefits to the public."

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW strongly encourages BLM to retain parcels that have a direct access to a public road or public legal right-of-way to maintain hunting access. The following parcels identified by legal description, contain crucial wildlife habitats for multiple species including elk, mule deer, Rocky Mountain big horn sheep and moose.
T8S, R95W, S36 public hunting access, winter use for multiple big game species.
T10S, R97W, S13, 25, 24 winter use for multiple big game species.
T10S, R96W, S29, 32, 35 public hunting access, winter use for multiple big game species.

T10S, R96W, S25 Public hunting access, winter use for multiple big game species.
T10S, R95W, S20 Public hunting access, winter use for multiple big game species.
T10S, R95W, S22 Public hunting access, winter use for multiple big game species.
T10S, R95W, S26, 33, 34, 35 public hunting access, winter use for multiple big game species.
T10S, R94W, S4, 9, 17, 16, 15 public hunting access, winter use for multiple big game species.
T10S, R94W, SI4, 13, 12, IOS 93W S7 public hunting access, winter use for multiple big game species.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Several large potential disposal parcels contain mapped moose winter concentration areas. Moose production areas are in the process of being identified and mapped. Areas of Plateau Valley provide an important, although as yet undefined as to scope and scale, movement corridor between existing moose concentration areas in the Hightower area and the certain areas in Plateau Valley. Moose are readily using this corridor, moving from the original release area on the Grand Mesa and beginning to occupy the valuable habitat in the greater Plateau Valley. This entire Valley provides patchy, but adequate habitat for moose with numerous riparian systems and other preferred foraging areas.
T9S, R93W, SI4, 13, 24, 34, 35 winter use for multiple big game species and crucial expanding moose use habitats.
T11S, R96W, S9 public hunting access, winter use for multiple big game species, and crucial expanding moose use habitats.

Response
All parcels identified as available for disposal in the range of alternatives meet one or more of the criteria listed in Chapter 2 (page 2-163 of the Draft RMP/EIS). Further analysis would be required before the BLM disposed of parcels.

Question Mark Hill is a Cooperative Management parcel in Alternative B and no change has been made to the Proposed RMP/Final EIS. The BLM and the NPS are in the process of transferring administrative jurisdiction of two parcels, including the Question Mark Hill parcel, to the NPS for administration as part of the Colorado National Monument. While the BLM cannot confirm the location of the "no thoroughfare wash" parcel, the nearby parcel number 149 is identified for disposal but will go through further NEPA analysis before actual disposal occurs. No lands at the base of Mt. Garfield are identified for disposal; no change has been made to the Proposed RMP/Final EIS.

The parcels identified by CPW for retention because of their hunting opportunities are isolated parcels in the Collbran/Plateau Valley area. They are already identified for retention within the range of alternatives, except for T10S, R95W, Sec. 22 (a 40-acre parcel identified as available for disposal in all of the alternatives because of its small size), and some were identified as available for either cooperative management or disposal. Parcels adjacent to the Grand Mesa National Forest were identified for potential cooperative management in the preferred alternative (these parcels range from 160 to 1,000 acres). The described parcels identified as available for disposal in the preferred alternative range from 40 to 500 acres. The largest of these (T10S, R97W, Sec 13, 24 and 25) does not have public access. The parcels that do have public access are relatively small (40 acres, 160 acres, and 360 acres, and meet the following disposal criteria: "Isolated parcels that are small or so located as to make effective and efficient management impractical." Disposal parcels are identified for eligibility of future disposal through the RMP/EIS process and would not necessarily be disposed of in the future. Parcels deemed eligible for

disposal would undergo site-specific public scoping and NEPA analysis before the disposal process could proceed or be completed. Therefore, no change has been made in the Proposed RMP/Final EIS.

The parcels identified by CPW for retention because of their important moose habitat are isolated parcels in the Plateau Valley area. Some portions are already identified for retention within the range of alternatives, and some portions are identified as available for disposal in all alternatives. The described parcels range in size from 40 to 150 acres and meet the following disposal criteria: "Isolated parcels that are small or so located as to make effective and efficient management impractical." Disposal parcels are identified for eligibility of future disposal through the RMP/EIS process and would not necessarily be disposed of in the future. Parcels deemed eligible for disposal would undergo site-specific public scoping and NEPA analysis before the disposal process could proceed or be completed. No change has been made in the Proposed RMP/Final EIS.

ROW Avoidance and Exclusion

Summary

There are too many ROW avoidance and exclusion areas. There is also a lack of details regarding management of ROW avoidance areas and how a ROW might be granted in those areas.

Comments

Submission No: rmc0068

Commenter: Robert Boswell, Piceance Energy, LLC

Comment: The BLM Should Explicitly Provide for Circumstances Under Which Development May be Approved in ROW Avoidance Areas. Piceance Energy's leases and operations are located primarily to the east of Collbran, Colorado. Nearly all BLM lands in this area are designated as "ROW Avoidance" areas. See RMP/EIS Map 2-27, 2-153-155. Piceance Energy recognizes and appreciates that the RMP provides that development may occur in a ROW Avoidance area in some circumstances. See e.g., Draft RMP/EIS at Glossary-4 ("The area may not be totally unavailable but should be avoided if possible."); 4-318 ("ROW applications could be submitted in ROW avoidance areas; however, a project proposed in these areas would be subject to additional requirements such as resource surveys and reports, construction and reclamation engineering, long-term monitoring, special design features, and re-routing. As a result of special surveys and reports, alternative routes may need to be identified and selected to protect sensitive resources."). But the Draft RMP does not explain the circumstances under which ROW applications would be accepted in an Avoidance Area.

The RMP should expressly state that line officers may consider the totality of the circumstances in determining whether development in Avoidance Areas is appropriate. The RMP should direct line officers to consider economic considerations in determining whether alternative routes are feasible. And the RMP should recognize that an alternative route may actually have greater impacts that development in the Avoidance Area. For example, an alternative route may be circuitous and significant longer, causing additional surface disturbance and impact. The RMP should give line officers flexibility to approve development in the Avoidance Area if the route is preferable based on the totality of the circumstances.

Draft EIS/RMP at 2-153-155 - state that: "Development in avoidance areas may be approved if after evaluation of the totality of environmental, economic, and technical aspects of the proposal, the BLM line officer determines that development in the Avoidance Area is preferable to avoidance."

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Right-of-Way Exclusion Areas. Preferred Alternative B proposes 204,200 acres as ROW Exclusion Areas and 740,900 acres as ROW Avoidance Areas, which is 945,100 acres out of the 1.2 million total surface acres managed by Grand Junction BLM. BLM restricts nearly 80 percent of its surface acreage from use as a ROW. In determining its ROW exclusion and avoidance areas, BLM includes everything from steep slopes to streams to wildlife areas without consideration of site-specific situations. BLM's proposal unnecessarily restricts future ROWs and will create serious impediments to oil and gas development.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana is opposed to the BLM's proposal under Alternatives B and C to substantially increase the number of acres subject to ROW exclusion and avoidance areas in the GJ RMP. GJ DRMP/EIS, Table 2.2, pgs. 2-150 – 2-155. Under this proposal, BLM restricts nearly 80 percent of its surface acreage from use as a ROW. In determining its ROW exclusion and avoidance areas, BLM includes everything from steep slopes to streams to wildlife areas without consideration of site-specific situations. For example, Alternative B proposes ROW avoidance areas within 4 miles of a sage grouse lek although there could be significant land within 4 miles of a lek that is not sage grouse habitat. The BLM has not justified this substantial increase in the number of acres subject to ROW exclusion and avoidance areas.

Response
BLM Handbook H-1601-1, Appendix C, Section E, requires the BLM to identify the following consistent with the goals and objectives for natural resources within the planning area: ROW avoidance or exclusion areas (areas to be avoided but may be available for location of ROWs with special stipulations and areas not available for location of ROWs under any conditions). ROW avoidance areas highlight areas that have resource concerns that may require special mitigation and surveys. ROW applications in avoidance areas would be accepted and analyzed to determine if they are feasible and what restrictions may be necessary for permitting. ROW applications in exclusion areas would not be considered and may require a plan amendment to be processed. The Draft RMP/EIS analyzed a wide range of alternatives for both ROW avoidance and ROW exclusion areas. Appendix B of this RMP/EIS identifies which stipulations apply to ROW avoidance areas and Appendix G of this RMP/EIS contains several SOPs and BMPs to minimize environmental impacts and identify limitations on other uses that would be necessary to maintain the corridor and ROW values. No changes have been made to the Proposed RMP/Final EIS.

Pipelines and Corridor Access

Summary
There is a significant lack of discussion on the use of pipelines and corridor access in the Draft RMP/EIS.

Comments
Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Transportation Infrastructure. There is a significant lack of discussion on the use of pipelines and corridor access in the DRMP. TU supports any reduction in truck traffic that reduces the issues with fugitive road dust and associated air quality problems, as these reductions decrease the excess need for water for road dust

abatement, decreases surface contamination from secondary truck waste contaminants, and decreases wildlife mortality events and associate security issues with big game and other wildlife species. The final RMP must include a complete ROW transportation system for all pipelines associated with oil and gas infrastructure and provide a management plan for implementing effective transportation plans that minimize erosion, weed infestation, and habitat fragmentation. While pipelines could go a long way in lessening the impact of truck traffic, their development would have significant impacts on water quality, air quality, fish and wildlife resources throughout the planning area and therefore must be thoroughly addressed in the final RMP.

Response
The transportation infrastructure for oil and gas leasing and development is proposed and analyzed at the project-specific level. Project applicants may apply for a ROW grant for pipelines associated with development in areas outside of ROW exclusion areas. The BLM will work with the applicant on a case-by-case basis and through the NEPA process to identify and implement best practices to reduce impacts on sensitive resources. BMPs have also been developed that address centralized production facilities and telemetry to reduce truck traffic associated with transport of produced water and oil/gas (e.g. M&E-68, M&E-69, M&E-70; see Appendix H). No change has been made to the Proposed RMP/Final EIS.

Land Exchanges and Transfers

Summary
A list of parcels should be exchanged with the City of Grand Junction.

Comments
Submission No: rmc0092
Commenter: Sam Susuras, Mayor, City of Grand Junction
Comment: The City requests the BLM take ownership of isolated parcels of land in and along the river corridors that currently have no ownership. Having the BLM secure ownership of these parcels will ensure that public management of the river corridor will be uninterrupted and help local entities and law enforcement agencies deal with public use of the river corridor.

Submission No: rmc0092
Commenter: Sam Susuras, Mayor, City of Grand Junction
Comment: The City requests the BLM to transfer parcel number 2945-071-00-914, legal description Lot 6 of Section 7, Township 1 South, Range 1 West (approx. 2.3 ac.) to the City. The property is contiguous to other City parcels and currently contains a portion of the river trail system that N is maintained by the City. (See map to right)

This is the only land parcel that the BLM owns along the river that is within the City limits of Grand Junction. The City would like to obtain ownership of the parcel.

Submission No: rmc0092
Commenter: Sam Susuras, Mayor, City of Grand Junction
Comment: The City requests land exchanges in the Whitewater area, specifically the Somerville Ranch area to help protect our water resources and to square up boundaries between City and BLM parcels that would help manage the Whitewater Common grazing allotment. The exchanges would benefit the BLM by giving them control over

parcels of land currently under control of private landowners that contain a considerable resource of Colorado Hookless cactus. The following is a list of desired BLM properties adjacent to the City's property. In many cases the checker board pattern of land ownership creates management issues that we believe can be reduced with appropriate land exchanges.

PARCEL SEC RANGE TOWNSHIP ACRES
E 1/2 NE 1/4 6 R97W T12S 80
NE 1/4 2 R2E T2S 160
5 1/2 6 R97W T125 320
NE 1/4 SW 1/4 2 R2E T25 40
N 1/2 7 R97W T12S 320
NW 1/4 NW 1/4 2 R2E T25 40
N 1/2 NE 1/4 32 R97W T12S 80
NW 1/4 SE 1/4 2 R2E T2S 40
NE 1/3 NW 1/4 32 R97W T125 40
S 1/2 SW 1/4 2 R2E T25 80
N 1/2 NE 1/4 33 R97W T125 80
SE 1/4 SE 1/4 3 R2E T2S 40
N 1/2 NW 1/4 33 R97W T12S 80
SE 1/4 NE 1/4 9 R2E T2S 40
5 1/3 11 R98W T125 60 SE 1/4
SE 1/4 9 R2E T2S 40
E 1/2 SW 1/4 12 R98W T125 80
NE 1/2 NE 1/4 10 R2E T2S 80
NW 1/4 SW 1/4 12 R98W T125 40
SE 1/4 SW 1/4 10 R2E T25 40
5 1/2 NE 1/4 12 R98W T125 80
SW 1/4 NW 1/4 10 R2E T2S 40
SE 1/4 12 R98W T125 160 N 1/2
NW 1/4 11 R2E T2S 80
N 1/2 NE 1/4 13 R98W T12S 80
S 1/2 12 R2E T2S 320
NE 1/4 NW 1/4 13 R98W T125 40
SE 1/4 SW 1/4 35 R2E T2S 40
N 1/2 NE 1/4 1 R2E T2S 80
SW 1/4 SE 1/4 35 R2E T2S 40
NE 1/4 NW 1/4 1 R2E T2S 40
W 1/2 SW 1/4 35 R2E T25 80
E 1/2 NW 1/4 2 R2E T2S 80

Response

It is unclear to which specific parcels the City of Grand Junction is referring as having no ownership. Further research of land ownership would be required before action could be taken to potentially change ownership of the parcels identified in the comment. Any future acquisitions would be in accordance with the acquisition criteria listed in Table 2-2. No change has been made in the Proposed RMP/Final EIS.

Regarding exchanges, the commenter is referring to parcels that are identified for land exchange under current management in Alternative A. In the Proposed RMP, they are not specifically identified for exchange, but any lands can be considered for exchange if they meet the criteria specified in Chapter 2. Any exchanges would occur through a site-specific process after the RMP is finalized. No change has been made to the Proposed RMP/Final EIS.

Parcel number 2945-071-00-914 contains a portion of the riverfront trail system authorized by a ROW grant issued to Mesa County. This parcel has been identified for cooperative management in the Proposed RMP (see Figure 2-31).

6.2.3.16 Areas of Critical Environmental Concern

Management Actions

Summary
Management actions in the Preferred Alternative should be strengthened to protect relevant and important values.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 2-188. The Glade Park ACEC, the final proposed Alternative, should carry actions equivalent to Alternative C in that it includes occupied habitat known to historically and possibly currently be used by the proposed endangered Gunnison Sage-grouse. CPW recommends one exception regarding the actions, which would be to allow limited livestock grazing to maintain range health but monitor levels to keep it suitable for grouse as recommended by the range wide guidelines in the state plan.

Submission No: rmc0066
Commenter: Marie McGowan
Comment: Considering the rare and fragile cultural sites, habitat values and the vulnerability of this area of motorized disturbance, I recommend the whole Indian Point WEA/ACEC be closed year round to motorized use, not just seasonally as in Alternatives B and C.

Response
For all ACECs, travel management designations complement special management (43 CFR 1601.0-5(a)) to protect the area and prevent irreparable damage to resources or natural systems and to protect life and promote safety in areas where natural hazards exist. In the case of Indian Creek ACEC (and Indian Point wildlife emphasis area), limiting motorized travel to designated routes, applying a seasonal limitation to motorized travel, and applying stipulations to limit or prohibit surface-disturbing activities would protect wildlife during sensitive times of the year and protect cultural resources from damage associated with ground-disturbing activities. In the Glade Park/Pinyon Mesa ACEC area, allowing grazing within Gunnison Sage-Grouse habitat is currently within the range of alternatives. No change has been made to the Proposed RMP/Final EIS.

Evaluation Process

Summary
The presence of oil and gas leases should not deter the BLM from designating an ACEC.

Comments
Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy
Comment: Recommendations - Many of the decisions about whether to include areas as managed for wilderness characteristics and/or ACECs appear to have been made based in whole or in part on whether areas already had been leased for oil and gas development. However, lease expirations in the near or distant future could increase the opportunity for managing some lands for uses other than oil and gas development, particularly in places where large areas of leases have not been developed and are expected to expire around the same time. Therefore, we recommend that BLM (1) Provide a map of lease expirations and (2) revisit decisions for ACECs, Areas Managed for Wilderness Characteristics Outside of Existing WSAs, and the Master Leasing Plan based on anticipated lease expirations. BLM could designate some areas as potential ACECs or NSO stipulations applied if oil and gas leases expire.

Response
To be eligible for designation as an ACEC, an area must meet the relevance and importance criteria described in 43 CFR 1610.7-2 and BLM Manual 1613, and need special management. Following this guidance, the ACEC Report, available on the RMP website, details the BLM's findings regarding relevance and importance criteria. Approximately 70,200 acres of the 72,800 acres of ACECs in Alternative B that have oil and gas resource potential are already leased. The presences of existing oil and gas leases did not preclude ACEC designation. As detailed in Table 2-2, restrictions associated with ACEC management vary by ACEC and valid and existing rights were considered when restrictions were designed. A discussion of the lands with wilderness characteristics inventory can be found on the RMP website and in **Section 6.2.3.10**, Lands with Wilderness Characteristics. The BLM is required to reevaluate areas and some areas may qualify for ACEC designation or management to protect lands with wilderness characteristics if certain qualities, including oil and gas leases, change. No change has been made to the Proposed RMP/Final EIS.

Support for Alternative C

Summary
Specific reasons are given for why the BLM should adopt ACECs from Alternative C into the Proposed RMP.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 4-173, 4-363 and Figure 2-66, It is strongly recommended that the ACEC's from Alternative C are adopted in the final RMP regardless of which Alternative is chosen due to the significant protection they would provide to numerous BLM sensitive species. At a minimum, it is strongly recommended that the Prairie Canyon, Glade Park-Pinon Mesa, and the Alternative C version of the Roan/Carr Creeks ACEC's be added to Alternative B

due to the significant protection they would provide to numerous BLM sensitive species. For example, ACEC's were identified as one of the best methods for providing protection of the Grand Valley population of white-tailed prairie dogs by the state plan. The BLM was a cooperator in developing this plan and is the only agency that could use an ACEC as a tool for this species in the Grand Valley. Use of these areas by WT prairie dogs directly affects the state threatened burrowing owl, state endangered kit fox, and state species of concern ferruginous hawk. In addition, with the recent proposed listing of endangered for Gunnison Sage-grouse managing public lands for this population via a Glade Park ACEC may prove critical to its recovery in the coming years.

Response

Please see Table 2-1 for the ACECs that were selected for inclusion in the Proposed RMP/Final EIS. The Glade Park-Pinon Mesa area would be managed as a wildlife emphasis area under the Proposed RMP to protect Gunnison Sage-Grouse. Other protections are proposed for wildlife and special status species, including stipulations, BMPs, and SOPs that would limit or prohibit surface-disturbing activities in certain areas. Analysis in Chapter 4 shows that these actions would provide sufficient protection for species.

Prairie Canyon ACEC

Summary

Specific reasons are given for why the BLM should adopt Prairie Canyon ACEC.

Comments

Submission No: rmc0089

Commenter: Janice Shepherd

Comment: I'm writing in support of the creation of the Prairie Canyon ACEC. It is very distressing to consider the grave decline in the number of burrowing owls in the Grand Valley over the last 30 years. Establishing this ACEC is but a small step that is needed to help the burrowing owl reestablish the numbers to remain viable in this area. Timing limitations imposed during burrowing owl nesting season should include stopping stressful human activities such as target shooting. I support the closure of roads in areas known for prairie dog colonies because those areas are also areas of burrowing owl nests. Rehabilitation of closed roads in burrowing owl areas should be a priority in order to open more land for nesting and to reconnect land that has otherwise been dissected by excessive human impact. These are such amazing birds it is worth the effort and sacrifice to do what is necessary to increase their population numbers to 1980's levels.

Response

To be eligible for designation as an ACEC, an area must meet the relevance and importance criteria described in 43 CFR 1610.7-2 and BLM Manual 1613, and need special management. Following this guidance, the ACEC Report, available on the RMP website, details the BLM's findings regarding relevance and importance criteria. Chapter 2 contains special management actions for each proposed ACEC, including Prairie Canyon. The analysis in Section 4.5.2 does not conclude that the range of alternatives is insufficient to protect the relevant and important values in the Prairie Canyon. Note that the Prairie Canyon wildlife emphasis area is included in the Proposed RMP; wildlife management would be emphasized in this area. No change has been made to the Proposed RMP/Final EIS.

6.2.3.17 Wilderness Study Areas

Summary

There is no rationale for the proposed changes in management standards for WSAs. Specifically, prohibiting mountain bicycle use in WSAs has no basis in law or policy, and no need to prohibit this use was disclosed in the impact analysis.

Comments

Submission No: emc0694

Commenter: Bonnie Petersen

Comment: There is no basis reflected in the RMP for the numerous proposed changes in management standards for wilderness study areas.

Submission No: emc0912

Commenter: Jason Bertolacci, International Mountain Bicycling Association

Comment: The GJMP will prohibit mountain bicycle (mechanized) access in administratively designated Wilderness Study Area(s) (WSA). BLM policy for managing WSAs (Manual 6330) requires that the area be managed so the wilderness character is not impaired. The GJMP presents no analysis or evidence showing that mountain bicycling, on existing trails, would impair the wilderness characteristics of these areas.

We believe the presumption that mountain bicycling would per se impair the wilderness suitability of the land is derived, in part, from a fundamental misunderstanding of the different disciplines of the sport. The most publicized mountain bicycling shows racing or "extreme" riding events, which are important aspects of the sport, but they are neither the whole picture nor the most common experience. The type of riding that would occur in remote backcountry areas is much more like hiking or horseback riding, where the speed and distance are less important than the views and company you are with. Due to the remoteness and difficulty of these backcountry rides they are attempted by a relatively small number of people. We ask that the final GJMP address the impacts that mountain bicycles would have on wilderness characteristics and alternatives for addressing those impacts. We also request that where backcountry routes are to be closed alternative routes are identified to ensure that an entire experiences and economic opportunities are not lost.

The BLM has never adopted a position that mountain bicycles are incompatible with preservation of wilderness characteristics and has always supported the use of bicycles for exploring the backcountry. The BLM manual specifically states, "Limited or existing motorized or mechanized (e.g., mountain bike) access may be consistent with protection of wilderness characteristics."[2] The same section also states, "Designated routes of travel may be identified for motorized or mechanized access." These sections were revised in February of 2011, and we have not seen any more recent direction indicating that this is no longer Bureau policy. If the Grand Junction Field Office believes that the WSAs under their jurisdiction necessitate this additional measure to protect the wilderness characteristics we ask that the BLM explain their departure from the Manual's guidance.

Submission No: emc0693

Commenter: Thomas Hundtroft, Bookcliff Rattlers

Comment: Alternate C shows a big non motorized section added to the Demeree WSA. No rationale is given that warrants this designation. It eliminates two backcountry loop trail opportunities. Designation of non motorized zones a withdrawal when 5,000 acres in aggregate are involved which is the case with the proposed withdrawals. Furthermore, WSAs and Wilderness cannot have buffer zones (Wilderness Act of 1964 and case law).

Response
WSAs are managed in accordance with BLM Manual 6330, Management of BLM Wilderness Study Areas. The BLM's general policy is to continue resource uses on lands designated as WSAs in a manner that maintains the area's suitability for preservation as wilderness. Managing according to VRM Class I objectives and closure to fluid mineral leasing are BLM policy (Manual 6330). BLM policy also states that that all uses and/or facilities must meet the nonimpairment standard, meaning that the use or facility must be temporary and not create new surface disturbance. As such, the BLM included in its alternatives a prohibition on surface-disturbing activities in WSAs in accordance with Manual 6330. No change has been made to the Proposed RMP/Final EIS.

BLM travel management policy does encourage a comprehensive look at all modes of travel. In this case, the Proposed RMP action is to enhance wilderness values by closing WSAs to mechanized and motorized travel. The BLM determined that closing WSAs to motorized and mechanized travel would be the best method to maintain suitability for preservation as wilderness. As noted in Chapter 3, pages 3-206 through 3-208 of the Draft RMP/EIS, all WSAs are threatened by unauthorized OHV incursions or increased recreational activity in the areas surrounding the areas. The area to the east of the Demaree WSA is proposed for management that would maintain its wilderness characteristics in Alternative C, which is why the area's travel management designation is different in this alternative. No change has been made to the Proposed RMP/Final EIS.

6.2.3.18 National, State, and BLM Byways

Dinosaur Diamond National Prehistoric Highway

Summary
The Draft RMP/EIS fails to explain how the BLM would enhance, promote, and protect the dinosaur resources of the Dinosaur Diamond National Prehistoric Highway.

Comments
Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: In all the action alternatives, BLM proposes to "enhance, promote, and protect the dinosaur resources of the Dinosaur Diamond National Prehistoric Highway (National Scenic Byway and All American Road)." The portion falling within the planning area consists of Colorado State Highway 131. However, the DEIS fails to clearly explain how this action would be carried out, including any stipulations to mitigate visual impacts. Further specificity is needed to properly analyze this proposal.

Response
Draft RMP/EIS, page 2-212, states that the BLM will support development of byway facilities consistent with other decisions of the RMP, support the efforts of corridor management plans, and manage the corridor with a CSU stipulation (width varies by alternative). The VRM designation for this byway is also provided and varies by alternative. No change has been made to the Proposed RMP/Final EIS.

6.2.3.19 Cultural Resources

Summary

The alternatives should contain modifications for cultural resource stipulations and a provision for accelerated and prioritized surveys of sites or necessary excavation projects.

Comments

Submission No: rmc0076

Commenter: Steve AcquaFresca, Mesa County Board of County Commissioners

Comment: BLM is proposing to designate each inventoried cultural resource site into one of the following categories: Scientific Use, Conservation for Future Use, Traditional Use, Public Use, Experimental Use, and Discharge from Management. Under all the action alternatives, BLM proposes an almost uniform and unnecessary stipulation of no surface disturbance varying between 100 meters of the site to 200 meters of the site. Visual impacts are also identified as a concern for which stipulations might be enacted in the Public Use and Traditional Use categories, though these potential stipulations are not afforded any level of prescriptive specificity. Of great concern is that BLM would arbitrarily require project redesign or relocation. Moreover, the DEIS contains no provision for accelerated and prioritized surveys of sites or necessary excavation projects.

The potential visual impact mitigation measures associated with the Public Use and Traditional Use categories are vague and fail to provide regulatory certainty, nor do they acknowledge the temporary nature of the visual impacts associated with oil and gas development.

Response

The proposed stipulations contain a modification that allows for the site-protection boundary to be modified on a case-by-case basis, taking into account topographical barriers, the design of the proposed action, and the characteristics of the cultural resource site and/or area (see Table B-5). No change has been made to the Proposed RMP/Final EIS.

Surveys and excavation are implementation-level actions and do not need to be identified in the RMP. Appendix C, page 9 of the BLM Land Use Planning Handbook (H-1601-1) identifies implementation decisions for cultural resources:

> Identify site-specific information needs, impacted resources, protection measures and opportunities to use cultural properties for scientific, educational, recreational, and traditional purposes. Evaluate whether intended uses would result in changes to cultural properties' significance or preservation values, and if so, how resource conditions should be monitored, measured, and maintained at an acceptable level.

No change has been made to the Proposed RMP/Final EIS.

6.2.3.20 Forestry

Harvesting Invasive Woody Species

Summary
There is no rationale to prohibit commercial and private harvesting of tamarisk, Russian olive, and other invasive woody species. Limitations on aspen harvest from the 1987 RMP should be carried forward in the action alternatives, as should an emphasis on harvest in areas where insects have increased the risk of catastrophic wildfire.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: BLM has an Action across all Alternatives prohibiting commercial and private harvesting of tamarisk, Russian olive, and other invasive woody species. This didn't seem to be consistent with the Goal on page 2-121 (Provide for use of forest and woodland products) and there didn't seem to be any rationale disclosed in Chapters 3 and 4.

Response
The Draft RMP/EIS at page 2-123, is incorrect in stating that commercial and private harvesting of tamarisk, Russian olive, and other invasive woody species would be prohibited. The correct proposed action is presented on 2-46 to 2-48 of the Draft RMP/EIS (under Riparian Management). Chapter 4 also analyzes the correct action. The action on page 2-123 has been corrected to align with the rest of the RMP/EIS.

Harvest in Cavity-Rich Sites

Summary
The Proposed RMP/Final EIS should consider the wildlife value of cavity-rich sites when determining which areas should be available for harvest.

Comment
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-124, first Action: What happened to regard for cavity-nesting birds, e.g., flammulated owls, woodpeckers, mountain bluebirds, and others? It was there in 1987. There's nothing in the proposed actions of Alts. B, C, and D that indicates cavity-rich, high nesting activity aspen sites will get consideration by the forester marking harvest suitability areas.

Response
The RMP/EIS allows harvest in limited areas of aspen stands. Proposed management under Alternatives B, C, and D is aimed at encouraging regeneration of aspen stands. Since the 1987 RMP was adopted, aspen stands in the planning area have experienced widespread severe and rapid dieback and mortality due to Sudden Aspen Decline. If this trend continues, conifer species will become the dominant tree species in a significant portion of the current aspen cover types (see Section 3.3.1). The BLM performs

NEPA analysis on all site-specific harvesting actions and the value of cavity-rich trees will be analyzed on a project-level basis. No changes have been made to the Proposed RMP/Final EIS.

Beetle-Kill Trees

Summary
Encourage removal of beetle-kill trees to reduce wildfire risk.

Comment
Submission No: cfc0221
Commenter: Sandra Kiser
Comment: To reduce mega-wildfire risk. encourage removal of beetle killed trees to be used as wood product.

Response
BLM management emphasizes forest health restoration and reducing the risk of catastrophic wildfire rather than production of commercial timber (Section 3.3.1). Commercial interest in areas susceptible to insect infestations has historically been limited to pinyon juniper (Section 3.3.1). The forestry program works closely with the wildland fire management program by focusing harvest and treatments to reduce the risk of catastrophic wildfire. This approach is carried forward in all alternatives. No changes have been made to the Proposed RMP/Final EIS.

6.2.3.21 Public Health

Target Shooting

Summary
Areas open to cross-country motorized travel should be closed to target shooting to protect the motorized users.

Comments
Submission No: rmc0089
Commenter: Janice Shepherd
Comment: Areas of Open motorized travel should be closed to target shooting to protect the motorized users. Unlike quiet users (foot, horseback and bicycle), motorized users may not hear the shooting over the noise of their engines. In an open motorized travel area they may come up and over a "backstop" being used for target shooting without any realization that they are putting their lives in danger. I support the RMPs position that open motorized travel areas should be closed to target shooting. At the Mesa County open house a woman told me that she and her husband almost inadvertently shot a motorcyclist who came zooming over their carefully picked backstop. The woman said they were not in an open travel area, but that the area was so covered in user created trails it was hard to know what was an official trail and what wasn't.

Response
The list of areas closed to target shooting includes all OHV open areas. Please see page 2-180. A designated route system outside of OHV open areas and areas closed to motorized travel would help

inform users of which routes are available for use and which routes are closed so that they can choose appropriate backstops for shooting. No change has been made to the Proposed RMP/Final EIS.

Motorized Travel

Summary
Motorized vehicles present safety problems for non-motorized users.

Comments
Submission No: rmc0031
Commenter: Bill Hamann
Comment: I was disappointed that there was no discussion of impacts of one trail user group on another when they share a trail. Most hikers (which I am) stay away from any trail where they might encounter ATVs and dirtbikes, because of the excessive noise, dust, air pollution, and resource damage created by this category of motorized users. There is also a significant safety problem, due to the difference in speed of travel, and the fact that many OHV/dirtbike people are out for 'thrills and spills', frequently racing each other. I would be willing to share trails if the dirtbikes and ATVs would agree to noise and speed limits, and pollution controls.

Response
The Proposed RMP/Final EIS has been revised to more thoroughly address interactions between various recreationists. See the recreation user interaction objective and associated actions beginning on page 2-182 which describe principles and strategies for managing a broad range of desired recreation activities, experiences and outcomes across the GJFO. ERMA and SRMA objectives and actions (beginning on page 2-186) provide additional guidance for managing recreation user interactions in specific RMAs and RMZs. Per the BLM Land use Planning Handbook (1601), RMAs are designed to provide specific recreation experiences and opportunities and minimize user conflict. Section 4.4.3 beginning on page 4-322 also acknowledges and analyzes the effects of incompatible user interactions (conflict) on the attainment of desired recreation outcomes.

6.2.3.22 Visual Resources

Summary
The North Fruita Desert SRMA should be managed as VRM Class II in order to retain its attractiveness to visitors.

Comments
Submission No: rmc0007
Commenter: Lori Buck, City of Fruita
Comment: The City of Fruita is located in a visually attractive valley with the Colorado National Monument on its southern boarder and the Bookcliffs within the NFD, SRMA to the North. Maintaining attractive vistas is very important to the quality of life in Fruita, and is a major contributor to why people have relocated to the City of Fruita. Fruita has had the largest growth rate in Mesa County in the past 10 years - 7.8%. Given the scenic qualities of the NFD, the city would like to see the NFD maintain its visual resources while still allowing recreational

activities. The City would like to see the Visual Resources of the NFD, SRMA managed as Class II as long as additional trail development is allowed.

Response
The North Fruita Desert SRMA was analyzed for management as VRM Class II in the range of alternatives for the Draft RMP/EIS and is proposed for management as VRM Class II in Alternative B (the Proposed RMP) of the Proposed RMP/Final EIS (See page 2-140). Surrounding areas would be managed as VRM Class III.

6.2.4 Baseline Information

6.2.4.1 Air Quality

Summary
Several commenters requested clarification of and changes to the Air Resources Management Plan (Appendix G of the Draft RMP/EIS).

Commenters also requested that the Draft RMP/EIS be updated to include more accurate and current baseline information. In particular, commenters said the Draft RMP/EIS omits or mischaracterizes some air quality monitoring stations, needs to expand the summary of air quality data relevant to sites downwind of the planning area, does not include adequate citations for all data, needs to acknowledge air pollutants of greatest concern in and outside the planning area, and needs to more clearly and fully describe the current legal and regulatory landscape.

Comments
Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: Further, since these near-field models were utilized for a different purpose and for a different Resource Management Plan, the Division believes that the following components would be helpful in articulating why the White River and Colorado River values would be applicable for the Grand Junction RMP:
1) Information that contains specific emission sources and a typical well pad layout as analyzed in the White River Field Office and Colorado River Valley RMPs. An explanation as to how these values can be extrapolated for purposes of the Grand Junction RMP would be valuable as well.
2) An affirmative statement by the BLM that an assumption is being made that the values identified in the White River and Colorado River Valley RMPs can be directly relatable to the Grand Junction RMP. If this information can be utilized in this EIS, a statement as to why would be helpful. Is it because of geographical similarity? Operational characteristics? Other aspects that have not been fully identified?
3) Inclusion of the rationale behind using project boundary exclusion setbacks to limit public access as an option to the use of Tier IV drilling rigs.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 3-18, Summary of Air Quality Trends
Please expand the summary of air quality data relevant to sites downwind of the planning area. These should include at a minimum the visibility data from the FLTO IMPROVE site as well as the NADP data from the Sunlight (site #92) and Fourmile (site #08) monitors.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 3-15, Visibility Monitoring
The second paragraph references the source of the data graphed on Diagrams 3-2 through 3-4. However a search of the DEIS including the References chapter did not reveal a detailed citation of this source (given as IMPROVE 2012). The data presented in the DEIS diagrams differs slightly from the data used by the White River National Forest in the DEIS for oil and gas leasing. It would be helpful to provide a full citation of the visibility data source in the FEIS for the GJFO RMP. The WRNF would be happy to provide a summary of our IMPROVE data.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Pages 3-14 to 3-15, under Visibility Monitoring
Please clarify that while there are no Class I areas within the planning area, activities within the planning area can potentially impact Class I and sensitive Class II areas downwind of the areas administered by the GJFO. These areas include those administered by the USFS such as the Flat Tops, Eagle's Nest, Maroon Bells-Snowmass and West Elk Wilderness areas (Class I) and Raggeds, Holy Cross, Hunter-Fryingpan, and Collegiate Peaks Wilderness areas (sensitive Class II).
The first sentence of this paragraph seems to imply that Class I areas include national forests. The Clean Air Act did not identify any national forest as a Class I area. However, there are congressionally designated Wilderness Areas administered by the US Forest Service that are also Class I areas and it is these areas where visibility is an air quality related value. In addition, the state of Colorado recognizes that visibility in Class II Wilderness areas is also a concern. Please clarify this paragraph to accurately identify those areas under federal administration that are protected as Class I areas (i.e. national park, national memorial parks and national wilderness areas).

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 3-10, Table 3-2
Please add the IMPROVE site located on the WRNF (FLTO). The parameters measured are the same as those for the WHRI site. Location of the FLTO site is:
N 39o 54' 54.7"
W -107o 38' 03.7"

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 3-9, paragraphs under Current Conditions
Please refine the first sentence to state that ozone and fine particulate matter are the air pollutants of greatest concern not only within the planning area but to downwind sites such as Class I and sensitive Class II areas that lie outside of the planning area.
The bottom paragraph in this section states correctly that the USFS operates an IMPROVE monitor on the WRNF in Pitkin County. Please add that the USFS also operates an IMPROVE monitor located on the WRNF in Rio Blanco County.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 3-8, third full paragraph: The first sentence seems to infer that only the Department of Interior and the EPA were tasked with identifying federal Class I areas where visibility was an important value. The Clean

Air Act (Section 169A) actually states that the Secretary of Interior was to consult, ". . .with other Federal land managers. . ." to review all mandatory federal Class I areas and identify those where visibility was an important value. In addition, it was the EPA's task (not the Secretary of Interior's) to promulgate the list of mandatory Class I Federal areas. Please clarify the role of federal land managers (i.e. National Park Service, US Fish and Wildlife Service, Bureau of Land Management and US Forest Service) in identifying Class I areas sensitive to visibility and EPA's responsibility in promulgating that list.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 3-7, Atmospheric Deposition: While the DEIS mentions both the NADP and CASTNET programs, there is no further description of more proximate monitors to the GJFO. With the EPA as a partner, the USFS operates and maintains two NADP monitors located near Glenwood Springs. In order to provide the reader information on existing air quality within and downwind of the planning area, we suggest you add to this section a summary of the data from these and other nearby sites that monitor atmospheric deposition.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 3-7, top paragraph: Please add a clarification that there are two visibility monitors within 100 km of the GJFO RMPPA. One is the White River site (WHRI) located near Aspen, CO; the other is the Flat Tops site (FLTO) located near Buford, CO. Both monitors operate under IMPROVE protocol.
Also, in the FEIS please provide a summary of the visibility data from at least these two visibility monitoring sites as they are representative of the affected environment. This will provide the reader more detailed information on existing air quality. We can provide this information if you cannot obtain it otherwise.

Submission No: cfc0122
Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee
Comment: Table 3-2 Air Quality Monitoring Sites in or Near the Planning Area [Commenter provided a map attachment showing proposed corrections to the types of air quality monitoring sites in or near the planning area].

Submission No: cfc0122
Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee
Comment: The BLM's assessment does not identify PM10 to be a pollutant requiring action under the Draft RMP unless, as we understand the logic of the RMP, the area ever becomes designated as "nonattainment" for that pollutant. However, there are several reasons the MCAQPC believes that PM10 should be identified as a pollutant of concern now rather than waiting for air quality to degrade to the point of achieving a nonattainment designation. PM10 has posed key challenges for the MCAQPC during the last forty years when managing the Grand Valley airshed's air quality. During this time, the MCAQPC has spearheaded efforts to coordinate community efforts and requirements designed to not only prevent such a nonattainment designation, but also to protect human health and quality of life. If the BLM acts without regard to these efforts and requirements, the BLM may undermine these community efforts.

Submission No: cfc0122
Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee
Comment: Existing air monitoring equipment in the Grand Valley has changed since 2010. This table should reflect the most recent changes. The Monitoring site at Pitkin Ave no longer samples for the parameter PM10. The Colorado National Monument site now includes PM10 monitoring (Attachment A).

As the particulate monitoring network now exists in Mesa County, both filter based and continuous monitoring of PM2.5 and PM10 occurs at the South Ave site. Filter based PM10 monitoring occurs at the HWY 141 site, and continuous PM10 monitoring occurs at the Colorado National Monument site.
Page 3-14 should read:
Four monitors have sampled PM10 in the GJFO RMPPA. Three are located at 650 South Avenue in Grand Junction, and the fourth is located at US Highway 141 and D Road at Clifton, just east of Grand Junction.

At the South Avenue site, one sampled PM10 approximately once every three days, the second, about once every six days, the third was a continuous type monitor. The second highest 24-hour PM10 concentration for each year is listed in Table 3-7, Second-Highest 24-Hour PM10 Concentration, and was the same or higher in the monitor that was sampling at a higher frequency. In 2010, the continuous type monitor replaced a similar monitor that was located nearby at 645 ¼ Pitkin Ave (I-70 Business Loop). Data from the Clifton monitor (US Highway 141 and D Road) is also included in Table 3-7. . . "
As discussed in paragraph 3 of page 3-14, we believe the most likely explanation for the uncorrelated data from the continuous PM10 monitoring at the South Avenue and Pitkin sites and the 24-hour PM10 filter based monitoring at the South Avenue site is due to differences in collection methodologies.
We also recommend data from the new continuous PM10 monitoring site at 650 South Avenue be included in Table 3-7.

Submission No: cfc0122
Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee
Comment: It appears that as written, Table 3-1 cites standards that have changed; we suggest this table accurately reflect current standards. To do so, the following changes need to be made.
NAAQS1 CAAQS2

NAAQS

Criteria Pollutant	Current Standard
Pb	0.15 micrograms/cubic meter
PM 2.5 primary annual	12 micrograms/cubic meter
PM2.5 Secondary annual	15 micrograms/cubic meter
SO2 24 hour primary	no standard
SO2 Annual Primary	no standard

CAAQS

Criteria Pollutant	Current Standard
SO2 3 hour maximum	700 micrograms/cubic meter

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: The Draft EIS (Table 3-2) misidentifies two monitors in the planning area as SLAMS monitors. The Colorado National Monument monitor (for ozone) is a non-regulatory 2B-Tech monitor run by the National Park Service, not a SLAMS monitor. The Highway 141 monitor (for PM 10) is a Special Purpose (regulatory) monitor, not a SLAMS monitor.

Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: G.3 AIR QUALITY ISSUES IDENTIFIED FOR THE GRAND JUNCTION FIELD OFFICE Pollutants of Concern: (Page G-3)
This section should indicate that the Rangely monitor using ozone data collected between 2011 ·2013 now violates the ozone NAAQS.

Section G.3 First Bullet: The ARMP should also include an ozone impact analysis on the unclassifiable area in Duchesne and Uintah Counties in Utah, whether the RMP has a significant impact on the Wyoming ozone NAA and the Denver ozone NAA. The analysis should also include an analysis on the Utah PM2.5 NAA area.

Section G.4.1: Emissions Tracking
It should be noted that there is no mechanism currently in place (such as an Memorandum of Understanding) for CDPHE to collaborative work with BLM to develop an annual emission inventory for the GJ planning area. Developing an annual emission inventory specific to the GJ planning area could require a lot of resources. Details such as resources and funding will need to be worked out between CDPHE, BLM and the other federal agencies.

Second, the text says, CDPHE determination ... that federally authorized oil and gas activities caused or contributed to the excedance. This demonstrates that BLM is basically passing the burden of dealing with excedances of air quality standards on to CDPHE well after the Federal BLM actions.

There needs to be some type of time commitment documented in the ARMP between when an exeedance of the NAAQS or CAAQS occur for establishing and implementing mitigation measures to manage air resources so that a violation of the NAAQS could, hopefully, be avoided.

Section G.4.2: Annual Review of Air Resources Data Page G-5
The current air monitoring network in the GJ planning area is inadequate given the emission increases projected in the RMP and current air quality monitoring in the area, and, certainly, there is a lack of air monitoring in the potentially affected areas. An adequate monitoring network is essential to carrying out the proposed adaptive management plan including credible air quality modeling. An adequate air monitoring network should be established and a minimum of three years of baseline air quality data should be collected in the affected areas prior to signing of the ROD.

In addition to collecting baseline air quality data in the affected areas, continued air quality monitoring is essential to the management of air quality resources in the Planning Area. The ARMP does not provide any commitments, resources or assurances that funding and resources will be available for monitoring to collect baseline data or continued monitoring in the affected areas while development is going on into the future. The ARMP needs to commit to monitoring in the affected areas for the life of the project.

Given the amount of proposed drilling and other mining activities, the Division highly recommends that BLM consider placing additional permanent monitors within the GJFO planning area. These additional monitors will be critical in order to assess and manage possible increased concentrations of ozone, fine particulate matter, volatile organic compounds and oxides of nitrogen. The monitors will provide data for inclusion of additional controls and mitigation strategies, and improve the accuracy of air quality modeling for the area. The Division is available to provide BLM with an analysis of recommended sites where additional air quality and meteorological monitors could be placed in the planning area.

Section G.5.3: Emissions Inventory (page G ·7)
In the sentence "BLM may require submittal of an emission inventory ... ", it is unclear when an emission inventory will be required. Either "may" should be changed to "shall" or the set of conditions when an emission inventory "may" be required should be presented in the text.

Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: Second, a violation of the NAAQS is a public health issue that should be avoided through robust air quality management practices such as having an adequate air quality plan in place before a violation of the NAAQS occurs rather than after. CDPHE recommends that a robust air quality plan be achieved and implemented through monitoring, modeling and control technology analysis prior to the ROD signing and leasing permits granted. Once the NAAQS for any pollutant(s) is violated, the burden of bringing an area back into compliance and maintenance of the NAAQS becomes a State responsibility which could be potentially avoided with diligent resource management upfront rather than retrospective planning.

Third, the "Contingency Plan" only commits to having voluntary control measures in place for ozone. The "contingency plan" should also include precursors to ozone and, the contingency plan should not limit itself to ozone but include all the criteria pollutants such as NO2 and PM2.5. The contingency plan should not limit itself to direct O&G operations but also to other mineral extraction practices. Also, the contingency plan should also consider reductions in other emissions resulting from BLM leasing such as heavy duty truck and equipment operations, dirt road traffic and other sources of pollutants.

Section G.9 Comprehensive Interagency Air Resources Management Strategy (page G ·12). The text indicates that a "comprehensive strategy to manage air quality impacts from oil and gas development in western Colorado" will be developed. Could BLM describe what from the comprehensive strategy will take such as a document or other formal documentation? Is there an opportunity for the public to comment on the "comprehensive strategy" since the plan will be developed outside of this RMP?

Comments on the Air Resources Technical Support Document
Table 3-1 page 51
Since a more detailed and refined air quality analysis is not provided in the RMP, a simplified ' roll -forward ' proportional analysis from Table 3-1 reveals that an exceedance of the PM2.5 NAAQS could occur at the Grand Junction monitor under all Alternatives due solely to projected increase in PM2.5 emissions from BLM activities (excluding other growth in the planning area). The PM2.5 design value from the Grand Junction monitor for 2009-2011 is 33.5 ug/m3. From table 3-1, the base year emissions for primary PM2.5 are 289 tons/year. Using proportional analysis for the year 10 and year 20 projections, the estimated growth factor in emissions ranges from 1.38 under Alternative C in year 10 to a growth factor of 3.46 under Alternative D in year 20. Applying these growth factors to the base PM2.5 concentration of 33.5 ug/m3 indicate that projected PM2.5 concentrations could range from 56.2 ug/m3 to 116 uglm3 which both exceed the PM2.5 NAAQS of 35 ug/m3.

Miscellaneous/Additional Comment From The Technical Services Program:
Given the close proximity of the development areas to nearby Class I areas the State would recommend that BLM perform a modeling analysis such as a CALPUFF run in the screening mode to address project-level AQRV and nitrogen deposition impacts at these sensitive areas. A screening-level analysis can be performed with relative ease and is a cost-effective way to ensure a higher level of credibility for the analysis, in particular within the public eye.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page G-4, First full paragraph
We request that the BLM include the USFS in its annual reviews of air resources management data. Also, please include data that is representative of air quality conditions in downwind Class I wilderness areas including the Maroon Bells-Snowmass, Eagles Nest and Flat Tops Wilderness areas. Specifically these data include the following programs: IMPROVE, NADP, and monitoring of ozone and snow and lake chemistry.

Page G-4, First bullet
To clarify this statement, please quantify the maximum development rate that could occur prior to signing of the ROD.

Page G-5, Section G.4.2
Bullet b: Please add that evaluation of air monitoring data will include Class I and sensitive Class II areas that could potentially see impacts and that are outside of the planning area.

Page G-8, Section G.6.1
We encourage the BLM to expand this effort to include other field offices within northwestern Colorado such that the efforts of industry, CDPHE, USFS, National Park Service, EPA, local counties and other entities result in supporting air quality monitoring (including AQRVs) in an effective and efficient manner.

Page G-9, Section G.6.4
We recommend that the BLM also recognize in this section the importance of AQRV monitoring of Class I and sensitive Class II areas. We request that the BLM collaborate with the USFS and other federal land managers to ensure that this monitoring continues with funding as needed.

Page G-10, Sections G.7.3 and G.7.4
In the spirit of the Air Quality MOU we request that the BLM state here that they will work with stakeholders, including federal lands managers with the USFS and National Park Service, to determine the parameters required for project-specific and regional air quality modeling.

Page G-12, Section G.9.1
In this section please discuss if or how the West-CARMMS effort ties in with the Three State Air Quality Study effort, both of which the BLM is involved in.

Page G-13, Table G-1
Please clarify if these BMP's will be required for all oil and gas development activities or only if air quality data indicates a need for emission reductions?

Response
The Air Resources Management Plan (Appendix G of the Draft RMP/EIS) has been replaced with the Comprehensive Air Resources Protection Protocol (CARPP; Appendix G of the Proposed RMP/Final EIS). The CARPP describes the BLM's strategies for protecting air resources from BLM-authorized activities that have the potential to adversely impact air quality within the state of Colorado. This plan also outlines specific requirements for proponents of projects that have the potential to generate

significant quantities of air emissions and adversely impact air resources within any planning area (as determined on a case by case basis). Further, the purposes of this protocol are to:

- Address air quality issues identified by the BLM or public scoping in its analysis of potential impacts on air quality resources for BLM Colorado RMPs/EISs
- Further clarify how air resources goals, objectives, and management actions set forth in BLM Colorado RMPs will be achieved

The Proposed RMP/Final EIS, Section 3.2.1, contains the following updates that address commenter concerns:

- An updated list of air quality monitoring stations, their location, and the data each station captures (see page 3-10 and Table 3-2)
- Corrected information on PM_{10} monitors and additional site and monitored concentration data (see pages 3-14 and 3-15 and Table 3-7)
- The description of air quality analysis in the White River Field Office and Colorado River Valley RMPs has been removed. The near-field discussion has been revised to include references to two modeling analyses that have been performed for Environmental Assessments in the GJFO planning area (i.e., the Fram Whitewater Unit Master Development Plant and Black Hills Debeque Exploratory Proposal). In addition to the air quality impacts analyses described, additional information has been added to the Proposed RMP/Final EIS that describes other near-field modeling tools including the BLM COSO near-field modeling screening tool that may be used at a project-level analysis to determine potential near-field air quality impacts for a particular project (see Section 4.3.1).
- A full reference citation for "IMPROVE 2012" (see page References-15)
- Clarification that, while there are no Class I areas within the planning area, activities within the planning area can potentially impact Class I and sensitive Class II areas downwind of the areas administered by the GJFO. These areas include those administered by the USFS such as the Flat Tops, Eagle's Nest, Maroon Bells-Snowmass and West Elk Wilderness areas (Class I) and Raggeds, Holy Cross, Hunter-Fryingpan, and Collegiate Peaks Wilderness areas (sensitive Class II; see page 3-15).
- An accurate list of those areas under federal administration that are protected as Class I areas (see page 3-15)
- A statement that ozone and fine particulate matter are the air pollutants of greatest concern not only within the planning area, but to also downwind sites such as Class I and sensitive Class II areas that lie outside of the planning area (see page 3-9)
- Monitored ozone data from Rangely, CO for 2011-2013 were added to the ozone discussion (see page 3-11)
- Clarification of the EPA's role in identifying federal Class I areas (see page 3-8)
- An updated list of NAAQS standards (see Table 3-1)

BMPs will be applied when necessary under both the annual cumulative and project specific contexts make that necessary. See Section VI of the CARPP for a description of air quality BMPs.

Data available on the IMPROVE monitoring website (http://vista.cira.colostate.edu/IMPROVE/) indicates that visibility in the Flat Tops Wilderness Area is represented by the White River National Forest IMPROVE site (WHRI1), which is designated as the monitor for the Flat Tops Wilderness (IMPROVE 2014) and is located about 57 miles southeast of the Wilderness. The US Forest Service operates and maintains the WHRI1 monitor, which is sited at an elevation of 11,199 feet in Tourtellotte Park, at the Aspen Mountain Ski Area. The IMPROVE program identifies no other monitor in this region. Data for WHRI1 is provided in Section 3.2.1 and Diagrams 3-2, 3-3, and 3-4 of the Proposed RMP/Final EIS.

National Atmospheric Deposition Program (NADP) data is available from the Sunlight (site #92) and Fourmile (site #08) monitors. However, the NADP sites do not capture dry deposition and as such do not provide critical information for the RMP analysis. NADP data could be useful to the broader CARMMS model for validation, but in the RMP context, its usefulness is limited and is not provided in the Proposed RMP/Final EIS.

The Proposed RMP/Final EIS has not been updated to include PM_{10} as a pollutant of concern. FLPMA Section 202 [43 USC 1712] (c)(8) requires the BLM to provide for compliance with applicable air pollution control laws. Section 176(c) (42 USC 7506) of the Clean Air Act (CAA) requires federal agencies' actions to conform to any applicable state, tribal or federal implementation plans for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). The RMP/EIS contains management actions to reduce PM_{10} emissions from dust (see Chapter 2), a suite of SOPs and BMPs that can mitigate against increased levels of PM_{10} (see Appendix H), and a monitoring strategy in the CARPP (see Appendix G).

According to CDPHE's 2011 Annual Monitoring data report, the western counties, including Mesa, Delta, and Garfield, are averaging (max at any site) around 64 percent of the NAAQS. The report documents only one exceedance over the 3-year averaging period at the Clifton monitor (allowed under the NAAQS). This does not indicate there is a need for a high level of concern at this point. The BLM will adapt to changing information as it is developed.

The US Forest Service will have the same access to air resources management data as the public and other partners. Data will be incorporated and disclosed as appropriate, and where resources are available to provide such data. No change has been made to the Proposed RMP/Final EIS.

Exceptional Event Data

Summary

The Draft RMP/EIS should incorporate exceptional event data, but reliance on an exceptional event determination is not adequate for an Adaptive Management Strategy. The BLM should become party to the Colorado Memorandum of Agreement (MOA) Cooperative Approach Towards Reducing PM_{10} in the Grand Valley in Mesa County.

Comments

Submission No: cfc0122

Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee

Comment: The BLM also may not be aware that several incidents of very high PM10 readings within the Grand Valley airshed are not included in publicly-reported data. These readings occur when strong winds systems carry PM10 into the valley from upwind deserts. One such event occurred May 23, 2010, when the Mesa County Powell Building monitor in Grand Junction measured 155µg/m3, and the Clifton monitor, 189µg/m3. The Colorado Division of Public Health and the Environment expects to be submitting the Exceptional Event documentation to EPA for review on June 28, 2013, in an attempt to excuse these readings from consideration in the Grand Valley airshed's attainment status3. Whether or not these events are excused, they exceed EPA's regulatory level of 150µg/m3 for a 24-hour period.

Submission No: cfc0122

Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee

Comment: MCQAPC PM10 comments concerning Volume 1, Section 3.2.1, of the draft RMP include the following. 1. Colorado Memorandum of Agreement (MOA) Cooperative Approach Towards Reducing PM10 In the Grand Valley in Mesa County On February 10, 2010, Mesa County, the City of Grand Junction and CDPHE signed a MOA that outlines strategies to reduce local contributions of PM10 from sources within the Grand Valley (Attachment C). In addition, the MOA also outlines a cooperative approach to identifying exceptional events and documenting them for exclusion from the NAAQS compliance requirements. As a means of implementing the statement on page 3-19, 'The BLM expects to work cooperatively with CDPHE-APCD, the EPA, and other local, state, federal and tribal agencies to address these issues,' the MCAQPC recommends the BLM become a partner in this MOA to help address blowing dust issues from Federal lands located in the Grand Valley.

Submission No: cfc0122

Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee

Comment: MCQAPC PM10 comments concerning Volume 1, Section 3.2.1, of the draft RMP include the following. 3. Incorporation of PM10 Exceptional Event Data. Because CDPHE is in the process of requesting Exceptional Event status for PM10 readings on May 23, 2010, this data is not incorporated in publically-available EPA or CDPHE data bases. Even if these events are excluded from the NAAQS attainment evaluation, these types of events still cause health effects in the Grand Valley. Blowing dust from disturbed soils, unpaved roads, and parking areas only exacerbate the noticeable effects of these events. The MCAQPC recommends that the BLM include the potential Exceptional Event readings that are currently publicly unavailable from Federal and State ambient air quality data sites into the RMP's PM10 air quality impact assessments.

Submission No: emc0920

Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment

Comment: Section G4.1: Interim Air Resources Management Strategy, Second Bullet. Although CDPHE can tag data as being an exceptional event, the formal determination of whether an event/exceedance of the NAAQS is exceptional can be very lengthy. First, the CDPHE needs to fully document the event and then submit the documentation to EPA for approval. This process currently takes several years to complete. Therefore, reliance on an exceptional event determination is not adequate for an Adaptive Management Strategy.

Response

The Proposed RMP/Final EIS has not been updated to include the potential exception event readings that are currently publicly unavailable from federal and state ambient air quality data sites. If these events

are upheld as exceptional, then the data would not be used in air quality computations, and thus do not need to be described in the affected environment within the NEPA context for calculating air quality impacts. Data resulting from exceptional events, for example structural fires or high winds, may be given special consideration by EPA, and in some cases, it may be appropriate to exclude these data in whole or part because they could result in values inappropriate for comparison with the levels of the NAAQS.

The revised strategy for responding to monitored exceedances of the NAAQS is now described in Section IV.D.1 of the CARPP.

Whether the BLM would become party to the Colorado Memorandum of Agreement (MOA) Cooperative Approach Towards Reducing PM_{10} in the Grand Valley in Mesa County is outside the scope of the RMP. No change has been made to the Proposed RMP/Final EIS.

6.2.4.2 Soil Resources

Summary

There should be additional discussion of the relationship between wind and dust particulates. There should be discussion of additional ways to minimize PM_{10} levels.

Comments

Submission No: cfc0122

Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee

Comment: Updates to Volume 1, Section 3.2.4: Soil Resources

Although Section 3.2.4 of the Draft RMP addresses Soil Resources, this section does not include a discussion of PM10 increases that could impact air quality. The MCAQPC recommends that this section discuss limiting access to Federal lands to reduce soil impacts that result in additional PM10 emissions during periods of high winds, including providing paving for high-traffic areas, covering parking areas with gravel or asphalt, and minimizing the disturbance of Biological Soil Crusts that help hold soils intact during periods of high winds by prohibiting free-range off road use.

Response

Section 4.3.2 describes the effect of particulate matter from erosional forces such as wind and water on soil resources. In addition, Section 4.3.1 analyzes the impact of implementing each alternative on PM_{10} levels and the primary resource programs responsible for an increase or decrease in PM_{10} levels. Additional, implementation-level decisions would be addressed after the RMP process and be subject to NEPA analysis and public comment. Revisions to the travel management plan may affect soil disturbance and dust. Once the travel management plan is adopted the entire field office will have areas that are open, closed, and limited to designated routes. There will not be areas open to cross-country travel that are outside of the desingated open areas. Designating areas as open, closed, or limited to designated routes and/or the designation of routes for different modes of travel is considered in the analysis of PM10 levels under different alternatives, and on the effect of travel on different soil characteristics (see Sections 4.3.1 and 4.3.2). No change has been made to the Proposed RMP/Final EIS.

6.2.4.3 Water Resources

Drinking Water and Groundwater Resources

Summary

The BLM should identify which aquifers are Underground Sources of Drinking Water (USDWs) under the Safe Drinking Water Act (SDWA). The BLM should also expand Figure 3-5, Municipal Watersheds and Source Water Protection Areas, to include sensitive groundwater resources in the planning area, including smaller drinking water systems for which source water assessments have been completed.

Comments

Submission No: emc0853

Commenter: Suzanne Bohan, US Environmental Protection Agency

Comment: The EPA commends the BLM regarding the characterization of groundwater resources, and the protections identified for these resources in the Draft EIS. Our main suggestion is to identify in the Final EIS which aquifers are Underground Sources of Drinking Water (USDWs) under the Safe Drinking Water Act (SDWA). The SDWA regulations define a USDW as an aquifer or portion thereof: (a)(l) which supplies any public water system; or (2) which contains a sufficient quantity of groundwater to supply a public water system; and (i) currently supplies drinking water for human consumption; or (ii) contains fewer than 10,000 mgll total dissolved solids; and (b) which is not an exempted aquifer (See 40 CFR Section 144.3). In addition, we recommend that the BLM expand Figure 3-5 Municipal Watersheds and Source Water Protection Areas to include sensitive groundwater resources in the planning area, including smaller drinking water systems for which source water assessments have been completed, as mentioned in the Draft EIS (p. 3-58).

Submission No: emc0853

Commenter: Suzanne Bohan, US Environmental Protection Agency

Comment: It appears that not all of the public water supplies have been characterized in the Draft EIS. The Draft EIS makes mention of smaller drinking water systems tapped throughout the planning area (p. 3-58), but it is unclear whether protections will be required for them. The EPA recommends including a complete list of these public water supplies in the Final EIS, and whether they are groundwater or surface water sources.

Response

Under an agreement signed by CDPHE and the BLM, the BLM is not allowed to display domestic drinking water sources, which includes surface and groundwater sources. This is to minimize potential threats to public safety. In the absence of identifying specific wells, regional aquifer information can be accessed from primarily two sources; Groundwater Atlas of the United States by Robson and Banta at USGS (2000) and Groundwater Atlas of Colorado by Ralf Topper, et al.

Source Water Assessments were performed for Mesa County and includes reports for the following entities:

- 139156; Bruners Artesian WS Redd
- 139157; Bruners Artesian WS Fleck
- 139180; Clifton WD
- 139185; Colbran, Town of

- 139205; Debeque, Town of
- 139321; Grand Junction, City of (Revised)
- 139434; Kannah Creek
- 139505; Mesa WSD
- 139529; Ranch Domestic
- 139600; Palisade, Town of
- 139791; Ute WCD
- 239154; Branson Services Inc.
- 239300; Gateway School
- 239302; Gateway Cafe Trading Post
- 239505; Mesa Lakes Resort
- 239615; Plateau Valley School Dist. 50
- 239618; Powderhorn MD 1 Ski Corp.
- 239749; Vega State Park Aspen Grove
- 239750; Vega State Park Oak Point
- 239761; Twin Peaks Bible Camp
- 239805; Vega SP Early Settlers CG
- 239806; Vega Lodge
- 339719; Spruce Grove

Under the SDWA, the EPA delegates authority to the states to regulate the Act. Recent amendments (1996) to the SDWA charges states with implementing a program for protection of Source Water and community water systems. The definition of public water supply is a system for the provision to the public of water for human consumption through pipes or other constructed conveyances if such system has at least 15 service connections or regularly serves at least 25 individuals. The term includes any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Moreover, an area with a number of private domestic wells (and predominately private land) not connected to any network (per definition above) may not be considered a source water area by the state. Many of the source water assessments completed (see above) are likely on private land, with few to no assessments on BLM-administered lands. The areas currently captured in the RMP are adequate. There may be other areas where source water assessments have not been completed; however, groundwater resources will be protected by the BLM through project design features, BMPs, COAs, and other mitigation measures through the land use planning process. No change has been made to the Proposed RMP/Final EIS.

Regulations for Oil and Gas

Summary
The Draft RMP/EIS fails to adequately describe the current regulatory climate for water resources.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: BLM includes a description of the current conditions and trends for water resources that does not adequately describe the framework governing water use. GJ DRMP/EIS, Chapter 3, Section 2.5. In its description of water trends, the BLM fails to mention oil and gas operators follow water law allocations just like any other water rights stakeholder in Colorado. BLM should note the role of state and private water rights in its analysis of water use.

Response
The Proposed RMP/Final EIS has been updated to clarify that oil and gas operators are subject to water allocation laws and protection measures at the state and federal level. See page 3-45.

Impaired Water Bodies

Summary
The Proposed RMP/Final EIS should be updated to include the newer 2012 list of 303(d) impaired water bodies in Colorado.

Comments
Submission No: rmc0092
Commenter: Sam Susuras, Mayor, City of Grand Junction
Comment: In Volume I (page 3-52) Table 3-8 303(d) List — The draft RMP is using a list from 2010 that shows Juniata Reservoir as being impaired. The City requests the BLM update this data with the 2012 303(d) listing that shows Juniata reservoir as not being impaired.

Response
Under Section 303(d) of the Clean Water Act, states, territories, and authorized tribes are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. The Proposed RMP/Final EIS has been updated to incorporate the more recent 2012 list of 303(d) impaired waters in Colorado. Please see Chapter 3, Table 3-8.

6.2.4.4 Vegetation

Summary
The BLM inaccurately describes various contributions to the spread of noxious weeds.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Furthermore, BLM singles out the oil and gas industry for the additional impacts associated with introducing noxious and invasive plant species. This characterization does not accurately portray the situation. There are many causes for the spread of noxious and invasive species, including the federal agencies themselves. The oil and gas industry also follows strict equipment washing requirements and other mitigations to stop the spread of noxious and invasive species.

Response
A discussion of the spread of noxious weeds can be found in Section 4.3.4, where the RMP/EIS attributes the increase in weeds to a number of causes, including weeds spread by vehicle traffic in and out of the planning area, recreational activities, fire suppression actions, and wildlife and livestock grazing movements. After distribution, these weeds then take advantage of opportunities to colonize sites disturbed by wildfires or other surface-disturbing activities. No change has been made to the Proposed RMP/Final EIS.

6.2.4.5 Fish and Wildlife

Summary
The Draft RMP/EIS overestimates the elk population in the planning area.

Comments
Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The current elk population identified in the DRMP may also be incorrect. In Section 3 (page 3-94) the document states: ". . .there are an estimated 93,000 elk in the GJFO planning area (CPW 2010a). This estimate is 13 times the 1987 RMP goal of providing habitat for 2,950 elk in winter." Recent conversations with CPW lead us to believe this to be incorrect and that this population estimate should be closer to 20,000 elk, many of which do not reside on BLM lands in the planning area. We recommend the BLM verify and correct this information in the final RMP.

Response
The CPW designates and surveys big game Data Analysis Units (DAU), which are intended to encompass one herd's range throughout the year. Several DAUs overlap the GJFO planning area. For elk populations, the majority of the field office is within DAUs E-10, E-19, and E-14, which are above, at, and below population objectives, respectively. For mule deer, the majority of the field office is within DAUs D-11, D-12, D-18 and D-41; the first two of these are currently below population objectives and the last two are within population objectives (CPW 2014). This information has been added to the Proposed RMP/Final EIS at page 3-93.

6.2.4.6 Special Status Species

Local and State Sage-Grouse Plans and Maps

Summary

Local plans for Greater Sage-Grouse, particularly the Garfield County Sage-Grouse Conservation Plan, Northwest Colorado Greater Sage-Grouse Conservation Plan, and the Parachute-Piceance-Roan (PPR) Greater Sage-Grouse Conservation Plan, should be incorporated into the RMP and inconsistencies resolved to avoid violation of the FLPMA and BLM rules and regulations.

Comments

Submission No: emc0711

Commenter: Claire Moseley, Public Lands Advocacy

Comment: While we recognize the State of Colorado was revising its state sage-grouse conservation plan at the time the DEIS was being prepared, aspects of local plans, particularly those from the Garfield County Sage-Grouse Conservation Plan, Northwest Colorado Greater Sage-grouse Conservation Plan, and the Parachute-Piceance-Roan (PPR) Greater Sage-Grouse Conservation Plan should have been incorporated into the document on a more meaningful level. These plans represent the most recent, credible, and proximate understandings of the current state of the populations and habitat in the planning area and include recommended management practices that would be sufficient to address threats facing the species. Accordingly, these local plans must be a critical element of the RMP's management direction for sage-grouse.

Submission No: rmc0053 and emc0907

Commenter: John Martin, Garfield County; and Fred Jarman, Garfield County Community Development Department

Comment: In order for the BLM to remain compliant with the Federal Land Policy and Management Act of 1976 (FLPMA) and the BLM's own rules and regulations, the BLM must fully acknowledge local plans and work to resolve inconsistencies between local plans and the BLM plans. By this letter, the County asserts there are significant inconsistencies between the County's Greater Sage-Grouse Conservation Plan and the information contained in the draft RMP regarding this species. As a result, the County requests the BLM coordinate with Garfield County to resolve those inconsistencies. Regardless of the Alternative ultimately chosen by the BLM, the County requests the provisions contained in the County's Greater Sage-Grouse Conservation Plan be included in that Alternative.

Submission No: rmc0053 and emc0907

Commenter: John Martin, Garfield County; and Fred Jarman, Garfield County Community Development Department

Comment: By way of example and for the purposes of this letter, Garfield County recently adopted the Garfield County Greater Sage-Grouse Conservation Plan which contains a Suitable Habitat Map. The map was created using the best available science including vegetation typing at a 2-meter resolution and was validated against bird locations provided by the Colorado Parks and Wildlife (CPW) showing a high degree of correlation. The Sage-Grouse Habitat Map found in Figure 3-11 in this RMPA EIS is highly inaccurate. The County requests it be replaced with the County's highly accurate Suitable Habitat Map provided as part of Exhibits H & I and graphically represented in Figures 1 and 2 below highlighting the area of concern.

Correspondingly, the definitions of Preliminary Primary and General Sage-Grouse Habitat listed on page 23 of the Glossary in Volume II of the RMPA EIS should be replaced with the following definition as they not apply to Greater Sage-Grouse habitat in Garfield County:

Suitable Habitat. Suitable Habitat includes all seasonal habitats (including lekking, nesting, brood rearing/summer and winter habitats) within the Plan area. Specifically, Suitable Habitat includes: Sagebrush cover is from 10 to 50%; Cover of Mixed Mountain Shrubs is not more than 20%; Distance to nearest Forest is over 100 meters; Distance to Shrubby Woodlands is over 50 meters; Grass/forb dominated habitats (with >10% sagebrush cover) within 20 meters of sagebrush habitat; Contiguous habitats >3 acres in size, or part of a block of Suitable Habitats in close proximity; Contain slopes typically less than 20%.

Response

The Garfield County Sage-Grouse Conservation Plan was released in March 2013, after the publication of the GJFO Draft RMP/EIS. Omission of the Northwest Colorado Greater Sage-Grouse Conservation Plan was an oversight. The BLM has added these plans to Sections 1.10.2 and 1.10.3. In addition, because of the sensitivity and new scientific information that has been gathered since the start of the planning effort, the BLM is undergoing an extensive analysis and process to amend RMPs in the western states that manage Greater Sage-Grouse habitat. The Northwest Colorado Sub-regional planning effort is reviewing these state and local plans in detail to identify management needs for Greater Sage-Grouse in Northwest Colorado, including the GJFO.

Based on this alternative development process, the BLM considered input from cooperating agencies, environmental organizations, and the public. As described in Section 2.4.2. Alternative B, the BLM used the GRSG conservation measures in A Report on National Greater Sage-Grouse Conservation Measures (NTT 2011) to form 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 RMP/EIS, individuals and conservation groups submitted management direction recommendations for protection and conservation of GRSG and their habitat. The recommendations, in conjunction with resource allocation opportunities and internal BLM input, were reviewed in order to develop BLM management direction for GRSG under Alternative B (Draft EIS, page 2-67).

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, and was developed in full cooperation with the Cooperating Agencies, noting the agencies' concerns with socioeconomic issues.

The Garfield County plan was released after publication of the Draft RMP/EIS and therefore was not considered for inclusion in the Draft RMP/EIS. The BLM reviewed the plan and determined that it is contained within the range of alternatives presented in the Draft RMP/EIS. The Proposed RMP in the Final EIS is based on public comments on the Draft RMP/EIS and may include part of the Garfield County plan.

Whether the Greater Sage-Grouse is determined for listing by US Fish and Wildlife Service is outside the jurisdiction of the BLM and beyond the scope of this EIS. As such, the BLM did not develop alternatives should US Fish and Wildlife Service choose to list or not list the Greater Sage-Grouse.

Greater and Gunnison Sage-Grouse Information and Protections

Summary

The RMP/EIS should include updated information and additional protections for Greater and Gunnison Sage-Grouse.

Comments

Submission No: rmc0074

Commenter: Ron Velarde, Colorado Parks and Wildlife

Comment: Volume I, Table 2-2, page 2-42: General concern for habitat treatments in Greater Sage-grouse habitats. CPW's concerns are that some populations may have one life stage or seasonal habitat that is more limiting than others, but we rarely know which it is (and it may fluctuate over time).

Survival during older life stages (juvenile. yearling, adult), nest success, and chick survival are all equally important for long-term population growth in GRSG (Tai for et al. 2011), so in the absence of knowledge which life stage or seasonal habitat is limiting, CPW recommends a balanced approach that maintains all seasonal habitats. They should not just focus on creating brood-rearing habitat, because that typically reduces the amount of winter or nesting habitat.

It also depends on what specific treatments, improvements, and restoration BLM may be planning. Removing encroaching Pinon-Juniper would be an appropriate treatment in winter habitat, removing sagebrush would not, etc.

Page 2-197. CPW would like BLM to add the additional acreage of the Alternative C Roan ACEC into final preferred Alternative so that suitable habitat for greater sage-grouse is accounted for. The Piceance-Parachute-Roan population will likely be one of if not the most heavily impacted grouse populations from energy development in the state. Creating areas managed for this species will provide a refuge for the birds in the event that they are pushed out of current core use areas.

Page 3-110, The Greater Sage-grouse high male count reported for 1975 (the count actually occurred in 1976) reflects all male grouse counted in the Parachute-Piceance-Roan (PPR) population (including portions of the Grand Junction, White River, and Colorado River Valley BLM field offices). The high male counts reported for 2005, 2006 and 2007 appear to include only those leks in the Grand Junction Field Office (essentially the south half of the PPR area) and are not directly comparable with the 1976 number. The comparable counts for all males counted in the PPR in 2005, 2006, and 2007 were 180, 226, and 178 males respectively. CPW requests that BLM update this table with the comparable full population data or note that 2005-2007 represent only those Greater Sage-grouse within that portion of the population located within the Grand Junction Field Office. CPW has data for the subsequent years as well if BLM would like to update the table through 2013.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 3-109, Gunnison Sage-grouse. It is assumed that updating the status to proposed endangered will be added during the next round of revisions. Also, with the discovery of the Timber Ridge Lek the following is no longer accurate: "all active leks are on private property." Recent CPW studies show that Gunnison Sage-grouse are using select BLM parcels; thus these BLM parcels and near-by parcels will become more significant in the future.

CPW recommends that the Timber Ridge lek site should be added to Occupied Habitat maps. CPW recommends that the Glade Park ACEC include all known and likely areas of use by the proposed endangered Gunnison Sage grouse. CPW comments regarding the Glade Park ACEC includes more specific recommendations.

Submission No: emc0965
Commenter: Edward Arnett, Theodore Roosevelt Conservation Partnership
Comment: Recommendation: We suggest BLM utilize additional published articles and guidance, particularly the use of the Western Association of Fish and Wildlife Agencies recommendations on mule deer habitat guidance and energy development (Lutz et al. 2011), the recently approved technical review by The Wildlife Society on impacts of oil and gas development on wildlife (Riley et al. 2012), and a recent USGS synthesis of sage grouse research (Manier et al. 2013). Other relevant articles on sage grouse we did not see in the RMP include Doherty et al. (2008, 2010), Holloran et al. (2010), Kirol (2012), Naugle et al. (2011), and Walker et al. (2007).

Response
Chapter 3 (see pages 3-112 to 3-114 and 3-119) has been updated with new information regarding Greater and Gunnison Sage-Grouse. In addition, the BLM regularly updates occupied habitat maps for numerous species. Those maps are received from CPW and are adopted via plan maintenance.

The emphasis in Chapter 2 on winter range for sage-grouse is specific to lower-elevation sagebrush (see page 2-42 of Draft EIS), which sage-grouse typically only use in the winter. The upper-elevation sagebrush (see page 2-43 of Draft EIS) is expanded to include all important habitat. Regarding the proposed Roan ACEC, there is a range of habitat protections for Greater Sage-Grouse in the RMP and this particular ACEC was partially considered relevant and important because of its association with the creeks that hold greenback cutthroat. The Roan and Carr Creek Wildlife Emphasis Area has been carried forward as an ACEC in Alternative B of the Proposed RMP/Final EIS (see page 2-122). While the Glade Park-Pinyon Mesa ACEC was not carried forward in Alternative B, the Glade Park and Timber Ridge wildlife emphasis areas were carried forward in Alternative B (see page 2-115, 2-124). The Roan and Glade Park-Pinyon Mesa ACECs were both analyzed in the Proposed RMP/Final EIS; the Glade Park-Pinyon Mesa ACEC was not carried forward in Alternative B, but was analyzed in Alternative C. This ACEC was not carried forward in Alternative B because adequate protection is already provided by overlapping restrictions such as No Leasing for fluid minerals, CSU stipulations for other programs, and the Glade Park Wildlife Emphasis Area. This was also the least restrictive management that met the objectives for the area.

Greater and Gunnison Sage-Grouse Clarifications

Summary
The RMP/EIS should specifically clarify whether the text refers to Gunnison and/or Greater Sage-Grouse and should capitalize the spelling for each.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Gunnison and Greater Sage-grouse: The Grand Junction Field Office is the only BLM field office in the state of Colorado that contains both Gunnison and Greater Sage-grouse and their habitats. For sake of clarity and intent of this long-term planning document, CPW believes that it is important to make the distinction between the two species whenever they are mentioned in the RMP. Since this planning document will be effective for the next 20+ years it will be important to be precise about the habitats and species being referenced over time.

Greater Sage-grouse: Throughout the RMP, CPW recommends that Greater Sage-grouse and Gunnison Sage-grouse be capitalized (as opposed to greater sage-grouse and Gunnison sage-grouse).

Response
The Proposed RMP/Final EIS has been updated throughout to mention the specific species and use capital letters for Greater and Gunnison Sage-Grouse.

Parachute Penstemon

Summary
The RMP/EIS should be updated with new and additional information about Parachute Penstemon.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Finally, CPW supports the identification of the Logan Wash Mine as a 'core conservation population' for the Parachute penstemon (p. 2-57). And CPW supports the recommendations in Alternatives B. C and D to "manage the identified habitat to maintain the population." It is relevant that CPW/CNAP is in the final stages of designating a Natural Area on Oxy property on the 'Logan Wash Mine' population of Parachute penstemon. This designated Natural Area would be adjacent to the Parachute penstemon population found on the GJFO. CPW encourages the GJFO to actively work with CNAP, Oxy and the USFWS to cooperatively protect the Parachute penstemon population which spans property boundaries in this area. CPW recognizes that ongoing storm water management and mine reclamation activities require some amount of activity in this area, but CPW/CNAP is intending to work with Oxy to minimize impacts to the Parachute pentsemon and the species would benefit from collaboration with the BLM in this area as well.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Oxy would like to add the following statements to the Parachute penstemon section found in Volume I, page 3-97. The Logan Mine population of Parachute penstemon is found on recently reclaimed mine areas located

on federal lands. Oxy utilizes the mining road for ongoing mine reclamation activities as well as for plant monitoring activities. Oxy cooperates in monitoring activities associated with the Logan Mine population. Also, Oxy is proposing to designate the Logan Mine population (private lands) as a designated State Natural Area with the Colorado Natural Areas Program. As part of this effort, Oxy will also be applying habitat and plant pollinator best management practices to its private lands not designated as part of the state natural area, but within the vicinity of the state natural areas.

Response
The BLM agrees with the commenters that the information they provided is accurate and relevant to the planning effort. Information about Parachute Penstemon has been added to the Proposed RMP/Final EIS. See page 3-97.

Special Status Species Wildlife

Summary
The RMP/EIS should be updated with new and additional information about species in the planning area.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Volume 1. Table 3-15, page 3-86: There are two subspecies of desert bighorns: Ovis canadensis nelsoni and Ovis canadensir Mexicana. CPW requests that BLM include this distinction.

Volume 1, page 3-91 BIG GAME SPECIES. The Grand Mesa is not included in elk production area. CPW requests that BLM update the mapping to reflect this omission.

Page 3-93, This study states "Given the extremely narrow window during which bats were sampled, the limited number of net sites, and the many variables that influence bat activity and capture success, this study's capture data should not be considered fully representative of the area, the summer season, or any particular site." CPW would clarify the following sentence to reflect this: "The most common species observed during the limited sampling of this study was the silver-haired bat (Lasionycteris noctivagans), followed by the big brown bat (Eptericus fuscus), hoary bat (Lasiurus cinereus), and long-legged bat (Macrophylhmt marrophillum)(Chung-MacCoubrey 2008)." Armstrong et al. 2011 suggest that the field office should include habitat that supports nearly all of the 18 bat species in Colorado with the exception of the tri-colored bat and the eastern redbat. Local CPW records support this assertion. Notable findings from the Chung-MacCoubrey (2008) study are that nearly all bats of all species looked at in the study used rock crevices as roosts providing support for the importance of these structures as roosting habitat.

Page 3-111. It may be worth stating under burrowing owls that they are highly dependent on use of white-tail prairie dog towns and burrows and consequently fluctuations in dogs may have accounted for declines in owls. Persistence of WTPD is uncertain given periodic plague outbreaks but populations have been stable as of the 2011 occupancy surveys.

Page 3-113. Big free-tail bat: while this is the largest bat in Colorado the sentence does not read that way, it implies that all of the bigger sued bats in the state are at lower elevations which is inaccurate.

Page 3-113, Kit fox, In the following sentence "One probable kit for track was found near Badger Wash, in addition CPW biologists reported seeing a kit fox just north of Badger Wash, and surveyors reported finding one probable kit fox den near Horse Mountain, just south of the Town of Palisade, in 2010." CPW also suggests changing the use of "probable" to "possible". CPW can add that in 2012, a four month camera survey was conducted with approximately 15 cameras deployed across the valley on BLM. No kit foxes were documented, probably due to the abundant presence of other carnivores more habituated to the urbanization.

Page 3-113, CPW recommends updating all of the Fitzgerald et al. 1994 citations in the RMP with the newer addition of Armstrong et al. 2011.

Page 3-114, CPW is no longer permitting the transplanting of WT prairie dogs in the Grand Valley.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: The RMP should include information about river otters being present in the Dolores River from the Utah state line up stream to Dolores. The plan does identify that otters occupy the Colorado and Gunnison Rivers within the RMP boundary; however the Dolores River is not included. CPW recommends correcting this habitat information.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Table 4-27, Page 4-158, Kit fox should also be considered strongly associated with sagebrush at lower elevations such as the patches occurring in the Grand Valley.

Table 4-27, Page 4-159: Fringed myotis would not generally be associated with sagebrush habitat. All bat species are likely to be associated with using rivers and streams for foraging and drinking purposes. CPW recommends that BLM drop fringed myotis from the Salt Desert Shrub and add them to Rivers and Streams.

Response
The BLM agrees with the commenters that the information they provided is accurate, relevant to the planning effort, and should be added to the Proposed RMP/Final EIS. See pages 3-117 (bighorn sheep), 3-93 (elk), 3-92 (bats), 3-118 (river otter), 3-115 (burrowing owls), 3-118 (kit fox), 4-184 (fringed myotis), and 3-118 (prairie dogs). References to "Fitzgerald" have been updated to "Armstrong" throughout Chapter 3.

Special Status Species Fish

Summary
The RMP/EIS should contain new and additional information on special status species fish.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 3-73. Add Brush Creek, a tributary of Roan Creek, and add: Whitewater Creek, Cabin Reservoir, Collier Creek, Bird Creek, Little Dolores River, East and West Brush Creek tributaries of Buzzard Creek, and Middle Fork of Big Creek. Additional waters may need to be considered pending genetic results and related USFWS decisions on cutthroat trout genetics.

CPW requests the BLM refer to CPWs list of cutthroat trout waters by way of reference to CPWs wildlife regulations. As amended.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Fisheries. The DRMP fails to account for all streams in the planning area that have known populations of native cutthroat trout. This omission makes the DRMP incomplete in its environmental analysis and thus, we again urge for a supplemental DRMP. Otherwise, the BLM must correct this in the final RMP. According to the yet-to-be published 2012 CRCT Rangewide Assessment, CRCT waters in the GJFO planning area (in addition to those listed in Section 3) are: Clear Creek, Bear Gulch, Kimbell Creek, Little Salt Creek, West Brush Creek, Buzzard Creek #2, Beaver Creek, Willow Creek, Bird Creek, Leon Creek, Park Creek, Grove Creek, Big Creek, West Fork Bug Creek, Kannah Creek, Sheep Creek, North East Creek, Big Dominguez Creek, La Fair Creek, West Creek, North Fork West Creek, North Lobe Creek, Fall Creek, Gill Creek, Big Creek, Calamity Creek, Blue Creek and Granite Creek. We acknowledge that not all of these waters occur on BLM lands, however, we recognize that management prescriptions on BLM lands/federal minerals could have impacts to these watersheds and tributary areas.

The DRMP correctly points out, most fish species are intolerant of sediment loads, and trout species (especially cutthroat trout) are particularly sediment-intolerant. However, there is a distinct lack of discussion on how significant sedimentation impacts can be to trout species. We find research that states that even with small increments in stream sedimentation can result in a decline in trout abundance (Alexander, G.R., and E.A. Hansen. 1983. "Sand sediment in a Michigan trout stream, part II. Effects of reducing sand, bedload on a trout population." North American Journal of Fisheries Management 3(4):365-37; ibid -1986. "Sand bed load in a brook trout stream. North American Journal of Fisheries Management 9(1):9-23).

Thus, we strongly disagree that Alternative B's and C's buffer recommendations of less than 500 feet would protect all fish-bearing streams. It is TU's assertion, supported by science (see discussion on buffers below) that the larger a buffer area, the better protection measures are allowed. Roads and well pads densities are positively correlated with fine sediment accumulation in streams which disrupts fish reproduction and can lead to mortality (Opperman, J.J., et al. 2005. "Influence of land use on find sediment in salmonid spawning gravels within the Russian River Basins, California." Canadian Journal of Fisheries and Aquatic Sciences 62(12):2740-2751: Taylor, C. M., et al. 2006. "Distribution, abundance, and diversity of stream fishes under variable environmental conditions." Canadian Journal of Fisheries and Aquatic Sciences 63(1):43-54). Oil and gas activities involve extreme disturbances to surface and subsurface lands. A mere 500-foot buffer to a cutthroat trout fishery or a Gold Medal fishery for a 4-5 acre well pad with facilities and equipment that contain toxic and hazardous chemicals is often insufficient protection. We are advocating for stronger buffer stipulation requirements in the final RMP, reasoning that it is easier to modify buffers from an established stronger protection barrier to that of a lesser buffer protection

amount through negotiated conditional use approvals and agreements, science-backed exemptions, and increased monitoring.

Response
The BLM agrees with the commenters that a portion of the information they provided should be added to the Proposed RMP/Final EIS. However, many of the streams identified in the comments are located on private or National Forest System lands upstream and outside of the influence zone of BLM management. Even areas where the BLM manages the subsurface mineral estate, the BLM does not make leasing decisions for the Forest Service or place protective stipulations on National Forest System lands. The BLM only leases and administers this mineral estate under the direction of Forest Service planning efforts. Private or National Forest System portions of select streams located downstream or in close enough proximity to BLM-administered lands that they could be influenced by BLM management or actions have been included in the Proposed RMP/Final EIS. Streams that are located on BLM-administered lands or on top of federal mineral estate have been added to page 3-107.

The Proposed RMP/Final EIS includes the Hydrology River NSO stipulation which would prohibit surface occupancy or use within 400 meters (1,312 feet) of the ordinary high-water mark (bank-full stage) or within 100 meters (328 feet) of the 100-year floodplain (whichever area is greatest) on the Colorado, Dolores, and Gunnison Rivers. A separate NSO stipulations for streams and springs possessing lotic riparian characteristics would prohibit surface occupancy and use and surface-disturbing activities within a minimum distance of 100 meters (328 feet) from the edge of the ordinary high-water mark (bank-full stage); where the riparian corridor width is greater than 100 meters (328 feet) from bank-full, it would prohibit surface occupancy and use and surface-disturbing activities within the riparian zone. Together with other complementary stipulations, the proposed stream buffers are largely adequate. For example, the Geology Slope NSO (i.e., steep slopes) stipulation adjacent to many streams helps protect streams for a greater distance away from the water's edge. Where slopes are more gentle, activity can occur closer to streams with limited potential for increased erosion or sedimentation impacts from surface-disturbing activities. In addition, numerous BMPs are in place that help minimize off-site soil movement and sedimentation from surface-disturbing activities. Other complementary stipulations include NSO stipulations for lentic riparian areas, slumping soils, and select wildlife and special status species stipulations that overlap or are adjacent to stream habitats. As a result, the analysis of impacts on fish suggests that larger buffers are not warranted.

6.2.4.7 Cultural Resources

Volunteer Monitoring Programs

Summary
Information regarding the volunteer site monitoring program for cultural resources should be included in the RMP and be used as a model for implementing other monitoring programs.

Comments
Submission No: emc0770
Commenter: Janice Shepherd
Comment: The BLM GJ Archeologist, Alissa Leavitt-Reynolds, has done an outstanding job of developing a volunteer Site Monitoring problem for monitoring the condition of cultural resource locations within the GJFO (and in the two NCAs). After a quick search through the document, I could not find any mention of this program nor of the important role it plays in supplementing the BLM's unfortunately limited budget by leveraging volunteers to bring updates on cultural resource sites to BLM GJ Archeologists via photographs and reports.

I believe the RMP should describe this Volunteer Site Monitoring program. Not only because I believe it should be included in the long term managing of the GJFO cultural resources but because other BLM locations may then learn of the program and adopt/develop similar cultural resource programs.

One of the key aspects of the Volunteer Site Mentoring program is the use of a set of photographs for a cultural site that each volunteer duplicates when visiting that site. In this way the volunteer and the BLM can quickly see changes over time due to natural or human causes.

Similar monitoring programs should be developed for other aspects of the RMP. And these should be described in the RMP.

For example monitoring gas/oil pads is a task that is hugely under-staffed within the BLM (likely due to budget constraints). Leveraging volunteers to supplement the limited BLM staffing available to monitor gas/oil pads would be a great benefit to the GJFO public lands. The monitoring would need to be restricted to those sites that are on BLM GJFO land (vs sites on private property). Once a set of photos has been taken for a gas/oil pad site, the volunteers would replicate those photos and write reports describing observed changes and problems. In this way the appropriate BLM staff would be alerted to changes in conditions on the well site and could in turn alert the operator. For example when I recently visited a gas pad, I discovered that a small rock fall had dislodged a pipe on the separator. I'm sure the gas pad operator found it beneficial to be informed that this damage had occurred.

Paleo sites could also be monitored by volunteers. I'm sure the BLM GJ staff members might suggest other monitoring programs that would be worth developing and implementing. So these (gas+oil pad monitoring and Paleo monitoring) should be added to the RMP, as well as the description of the cultural resource monitoring program.

Response
As opposed to general resource monitoring, site-specific and project-related monitoring are implementation-level actions and do not need to be identified in the RMP. Appendix C, page 9 of the BLM Land Use Planning Handbook (H-1601-1) identifies implementation decisions for cultural resources:

> Identify site-specific information needs, impacted resources, protection measures and opportunities to use cultural properties for scientific, educational, recreational, and traditional purposes. Evaluate whether intended uses would result in changes to cultural properties' significance or preservation values, and if so, how resource conditions should be monitored, measured, and maintained at an acceptable level.

The list of cultural resources in Appendix I, Cultural Resource Allocation to Use Categories, was compiled from various sources, including BLM or BLM-authorized surveys for the purpose of identifying cultural resources, as well as cultural resources surveys performed by third parties to meet the NEPA and the NHPA requirements for projects on BLM-administered land. The presence of cultural resources did not always and automatically result in the proposed closure of a route but was a factor for consideration, especially in high-density and high-sensitivity areas. No change has been made to the Proposed RMP/Final EIS.

Relationship with Oil and Gas Development

Summary

Multiple actions can impact cultural resources, not just oil and gas development. Additionally, oil and gas development increases the discovery, preservation, and protection of cultural resources.

Comments

Submission No: emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: The BLM extensively discusses the potentially adverse impacts on cultural or historic resources by oil and gas operations. The BLM should also note, however, that the surveys associated with oil and gas operations actually increase the discovery, preservation, and protection of previously unknown historic information. The BLM should revise the GJ DRMP/EIS to note that beneficial impacts may also incur to cultural resources as a result of oil and gas operations.

Response

Section 4.3.8 describes the many different actions that can affect cultural resources, including wildland fire, forestry, improper grazing, recreation, travel without limitations, ROWs, and energy development. The section also describes how brief surface evaluations during Class III inventory have helped identify the location of cultural resources, albeit over small areas within the larger planning area. In order to explain the way in which actions that can affect cultural resources can help identify, protect, and preserve cultural resources, the Proposed RMP/Final EIS has been changed to include the following statement in Section 4.3.8 (page 4-230).

> It is important to note that cultural resource inventory and mitigation—such as data recovery—associated with multiple use surface disturbing actions can affect cultural resources by contributing to the identification, preservation, protection, and/or scientific knowledge of cultural resources. Cases of mitigation where data recovery or excavation is involved provide for unique opportunities to acquire data and scientific knowledge about the past that otherwise would not be learned through surface inventory. These methods of data recovery are inherently destructive and while they result in adding to our current understanding of the past, they prevent future researchers, who might have better scientific techniques, from recovering data at the impacted locations.

Cultural Site Inventory

Summary
The number of cultural sites is overstated. This will lead to the unnecessary closure of routes.

Comments
Submission No: cfc0152
Commenter: Steve Green
Comment: It has come to my attention that your office has overestimated cultural sites within your planning area. This will unfairly cause the closure of numerous motor vehicle trails and routes. I believe your actions and information lack factual basis and need to be reviewed by an impartial party.

Response
Appendix I, Cultural Resource Allocation to Use Categories, contains an allocation list of cultural sites that is based on available cultural information used to prepare the Class I Cultural Resource Overview, current to March 2009. The sites listed in the appendix are not all listed on the National Register of Historic Places. No change has been made to the Proposed RMP/Final EIS.

North Fruita Desert Area

Summary
The statement that there are no significant resources in the North Fruita Desert SRMA is unsupported by data currently available to the BLM.

Comments
Submission No: rmc0089
Commenter: Janice Shepherd
Comment: On page 4-214 it is indicated that North Fruita Desert SRMA has no significant cultural resources. On a recent hike in the area I found quite a few artifacts that were historical in nature and likely attributable to the mining industry. Mining has a great history in Colorado and preserving old mine sites is important especially where this is evidence of people living near the mines, such as there is in Hunter Canyon. Increased recreational use especially in the form of vehicle traffic increases the likelihood of vandalism and theft (for the value of the metal) of historic artifacts. I'm guessing that these cultural resources and likely others within the North Fruita Desert SRMA are not on file at the BLM because no survey has been done of the area where they are.

Response
The Class I cultural resources survey performed for the GJFO (Grand River Institute 2011) shows moderate potential for cultural resources in this area. Though this density is lower than the other SRMAs mentioned, it is possible that more significant cultural resources would be located with further survey. In the Draft RMP, Section 4.3.8, all alternatives currently include the following statement: "With the exception of the North Fruita Desert, these include important cultural resource values." In the Proposed RMP/Final EIS, these statements have been changed to say only, "[t]hese include important cultural resource values."

6.2.4.8 Visual Resources

Summary
The document lacks acknowledgement of certain local efforts to preserve viewsheds.

Comments
Submission No: rmc0069
Commenter: Roger Granat, Mayor, Town of Palisade
Comment: Visual resources; "view-sheds" contribute to the scenic or visual quality and appeal of the landscape. In recognition of this, the Town has provided financial and political support to the Mesa Land Trust in establishing conservation easements that will preserve agricultural lands especially in the "Vinelands" that maintain the visual quality of Palisade. The Town's Comprehensive Development Plan adapted in 2007 specifically addresses this goal. Given the Town's commitment to this concept, the Town would like to encourage the designation of Mt. Garfield as VRM Class I under Alternative B, the Colorado River Corridor as VRM Class II under Alternative B, Colorado River Riparian as VRM Class II under Alternative C and the designation of the North Fruita Desert as VRM Class II.

Response
The Proposed RMP/Final EIS has been updated to include discussion of visual resource objectives in the Town of Palisade Comprehensive Development Plan. Text noting efforts of the Mesa Land Trust to preserve viewsheds has also been added. See page 3-146. The Proposed RMP/Final EIS VRM classifications are consistent with those listed in the comment. Regarding recommendations of the Town of Palisade, Mt. Garfield would be managed as VRM Class I (VRM Class I is typically limited to wilderness areas and other special designations), the Colorado River near Palisade would be VRM Class II, and a portion of the North Fruita Desert (i.e., the namesake SRMA) is proposed to be managed as VRM Class II.

6.2.4.9 Lands with Wilderness Characteristics

Inventory: Process

Summary
The BLM failed to follow its newest agency policy in the inventory process, resulting in arbitrary boundary delineations, the omission of areas that do contain wilderness characteristics, and a flawed range of alternatives and preferred alternative.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Commenter: However, the BLM's draft inventory of lands with wilderness characteristics contains numerous flaws and in many places fails to follow the guidance for conducting lands with wilderness characteristics inventories detailed in BLM Manual 6310. Many units contain boundaries that are arbitrary and other units were missed altogether. Because of these deficiencies in identifying the actual areas that could contain wilderness characteristics, the documentation of wilderness characteristics provided in the draft is incomplete for many units, and thus the management decisions proposed in the draft were not based on the full suite of information required. This may be one reason why the BLM would only manage 24,400 acres - about 2% of BLM surface acres in the

planning area - to protect lands with wilderness characteristics in the preferred alternative, all in the Gateway area (Draft RMP, p. 2-119).

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: BLM should utilize this planning process as an opportunity to update the LWC inventory to fulfill both its obligation under FLPMA but also to be in accordance with BLM Manual 6310 and 6320. This would entail BLM updating the boundaries associated with the units as described in BLM Manual 6310, including evidence of its determinations via Route Analysis forms, updated photos, waypoints and unit descriptions containing supplemental values. BLM can update this information so that it can make the correct determination regarding size, naturalness, outstanding opportunities for either solitude or primitive and unconfined recreation, aiding the agency in adhering to NEPA by presenting a reasonable range of alternatives.

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: In some instances (see Appendix A) boundaries were drawn despite the absence of any qualifying feature whatsoever (i.e. Wilderness Inventory Road, developed right-of-way), drawn on existing routes that do not qualify as boundaries because they are clearly not "maintained using mechanical means to ensure relatively regular and continuous use" (nor are they developed rights-of-way) and do not meet the criteria for boundary delineation laid out in the BLM Manual.

These boundaries errors resulted in a number of units being drawn smaller than the actual qualifying area, or large units being divided up into smaller ones due to incorrect information. Beyond the fact that this practice does not meet the criteria detailed in BLM Manual 6310, it brings into question the determinations made on individual units. laid out in BLM's own policies for boundary delineation for LWCs, but because when boundaries are misdrawn, the determinations made on whether or not wilderness characteristics exist in the unit are not based on the full suite of characteristics present. E.g. If the determination for incorrectly drawn a unit of 7,000 acres is that it doesn't have outstanding opportunities for solitude, but in fact the qualifying unit is 12,000 acres, then a whole host of wilderness characteristics from that additional 5,000 acres were not considered and the analysis and determination are incorrect.

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The numerous inaccuracies in BLM's inventory of lands with wilderness characteristics detailed above demonstrate that the inventory is insufficient to inform land use planning. BLM must resolve those inaccuracies and produce a suitable inventory before moving forward with evaluating management alternatives and environmental consequences.

Recommendations: BLM must correct inaccuracies in the lands with wilderness characteristics inventory to establish baseline conditions before the inventory can be used to inform management decisions.
ii. Management alternatives

Manual 6320 plainly states that "Managing the wilderness resource is part of the BLM's multiple use mission" (Manual 6320, p. 2). The draft RMP preferred alternative would manage 2% of the planning area to protect wilderness characteristics (Draft RMP, p. 2-119). This does not constitute multiple use and represents a flagrant lack of balanced management, especially when far greater acreage has been found to possess wilderness

characteristics. Furthermore, we take issue with the lack of geographic diversity proposed for management as LWCs in the preferred alternative, as all 24,400 acres are in the Gateway area.

Response
The BLM's authority to designate additional lands as wilderness study areas (WSAs) pursuant to FLPMA Section 603 expired on October 21, 1993, as affirmed in the settlement agreement from *Utah v. Norton*. Any remaining authority for managing lands to protect or enhance wilderness characteristics is derived directly from FLPMA Section 201 (43 USC 1711). The Wilderness Character Inventory Update used best available information using a combination of GIS, maps, and interviews with knowledgeable staff consistent with Manual 6320. As articulated in Section 201 of the FLPMA, the Secretary of Interior (through the BLM), "shall prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values … this inventory shall be kept current so as to reflect changes and conditions and to identify new and emerging resources and other values." BLM staff is continuing to ground-truth these areas. Inventories are used to guide the decision maker and are updated as information becomes available. If, as inventories are updated through the life of the RMP, new areas are found to have wilderness characteristics, the decision maker will have that information available to them at that time and can choose a new course of action. The BLM is considering options for continuing to update this inventory and provide a mechanism for future decision making.

To ensure compatibility with agency policy, the BLM revisited the inventory for several high priority areas, including those in and around Bangs Canyon. In response to the re-inventory and information provided in public comments, the Bangs lands with wilderness characteristics unit from Alternative C in the Draft RMP/EIS was carried forward in the Proposed RMP/Final EIS. See pages 2-152 and 4-292.

Inventory: Manageability

Summary
The West Creek area, as proposed under Alternative B, is the only unit to meet the standard for wilderness management. All other areas, including the Maverick and Unaweep units, contain valid existing rights which preclude BLM's capability to manage these areas in accordance with their wilderness characteristics.

Likewise, lands adjacent to those managed to protect their wilderness characteristics should not include allowable uses, such as motorized travel, that would degrade wilderness characteristics.

Comments
Submission No: emc0711 and rmc0076
Commenter: Claire Moseley, Public Lands Advocacy; and Steve Acquafresca, Mesa County Board of Commissioners
Comment: With the exception of the West Creek area as proposed under Alternative B, none of the areas identified as having wilderness character meet the standard for wilderness management due to the fact that they all contain oil and gas leases. Since Secretarial Order No. 3310, Sec. 5 d.(3) requires the agency to protect and honor the existing rights including valid and existing rights, the fact that oil and gas leases exist within these areas cannot be managed for their wilderness character despite the fact they may meet certain wilderness character criteria. The statement by BLM that the leases in Maverick and Unaweep are not in areas of current known potential or

conventional or shale gas development and that no past exploration or development for oil and gas has occurred is irrelevant. These areas contain valid existing rights which preclude BLM's capability to manage these areas in accordance with their wilderness characteristics and we oppose BLM's management proposals for all but West Creek under both Alternatives B and C.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The Maverick, West Creek and Unaweep WCIUs are proposed for management of wilderness characteristics. See GJFO DRMP/DEIS Appendix F at F-6. However, within the Maverick and Unaweep WCIUs exist valid oil and gas leases. Lands cannot be managed for wilderness characteristics without violating the pre-existing leases, which is a violation of federal law and BLM's own planning guidance. Further, the West Creek WCIU contains a power line right-of-way. These three Units proposed to be managed for wilderness characteristics contain elements making them unsuitable for management for such characteristics.

Submission No: rmc0030
Commenter: Bill Hamann
Comment: With regard to conflict of LWC units with oil and gas development, the DRMP states that 139,000 (of 171,000) acres of LWC units have low, very low, or no potential for oil and gas development (4.3.1.2). Only 1,800 acres have high potential and 29,300 acres has moderate potential (most of the latter two categories are in South Shale Ridge and Hunter Canyon area). This should be no reason to eliminate 9 LWC units from consideration. The draft RMP also states that 101,000 acres of LWC lands have already been leased for oil and gas development. First, that should not eliminate the other 70,000 acres. Second, it is my understanding that several of the leases have been challenged through appeals and the leases may not be viable. That problem should be resolved before eliminating almost 150,000 acres of LWC from inclusion in Alternate B.

Response
The BLM Land Use Planning Handbook (H-1601-1) directs the BLM to "identify decisions to protect or preserve wilderness characteristics (naturalness, outstanding opportunities for solitude, and outstanding opportunities for primitive and unconfined recreation)" and to "include goals and objectives to protect the resource and management actions necessary to achieve these goals and objectives. For authorized activities, include conditions of use that would avoid or minimize impacts to wilderness characteristics." In addition, the BLM policy concerning considerations of lands with wilderness characteristics in a Draft RMP/EIS is outlined in BLM Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process. BLM Manual 6320 directs the BLM to:

> …examine options for managing [lands with wilderness characteristics] and determine the most appropriate land use allocations for them. Considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to: (1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; (2) emphasizing other multiple uses while applying management restrictions (conditions of use, mitigation measures) to reduce impacts to wilderness characteristics; (3) the protection of wilderness characteristics as a priority over other multiple uses (BLM Manual 6320.06(A)).

The BLM does not believe that a comparison of acres managed to protect wilderness characteristics provides evidence of a balanced approach. The FLPMA and BLM Manual 6320 direct the BLM to

maintain an inventory and evaluate management of such areas, recognizing that one of the outcomes could be to manage the areas for multiple uses.

The BLM considered a range of alternatives for managing lands with wilderness characteristics in the Draft RMP/EIS. Based on other comments received, the BLM modified the range of alternatives to include management actions specific to each lands with wilderness characteristics unit. This range brings the EIS in full compliance with the NEPA. The CEQ regulations (40 CFR 1502.1) require that the BLM consider reasonable alternatives, which would avoid or minimize adverse impacts or enhance the quality of the human environment. In the analysis, the BLM considered the trade-offs of managing lands with wilderness characteristics to maintain those characteristics versus the resource use potential of the lands. Given these considerations, it was determined that Maverick, Unaweep, and Bangs unit would be managed to protect their wilderness characteristics while the remaining areas would be managed for multiple use. The West Creek unit was not carried forward in Alternative B of the Proposed RMP/Final EIS because it receives adequate protection from the overlapping Palisade ACEC.

While the Maverick and Unaweep units contain existing oil and gas leases, they are not in areas of current known potential for conventional or shale gas development and no past exploration or development for oil and gas has occurred. With the knowledge of historical development and the fact that oil and gas leases expire after 10 years without production, there is a reasonable assumption that in the next 20 years the existing leases might not be developed and subsequently the lands will no longer be under a lease. However, if exploration or development were to occur, the BLM would recognize the valid existing rights, as stated in the Draft RMP/EIS. Mitigation measures may be considered to minimize impacts on lands with wilderness characteristics, but valid and existing rights would prevail and would not allow the BLM to preclude access. Management for lands with wilderness characteristics would preclude future leasing, though. No change has been made to the Proposed RMP/Final EIS.

Inventory: Specific Units

<u>Bangs and Bangs West</u>

Summary
The Bangs and Bangs West lands with wilderness characteristics units should be combined and managed as one contiguous unit.

Comment
Submission No: emc0665
Commenter: Sherry Schenk
Comment: I also ask that you protect both Bangs Canyon and Bangs West as one continuous LWC. Limit travel to existing trails/old roadways (Tabeguache) except for foot and horse travel. Do not add additional motorized trails to this wonderful area. I've hiked out along the Tabeguache, to Horse Mesa, on Clark's bench, and also started from highway 141 mostly along the Tabeguache and find many features to enjoy in this LWC area.

Response
The BLM's Lands with Wilderness Characteristics Inventory Report did not find the Bangs West unit to contain outstanding opportunities for primitive and unconfined recreation. Because Bangs West is a

definable area lacking this wilderness characteristic, it will not be carried forward for management to protect wilderness characteristics. Please note that the Bangs West unit is included within the Bangs SRMA RMZ 4 in the Proposed RMP (Alternative B), which has management objectives similar to those of lands with wilderness characteristics units (e.g., primitive non-motorized recreation). No change has been made in the Proposed RMP/Final EIS.

Bangs, Kings Canyon, and South Shale Ridge

Summary
Some areas inventoried and found not to have wilderness characteristics (e.g., Kings Canyon area, Bangs Canyon, and South Shale Ridge) could have wilderness characteristics if roads are cherry-stemmed out.

Comments
Submission No: emc0665
Commenter: Sherry Schenk
Comment: On page F- 6 and 7 a statement is made about the 9 LWC areas that were not included saying that decision was made because of the potential of motorized use or oil and gas leasing. There are alternatives that should be considered rather than not designating these area as LWC's. Examples are the Kings canyon area that has a road used by ranchers. This road could be cherry stemmed out or identified as administrative use. Bangs Canyon and South Shale Ridge both have roads that could be cherry stemmed.

Response
The three areas that were identified as possibly having wilderness characteristics (Kings Canyon area, Bangs Canyon, and South Shale Ridge) were, in fact, found to have wilderness characteristics (Draft RMP/EIS at Appendix F, page F-4). As required in BLM Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process, the BLM considered a range of alternatives for managing lands inventoried and found to have wilderness characteristics. As stated in Appendix F, page F-7, these areas were not included in the preferred alternative because of potential conflicts with existing uses. As a result, per Manual 1626, these three areas do not have management to protect wilderness characteristics under the preferred alternative in the Draft RMP/EIS.

However, in response to public comments, the BLM revisited its inventory for the Bangs area. After reviewing potential wilderness inventory routes, it was determined that the Bangs unit should not be expanded. The results of the new inventory, including a description of the Bangs unit that is included in the Proposed RMP/Final EIS, can be found in the Lands with Wilderness Characteristics Inventory Report, available on the RMP website at: http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp.html. In summary, routes were evaluated for consideration as Wilderness Inventory Routes; the field work findings did not support expansion of the Bangs-area lands with wilderness characteristics unit.

Granite Creek

Summary
The BLM's finding that Granite Creek does not contain outstanding opportunities for solitude or primitive recreation is incorrect.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: Granite Creek
We disagree with BLM's finding that Granite Creek does not contain outstanding opportunities for solitude. The Granite Creek unit not only meets the criteria for size and naturalness as recognized by the BLM, but also possesses outstanding opportunities for solitude and primitive recreation. Because the unit is so difficult to easily access, anybody who makes their way into the unit will undoubtedly find absolute solitude. In addition, the isolation of the unit and the difficulty of access, combined with the deep canyon walls and Granite Creek that splits the unit—provide outstanding primitive recreational opportunities, especially backcountry fishing.

Response
As stated in the Wilderness Characteristics Inventory Update:

> The BLM finds the eastern portion of Granite Creek is relatively wide and straight, with a route running down the center. Broad mesas overlook the narrow strip between the route and the steep canyon walls, further limiting opportunities for solitude. The western portion of Granite Creek Canyon is generally less than 0.5-mile in width with scattered riparian vegetation limiting screening opportunities. Within the Renegade Creek area, the steep mountainsides will likely force visitors into area with flatter terrain limiting opportunities for solitude. Further, encountering users in Renegade Creek Canyon is likely due to the openness and lack of available vegetative screening. (Wilderness Characteristics Inventory Update at 75-76)
>
> Opportunities for primitive and unconfined recreation are less than outstanding. Although hiking, hunting, and fishing do occur within the unit the units narrow configuration would in general constrain recreation use. Backpacking in the unit would likely occur in the western portion of Granite Creek Canyon but it is short in extent. Hunting and fishing both occur in the unit but are considered less than outstanding as the presence of these recreation pursuits are not unique in the area. In addition, much of the use is motorized in nature ranging from recreationalists using the route down Granite Creek to explore to hunters searching for and gathering harvested game. (Wilderness Characteristics Inventory Update at 75-76).

The BLM maintains these findings. No changes have been made to the Proposed RMP/Final EIS.

<u>Hunter Canyon</u>

Summary
This unit contains unique biological resources that make it worthy of protecting wilderness characteristics.

Comment
Submission No: emc0835
Commenter: Janice Shepherd, The Quiet Trails Group
Comment: [Hunter Canyon] Quiet Trails Group supports different management alternatives for different sections of Zone H.
Specifically we support the designation of Hunter Canyon LWC as shown in Alternative C and the corresponding travel management decisions. This is a very unique area. For example there are chemosynthetic bacteria that are

normally only associated with deep sea vents, and hot springs. There are research projects into better understanding chemosynthetic bacteria, so its occurrence here should be preserved. Running water is also a rarity out here in the desert and is clearly a draw to local wildlife. We have seen first-hand that the Hunter Canyon LWC also supports eagles, bears, elk and deer winter range and has other wilderness qualities. It deserves protection and sound travel management. The current motorized route situation in this area is poor, with lots of erosion and duplicative routes. It is the experience of the Quiet Trails Group that the number of other hikers and mechanized users enjoying the canyon can outnumber the motorized users by as many as 2 to 1. There is plenty of opportunity for solitude.

Response
Hunter Canyon has oil and gas resource potential, is largely leased for fluid minerals, has coal potential, and has opportunities for motorized and mechanized recreation. This area would be very difficult to manage for wilderness character into the future because of the valid existing rights. For these reasons, the Proposed RMP emphasizes management of this area for other multiple uses instead of its wilderness characteristics. This area was considered for management for its wilderness characteristics under Alternative C in the Draft RMP/EIS. No change has been made to the Proposed RMP/Final EIS.

Roan and Carr Creeks

Summary
This unit contains outstanding opportunities for primitive and unconfined recreation.

Comment
Submission No: emc0959
Commenter: Brad Nicol
Comment: Roan & Carr Creeks - Roan and Carr Creeks foster unique, publicly accessible, riparian habitats which contain genetically pure populations of Cutthroat trout. Talk about a backcountry angler's dream! Please include the Area of Critical Environmental Concern proposed in Alternative C in your final plan as well as a Lands with Wilderness Characteristics designation.

Response
The Roan and Carr Creeks areas do contain unique fishing opportunities, but the orientation of the boundaries and topographical layout of the unit make opportunities for primitive and unconfined recreation less than outstanding. Note that the Roan and Carr Creeks area is proposed for designation as an ACEC in the Proposed RMP/Final EIS. No change has been made to the Proposed RMP/Final EIS.

Rough Canyon

Summary
Rough Canyon should be inventoried and considered for wilderness characteristics because of the recreation opportunities, cultural resources, and natural resources.

Comment
Submission No: cfc0061
Commenter: Joan Woodward
Comment: This comment is about the Rough Canyon area, which I understand may not be included in the current RMP. I think it is terribly important, however, to insure that the area of the trail from the Bangs Canyon parking lot through to the slickrock overlooking the falls and the river, be preserved as land with wilderness characteristics. The trail along the creek is spectacular, combining red rock, trees, and water, as well as petroglyphs or pictographs near the beginning of the trail. It is natural and should be managed to continue the peacefulness and beauty it currently provides.

Response
The area discussed in the comment on its own does not meet the size criteria for lands with wilderness characteristics. The BLM maintains these findings. No changes have been made to the Proposed RMP/Final EIS. Note that the Rough Canyon area is included in the Bangs SRMA RMZ 4, which has management objectives similar to those of lands with wilderness characteristics units (e.g., primitive non-motorized recreation).

Sinbad Valley

Summary
A portion of the Sewemup Mesa unit in Sinbad Valley is unroaded, manageable, natural, remote, recreation and solitude, and should be considered for wilderness characteristics.

Comment
Submission No: emc0899
Commenter: Barbara Hawke
Comment: In addition, the cliffs and valley floor on the northern and western portions of Sinbad Valley meet the criteria for Lands with Wilderness Characteristics (LWC), and along with the above-described outstanding suite of supplemental values, should be managed as an LWC. Examination of the BLM's travel maps reflect a clear unroaded area of manageable size north and northwest of the Salt Creek road. Careful survey in the floor of Sinbad Valley also reflects that there is a manageable area that excludes wilderness inventory roads, and that appears natural. While there indeed are some rough and unmaintained two-track routes in the valley, when one hikes into the northern and western portions of the valley, these routes become obscured, and the imprints of humans are substantially unnoticeable. Moreover, the overall experience to the average visitor is one of a wild, remote, area that seems preserved from a bygone area. The extensive opportunities for hiking, horseback riding, and nature study of this area well support that there exist outstanding opportunities for primitive and unconfined recreation, along with outstanding opportunities for solitude.

Response
The BLM finds that although much of the unit is likely in natural condition, the overall look of the area is one that has many human imprints that are this time too numerous to discount (see the Lands with Wilderness Characteristics Inventory Update available on the RMP website at: http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp.html). No change has been made to the Proposed RMP/Final EIS.

Unaweep Unit

Summary

The BLM's inventory is inaccurate because it failed to identify additional supplemental values and because it ignored several human-made features that deprive the area of wilderness characteristics.

Comments

Submission No: emc0830

Commenter: Peter Hart

Comment: Unaweep - BLM appears to have missed a host of supplemental values that add significantly to wilderness values the agency did find in the Unaweep area. For example, the agency overlooked the solitude that is easy to find throughout this unit and the opportunities for challenging route finding afforded by this largely unroaded area. In addition the agency overlooked the fact that the area is a critical headwaters connected to USFS roadless areas atop the Uncompahgre plateau and provides benefits for all downstream users as a relatively undeveloped and pristine catchment. Other important supplemental values that add to this area's unique wilderness character include wildlife habitat for a variety of important species (including speckled dace) and the importance of this area in the local viewshed (it is visible from the Palisade, Lumsden Canyon, and the scenic byway). The area's wilderness character should be protected in any final RMP and motorized, mechanized, and extractive development in the area should be prohibited.

Submission No: emc0930

Commenter: Ray Moores

Comment: After reviewing the Unaweep unit map I would like to point out that there is private land locked on the west side of the unit. The private land is NOT wilderness, it has a cabin and several water improvements on it. Furthermore, this land runs contiguous with the BLM and the BLM portion of the land is currently used for grazing.

The wilderness character inventory does not emphasize the fact that there is road running up Turner Gulch to the private land on top of the mesa. This private land within the center of the Unaweep unit is significant. One would not expect roads, cabins, fenced areas, improved springs, and other infrastructure within a wilderness area.

The wilderness character inventory does not include the fences installed in the unit. Drift fences have been installed in at least two places on the Ute Creek Trail to manage livestock.

The wilderness character inventory does not describe the historic mine workings within the unit nor the fact that there are still resources left that may be mineable. No mention is made anywhere within the EIS that describes the iron ore potential within the Unit. There are high grade iron ore deposits within the unit.

One must assume that the 1979 inventory did take into account some of these factors and that is why it had a no in the outstanding primitive unconfined recreation column. One might also consider that on the BLM portion of this unit there are very few places where one can escape the noise of recreational travelers on HWY 141.

Response

The wilderness characteristics inventory finds that 7,154 acres of the 9,494-acre wilderness inventory unit have wilderness characteristics. The inventory identifies the road running up to Turner Gulch, but this road forms the boundary outside of the unit. Private land to the west is outside of the unit. The presence of drift fences and mining potential were noted as significant enough to detract from the

overall naturalness of the area. As noted in the Wilderness Characteristics Inventory Update, "one can hear the traffic on Highway 141 for the first 100 meters up Ute Creek Canyon but the noise ceases beyond that point (Wilderness Characteristics Inventory Update at 197)." No changes have been made to the Proposed RMP/Final EIS.

6.2.4.10 Energy and Minerals

Coal

Summary
There are omissions in the discussion of the affected environment regarding coal resources and development. The overburden depth for coal should be reduced by 500 feet.

Comments
Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-165, in 2nd paragraph, the Dakota Group should be referred to as Dakota Sandstone. There is no "Group" designation for Dakota. In the 5th paragraph, the text indicates there are no historic coal mines in the Grand Mesa coal field in the GJFO area. The closed Cameo Mine is east of the Colorado River in the Grand Mesa coal field as are several old coal mines just east of Palisade.

Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: Chapter 3 - Affected Environment
Page 3-176, "The development potential for Mesa Verde coals at less than 3,000 foot depth is High"; for Mesa Verde coals at greater than 3,000 feet is Moderate". BLM does not calculate reserves if they exceed 2,000 feet of overburden, and MSHA rules make mining over 2,000 feet of overburden nearly impossible. The overburden number should be changed to 2,000 feet. What are the three new coalmines in the Bookcliffs area? Could that have come from the Dorchester plans? Page 2-170 has a disclaimer about acreage of coal development depth limited to 2500 feet overburden.

Response
The BLM concurs that text referring to the Dakota Group in the affected environment should be updated. Instances of "Dakota Group" will be replaced with "Dakota Sandstone." Additionally, the BLM will revise text specific to historic coal mines in the Grand Mesa coal field within the GJFO. The BLM will revise text to include the closed Cameo Mine east of the Colorado River in the Grand Mesa coal field, as well as the several old coal mines near Palisade. See pages 3-169 and 3-170.

The BLM acknowledges that the current position of the Mine Safety and Health Administration makes acquiring permission to mine coal with overburden greater than 2,000 feet difficult. Mining operations in the Book Cliffs region in the past have successfully mined under depths exceeding 2,800 feet. The Mine Safety and Health Administration has recently and is currently allowing deep mining (greater than 2,500 feet) for longwall systems in the Book Cliffs. There is no way to predict the Mine Safety and Health Administration's future position on mining at 3,000 feet, but the technology to mine at these depths exists. Mining technology and the Mine Safety and Health Administration's position are outside of BLM

control; therefore, the BLM believes that the 3,000-foot depth is a reasonable depth at which the coal resources can be categorized as 'High' potential. No change has been made to the Proposed RMP/Final EIS.

Wisely Court Decision

Summary
Failure to reference the Wisely court decision has led to duplicative analysis and documentation.

Comments
Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production
Comment: Black Hills is the current lessee of several leases C e.g. COC-69072, COC-69082, COC-69083, COC-69086) that are located in lands in or adjacent to the South Shale Ridge WCIU and/or ACEC. As BLM is aware, these leases were part of The Wilderness Society, et ai, v. Wisely, 524 F. Supp. 2d 1285 CD.Colo. 2007), case where the court found procedural violations of NEPA and the ESA. Although the court eventually determined that the BLM's NEPA analyses were not sufficient to support leasing, the court did not cancel the oil and gas leases on remand. Wisely, 524 F. Supp. 2d at 1312 n.l2 ("The Court will not simply void the September 2005 decision to resume leasing-and all of the BLM's subsequent acts implementing that decision-as doing so might adversely affect property interests obtained by lessees as a result of the lease sale."). Rather, the court simply required BLM to comply with its procedural obligations under NEPA and the ESA. BLM should include specific reference to compliance with the Wisely court decision to reduce duplicative analysis and documentation…It is Black Hills' understanding that BLM originally proposed to cure the deficiencies found by the Court in this case through a site-specific EA. It is also Black Hills' understanding, however, that BLM later proposed to use the RMP process to cure these deficiencies. With this in mind, BLM has not addressed the issues of this case in the current version of the RMP, but should do so.

Response
In Wisely, the court found two specific procedural violations: (1) failure to consider an NSO alternative; and (2) failure to fully consult with the US Fish and Wildlife Service on cumulative impacts of leasing on adjacent lands. The court recognized its very limited role was to review the procedures the BLM undertook prior to offering specific lands for oil and gas development, and not to review the substantive policy decisions implicit in that decision. To comply with Wisely, the BLM needs only to procedurally comply with the NEPA and the ESA.

The leases in question will be analyzed in a separate site-specific leasing EA; they are not analyzed in the RMP/EIS. No change has been made to the Proposed RMP/Final EIS.

Regulatory Authorities

Summary
The Draft RMP/EIS omits some regulatory authorities that govern energy and minerals.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM incorrectly states on page 3-162 that federal lands are only leased using the Mineral Leasing Act of 1920, as amended. The BLM additionally has the authority to lease federal lands under the Right-of-Way Leasing Act of 1930 and the Mineral Leasing Act for Acquired Lands of 1947. The BLM should provide this information so the public has a better understanding of how federal lands are leased within the Planning Area.

Response
The Proposed RMP/Final EIS has been updated to include mention of the Right-of-Way Leasing Act of 1930 and the Mineral Leasing Act for Acquired Lands of 1947. See page 3-167.

6.2.4.11 Recreation

Visitation Numbers and Patterns

Summary
The BLM's method of gathering baseline recreation user data was flawed in terms of how information was gathered and which user groups were contacted.

Comments
Submission No: emc0614
Commenter: James Solomon
Comment: The method of gathering user information was extremely flawed. The system of hiring college kids to gather information at various trail heads was not effective for the importance of the data and how this data would be analyzed and used for decision making. In the case of Motorized Recreation, the BLM made no attempt to contact the core user group and seek input as to area, use and importance of trails. The result of this flawed analysis can only lead to poor decision making regarding area designations. Consequently, many of the trail and area proposals are based on incorrect data.

Submission No: cfc0138
Commenter: Jerry Smith
Comment: GJFO DRMP/TMP Volume II pg. 4-422 -- Impact on Recreation
1. Estimate of Recreational Use
a. In this paragraph it states: "Mechanized activity consists primarily of mountain biking while non-mechanized activities include hiking, running, bird watching, dog walking, should and shooting etc." No mention of what mode of travel is used to access public lands for these uses. Common sense dictates the overwhelming number of these users arrive in some sort of motorized travel. Without roads and/or trails available, even these "quiet" users will be much more limited in their access to their chosen uses of public lands.

2. Further into this same paragraph, it states: "the proportion of mechanized and non-mechanized visitors from outside the region was calculated from the 2009 surveys. Due to the low response rate from off-highway vehicle (OHV) users, an alternative method was used to estimate the proportion of motorized visitors from outside the region. Motorized users were assigned the same proportion of out of region visitors as were non-motorized visitors.

A. We believe that this method of estimating the numbers of OHV users to be flawed in too many ways to count. Judging from the typical numbers of mountain bikers seen at the trailheads along Monument Road at the Tabeguache Trailhead, along the Kokopelli trail, and in the desert north of Fruita alone would lead one to believe these numbers to be entirely understated.
B. As for OHV uses, even quick surveys of Billings Canyon and 21 Road (Hunter Canyon) Jeep trails would lead one to believe that there is considerably more usage from "outside" users. These two trails have a national recognition that draws "outside" users nearly every day of the year.
C. If these estimates are as skewed as we believe, too many decisions regarding road and trail closures on the 2013 RMP/TMP have been made using poor data.

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: Reliance on anecdotal evidence and comments from just a few user groups does not provide an adequate overview of recreation needs in the Bangs Canyon area. BLM admits in Chapter 3 of the DEIS the "public land use and activity participation estimates depend on a mix of computerized trail counter data, field observations, and professional judgment of the recreation staff and hence are not scientifically based." (3-181) In order to fully analyze potential need for more motorized recreation opportunities, the BLM should conduct formal social surveys of all users in the area, to best balance the needs of various use groups.

Response
The Recreation Management Information System (RMiS) is the BLM-internal application that aggregates information pertaining to BLM-administered land used for public recreation purposes. Since 1984, RMiS has been the official record for outdoor recreation information on public lands managed by the BLM. It is the best available information and appropriate for use in a landscape-level analysis. Traffic counter data collected throughout the field office is adjusted using area-specific formulas to help to estimate use. Additionally, results from site-specific user surveys were used to determine visitor demographics and recreation preferences. Standard sampling and reporting techniques were employed in the administration of these surveys. Varying degrees of participation in these surveys necessitated certain assumptions in order to estimate user statistics. Those assumptions are summarized in Section 4.6.3, Recreation and Visitor Services, and explained in more detail in the full survey report (see BLM Grand Junction Field Office Community Assessment Final Report, October 2009 [BLM 2009l]). Visitor use estimates are only one factor among many that affect recreation management decisions. No change has been made to the Proposed RMP/Final EIS.

Changes from Current Management

Summary
The Draft RMP/EIS does not contain an adequate justification for the need to adjust current recreation management.

Comments
Submission No: emc0828
Commenter: Ned Suesse
Comment: Changes from current management should be supported by a scientific study and a rational basis. The current proposal makes deep cuts to recreation without offering any supporting logic for why these changes are

necessary, and what improvement might come from them. There is only the simple assumption that less use is better, which is not consistent with the management directives your office is legally bound to follow, nor something that science or logic bear out as true.

Response
The BLM is required to follow guidance in BLM Handbook H-1601-1 when revising RMPs. Recreation guidance in Handbook H-1601-1 was updated by IM 2011-004, which provides decision guidance, including guidance for the designation of new ERMAs and SRMAs. The Draft RMP/EIS is consistent with this guidance and the existing conditions (see Section 3.3.4) and impact analysis (see Section 4.4.3) identify the need for new recreation management and the tradeoffs associated with implementation of each of the alternatives. The Proposed RMP/Final EIS contains a revised suite of ERMAs and SRMAs that were developed in response to public comment (see page 2-185 – 2-354). These ERMAs and SRMAs were developed to respond to current and future patterns in use, population growth, and demographics. They provide improved opportunities and associated experiences for a wide variety of recreation activities and outcomes, ranging from quiet backcountry recreation to intensive OHV riding areas.

Paragliding

Summary
The Draft RMP/EIS does not discuss paragliding or hang gliding.

Comments
Submission No: emc0441
Commenter: Paul Christian
Comment: Paragliding (and hang gliding) require a very small amount of access to very specific locations, have extremely low impact on public land, unlike some other recreational activities. These flying sites are flown year-round by pilots from across the western United States. Reeder Mesa and Otto's Ridge sites are known to be some of the safest and most consistently used in Colorado. These sites fulfill an essential role of helping beginning and intermediate pilots safely improve and hone their skills. These are established and insured flying sites with the US Hang Gliding and Paragliding Association.

Response
The following information has been added to the Proposed RMP/Final EIS (see page 3-206): "There are several paragliding and hang gliding sites in the planning area that are flown year-round by pilots from across the western United States. Popular sites include Otto's Ridge, Reeders Mesa, and Peanut Point." In addition, information on route designations can be found in the Travel Management Plan comment response report, available on the RMP website at: http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp.html.

Bangs Canyon Use Patterns

Summary
The Draft RMP/EIS does not recognize the outstanding motorized and mechanized recreation opportunities provided in the Bangs Canyon area.

Comments
Submission No: emc0789; rmc0076; and emc0693
Commenter: Keith Fife, Mesa County; Steve Acquafresca, Mesa County Board of County Commissioners; and Thomas Hundtroft, Bookcliff Rattlers
Comment: The DRMP omits a key activity from its methodology and discussion of Bangs Canyon SRMA. Through an inaccurate and incomplete discussion, the DRMP leads readers to believe it is primarily a mountain bike SRMA when in fact one of the principle objectives of the Bangs Canyon Plan is provide motorized trail opportunities. In Appendix K, RMZ 4 and 5, are not mentioned. Chapter 4, in the discussion on pages 4-296 and 4-297 only once mentions motorized trail activities. Furthermore, the DRMP fails to disclose or adequately analyze the long-term cumulative effects of the DRMP proposals for Bangs Canyon.

Submission No: emc0933
Commenter: Todd Sadow, Epic Rides
Comment: Epic Rides requests consideration for the previously acknowledged (as noted in permit application) growth of the annual Grand Junction Off-Road mountain bike event; 600 riders in year one, 2,000 riders in year five, based on event impacts and performance.

Because the Resource Management Plan addresses use of the Bangs Canyon area and could potentially prevent growth of the event, I respectfully request consideration of the events original trajectory while establishing the final management plan. Of course, Epic Rides is glad to offer any type of cooperation necessary through this process in order to identify opportunities for the event to continue with anticipated growth while aligning itself with the Grand Junction BLM Field Office objectives.

Response
Appendix K, page K-15, of the Draft RMP/EIS states that the Bangs SRMA, under all alternatives, provides world-class motorized recreation opportunities. In addition, page 3-189 of the Proposed RMP/Final EIS has been updated to describe these activities. In response to public comments, the Bangs SRMA now contains four RMZs, including one RMZ (10,600 acres) dedicated to a broad range of OHV trail opportunities and including route connections that create long-distance OHV recreation opportunities spanning portions of the Bangs SRMA, Dominguez-Escalante NCA, and Uncompahgre National Forest.

Updates to the Bangs SRMA also specify recreation objectives and actions that guide management of Special Recreation Permits (SRPs) in the SRMA. The recreation demands identified for the area were considered in the development of SRMA/RMZ objectives and associated route designations. Under the Proposed RMP/Final EIS, the Bangs SRMA would allow for a variety of permitted commercial and/or competitive activities/events. Issuance of SRPs is discretionary, and SRP applications would be evaluated on a case-by-case basis utilizing permit evaluation factors, a permit classification system, and NEPA analysis. See Bangs SRMA objectives and management actions beginning on page 2-231.

6.2.4.12 Lands and Realty

Summary
The BLM should retain lands where access is granted through adjoining public lands because they contain valuable recreational resources and are easily accessed with GPS technology.

Comments
Submission No: cfc0099
Commenter: Brandon Siegfried
Comment: Review of the "Lands Tenure Adjustment" section of Volume I, of the GJ DRMP revealed many troubling preferences of the GJ BLM office. Most notably is how the BLM is considering the disposal of highly used and accessible public lands.

Examples:
1. Carr Creek Drainage
2. Brush Creek Drainage
3. Glade Park Area (part of the MIR ranch land swap for Timbered Ridge)
4. Mesa, Collbran and Debeque area.

My opinion is if legal access is granted by adjoining public lands, it should not be disposed off. These hard to access areas are now easily navigated with a modern GPS equipped with BLM layer. There is no excuse to dispose of these, mostly foot, accessible areas now. They will provide a tremendous resource for future generations that are willing to get out and hike.

Carr Creek and Brush Creek BLM lands are fully accessible by County Roads 232, 207 and 209. The public lands up for disposal/cooperative mgt in these areas should be removed immediately. Garfield County has gone out of their way to provide public access to these parcels. I have hunted, fished and camped in these areas for years.

Response
The Draft RMP/EIS analyzed a thorough range of alternatives based upon resource concerns and existing uses that included retention, disposal, and cooperative management for most of the parcels located in the Carr Creek and Brush Creek area. The Draft RMP/EIS presented information on the disposal parcel criteria that was used to screen proposed disposal parcels (Draft RMP/EIS at 2-162 to 2-164). The described parcels meet the following disposal criteria "Isolated parcels that are small or so located as to make effective and efficient management impractical." All of the proposed disposal parcels located in the Carr Creek and Brush Creek areas meet the described criteria. These parcels also meet the purpose for disposing of parcels (see Draft RMP/EIS at 3-196). No change has been made to the Proposed RMP/Final EIS. Analyses of the environmental consequences of disposing of the proposed parcels are included in the Draft RMP/EIS at 4-320 to 4-325.

All of the parcels located along Brush Creek are isolated and range from 40 to 350 acres in size. Most of these parcels do not intersect County Road 209 or have any legal access. The 40-acre parcels located north of Brush Creek are on sparsely vegetated south facing steep slopes with minimal wildlife habitat or recreation and hunting opportunities. The parcels located south of Brush Creek are also primarily located on steep slopes with limited to no public access. No change has been made to the Proposed RMP/Final EIS.

The parcels located in Carr Creek and Left Fork Carr Creek range from 20 to 300 acres in size. The two larger parcels in this area, ranging from 150 to 300 acres, have been identified for potential cooperative management in the preferred alternative. No change has been made to the Proposed RMP/Final EIS.

Disposal parcels are identified for eligibility of future disposal through the RMP/EIS process and would not necessarily be disposed of in the future. Parcels deemed eligible for disposal would undergo site specific public scoping and analysis before the disposal process could proceed or be completed. No change has been made to the Proposed RMP/Final EIS.

6.2.4.13 Areas of Critical Environmental Concern

Atwell Gulch

Summary
The Atwell Gulch ACEC should more accurately describe bighorn sheep and mule deer habitat.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Volume III, Table D-2, page D-5: Comments section for Atwell Gulch ACEC, fourth full paragraph "This area provides a migratory corridor..." The text should read: "This area provides year-round range and an important migratory corridor for a significant portion of the native bighorn sheep (Ovis canadensis) in the area. Additionally, it is also winter range and severe winter range for mule deer (Odocoileus hemionus)"

Response
The BLM agrees that the commenter accurately describes species use of the Atwell Gulch ACEC. The Proposed RMP/Final EIS has been updated accordingly. See page D-5.

Badger Wash

Summary
The Great Basin silverspot butterfly should be added to the list of sensitive species.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW questions why the Great Basin silverspot butterfly, Speyeria nokomis, was removed from the list of sensitive species which would be protected.

Response
The BLM erroneously omitted this species from the Draft RMP/EIS. The Proposed RMP/Final EIS has been updated accordingly. See page D-6.

Colorado River Riparian

Summary
Add peregrine falcons to the list of species for the Colorado River Riparian ACEC.

Comments
Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-55, Action, Colorado River Riparian ACEC: While Peregrine Falcons probably won't nest in the riparian area, they seem to be attracted to riparian areas for their productivity of prey and prefer nesting close to them. So you can add that species there.

Response
The BLM agrees with the comment and has added the species to the ACEC in the Proposed RMP/Final EIS. See page D-11 in Appendix D.

Coon Hollow/South Shale Ridge

Summary
The Coon Hollow/South Shale Ridge ACEC should be carried forward in the Proposed RMP because it overlaps the highly globally significant Rare Plants of the Wasatch Important Plant Area and the Roan Cliffs Priority Action Area, it has highly erodible soils, it contains cultural resources, and it is vulnerable to intensive energy development and motorized recreation.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: Western Colorado boasts a number of the state's Important Plant Areas (IPA), and this proposed ACEC overlaps the highly globally significant "Rare Plants of the Wasatch" IPA and "Roan Cliffs" Priority Action Area (see the "Colorado Rare Plant Conservation Strategy" at http://www.cnhp.colostate.edu/teams/botany.asp#initiative and maps and area descriptions on pages 29 through 31). The soils and substrates are highly erodible and also vulnerable, due to intensive energy development and motorized recreation in the region. Thus, a high level of protection through ACEC designation and accompanying strongly protective management prescriptions is essential. As the BLM's ACEC report notes, this area "Meets the importance criteria for more than locally significant importance to plants and has qualities that make it fragile, sensitive, irreplaceable, threatened, and vulnerable to adverse change. The area has known populations of Colorado hookless cactus, Naturita milkvetch, adobe thistle, as well as critical winter range for deer and elk."

The LWC inventory report hails South Shale Ridge as a botanist's dream of rare plants and the preponderance of cultural resources identified in the area warrant special management attention. In addition to LWC designation, we urge BLM to designate an ACEC to protect plant and cultural resources. Any designation of routes in or immediately adjacent to South Shale Ridge should be preceded by full cultural site inventories and clearances.

Response
The South Shale Ridge has been carried forward in the Proposed RMP/Final EIS. Construction of new routes anywhere in the decision area would be subject to cultural and natural resource surveys. Route designations may also change if use is shown to degrade resources (see Appendix M for additional information on the monitoring and mitigation strategy).

Based on available shapefiles, the Citizens proposed Cow Ridge ACEC does not overlap the CNHP Rare Plants of the Wasatch IPA. However, the Roan Cliffs Priority Action Area does overlap the proposed ACEC. The BLM could not find any Colorado hookless cactus, Adobe thistle or Naturita milkvetch occurrence records within the proposed Cow Ridge ACEC. Although not carried forward for designation as an ACEC, the area's rugged topography means it is largely covered, and protected, by the NSO stipulation for steep slopes.

CNHP's Important Plant Area and Priority Action Area polygons cover individual element occurrence records, which were used in the BLM's analysis of this area. While the BLM utilized the individual plant locations, the IPA and PAA were not used. No change has been made to the Proposed RMP/Final EIS.

Cow Ridge

Summary
Designate Cow Ridge as an ACEC to preserve currently fragmented rare plant habitat.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: Since the issuance of the Grand Junction Field Office's ACEC Report, as updated in August 2012, there exist new information and changed circumstances with respect to the protection of several plant species under the Endangered Species Act. In particular, the Debeque phacelia and Parachute beardtongue (penstemon) were listed as Threatened by the USFWS on July 26, 2011 (see http://www.fws.gov/mountain-prairie/species/plants/3ColoradoPlants/index.html). While the final listing rule affecting these species is referenced in the draft RMP (Draft RMP, p. 3-96-97), it is not clear that the heightened importance of these recently listed rare plant species is recognized in the proposed ACEC designations and associated management prescriptions, or that the listing led BLM to increase or more greatly emphasize protections in areas where these species occur. For example, the proposed Logan Wash ACEC contains these two species, but was not carried through to the draft RMP, as detailed below. All management implications of the protected status of plant species under the Endangered Species Act should be fully and robustly reflected in special management designations and prescriptions in the RMP.

We recommend the following areas be designated as ACECs in the final RMP, with the larger boundaries and more restrictive management prescriptions contemplated in Alternative C where applicable.

Cow Ridge
While this potential ACEC was not carried forward by BLM for further consideration in the draft RMP, this assessment should be reconsidered. The BLM's ACEC report notes "Meets the relevance criteria for natural processes or systems because it supports multiple A-ranked (excellent quality) occurrences of two BLM sensitive plants, Piceance bladderpod and Roan Cliffs blazingstar (Mentzelia rhizomata) and provides potential habitat for greater sage-grouse (Centrocercus urophasianus), a BLM sensitive species. " While the proposed ACEC meets the importance criteria for more than locally significant qualities because the bladderpod and blazingstar sites are of excellent quality and are vulnerable to adverse change, the proposed site is overly broad and fragmented. Given that rare plant habitat can sometimes be conserved even though currently fragmented, this area should be reconsidered for ACEC designation.

Submission No: emc0899 and emc0721
Commenter: Barbara Hawke and David Inouye
Comment: It is important to note that since the issuance of primary documents supporting the draft GJFO RMP, particularly the ACEC Report as updated in August of 2012, there exist new information and changed circumstances with respect to the protection of several plant species under the Endangered Species Act. In particular, the Debeque phacelia and Parachute beardtongue (penstemon) were listed as Threatened by the USFWS in July of 2011. While the final listing rule affecting these species is referenced in the DRMP document, it is not clear that the heightened importance of these recently listed rare plant species is recognized in the DRMP's proposed ACEC designations and associated management prescriptions. All management implications of the protected status of plant species under the Endangered Species Act should be fully and robustly reflected in special management designations and prescriptions in the DRMP.

For Cow Ridge more specifically, while this potential ACEC was not carried forward by BLM for further consideration in the DRMP, I believe this assessment should be reconsidered. The BLM's ACEC report notes, "Meets the relevance criteria for natural processes or systems because it supports multiple A-ranked (excellent quality) occurrences of two BLM sensitive plants, Piceance bladderpod and Roan Cliffs blazingstar (Mentzelia rhizomata) and provides potential habitat for greater sage-grouse (Centrocercus urophasianus), a BLM sensitive species." While the proposed ACEC meets the importance criteria for more than locally significant qualities because the bladderpod and blazingstar sites are of excellent quality and are vulnerable to adverse change, the proposed site is overly broad and fragmented. Given that rare plant habitat can sometimes be conserved even though currently fragmented, this area should be reconsidered for ACEC designation.

Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy
Comment: Establish the following ACECs to protect rare plants in addition to the other values that BLM has identified in these areas. ACECs provide better protections than NSO stipulations alone by covering a block of habitat that can encompass and bridge multiple populations of any one species or multiple species.
Cow Ridge: While this potential ACEC was not carried forward by BLM for further consideration in the DRMP, I believe this assessment should be reconsidered. The BLM's ACEC report notes
"Meets the relevance criteria for natural processes or systems because it supports multiple Aranked (excellent quality) occurrences of two BLM sensitive plants, Piceance bladderpod and Roan Cliffs blazingstar (Mentzelia rhizomata) and provides potential habitat for greater sagegrouse (Centrocercus urophasianus), a BLM sensitive species. . . While the proposed ACEC meets the importance criteria for more than locally significant qualities because the bladderpod and blazingstar sites are of excellent quality and are vulnerable to adverse change, the proposed site is overly broad and fragmented." Given that rare plant habitat can sometimes be conserved even though currently fragmented, this area should be reconsidered for ACEC designation.

Response
As stated in the ACEC Report on the Application of the Relevance and Importance Criteria:

> This proposed ACEC does not meet the importance criteria because it is not unique when compared to other sage-grouse habitat located within the Parachute-Piceance-Roan population. While the proposed ACEC meets the importance criteria for more than locally significant qualities because the bladderpod and blazingstar sites are of excellent quality and are vulnerable to adverse change, the proposed site is overly broad and fragmented.

The nominated Cow Ridge ACEC is approximately 25,777 acres in size, and is composed of more than 50 separate parcels that span various habitat types. The potential ACEC was found not to meet importance criteria for sage-grouse because it is outside of Priority or General Habitat for Greater Sage-Grouse and it is not unique when compared to the other sage-grouse habitat located within the Parachute-Piceance-Roan population. For sensitive plants, approximately 4 of the 50+ isolated parcels contain A-ranked (CNHP) occurrences of bladderpod and blazingstar, which was not enough of an extent to consider as meeting the importance criteria, especially without the additional habitat for sage-grouse. Additionally, standard management is considered to provide sufficient protection for the bladderpod and blazingstar occupied habitat. No change has been made to the Proposed RMP/Final EIS.

Dolores River Riparian

Summary

Evaluate the presence of the Fremont cottonwood riparian forest community and New Mexico privet community in the ACEC. This area is identified as a rare plant hotspot in the Gateway Rare Plant Priority Conservation Area.

Comments

Submission No: emc0917 and emc0721

Commenter: Juli Slivka, The Wilderness Society; and David Inouye

Comment: The Northern Dolores region contains a rare plant hotspot reflected in the "Gateway" Rare Plant Priority Conservation Area (see "Colorado Rare Plant Conservation Strategy", page 29; and Gateway Preliminary Action Plan, both available at http://www.cnhp.colostate.edu/teams/botany.asp#initiative). The Gateway RPPCA overlaps portions of the Palisade, Dolores River Riparian, and Sinbad Valley proposed ACECs, underscoring the need to designate these three ACECs with their associated expansions and strong management protections. As noted in the BLM ACEC report, "Multiple BLM sensitive plants (Kachina daisy, Eastwood's monkeyflower, San Rafael milkvetch, Dolores River skeleton plant, horseshoe milkvetch, Grand Junction milkvetch, and Gypsum cateye) occur in the area." The BLM should also evaluate the presence of the rare Fremont cottonwood riparian forest community and New Mexico privet community, and potentially additional rare plants in the proposed ACEC area, and include them in the values to be preserved by ACEC management.

Submission No: emc0899

Commenter: Barbara Hawke

Comment: [Dolores River Riparian ACEC] The BLM should also evaluate the presence of the rare Fremont cottonwood riparian forest community (Populus deltoides ssp. wislizeni/Rhus trilobata woodland G2S2) and Foothills riparian shrubland (Forestiera pubescens G1G2S1) New Mexico privet community, which are known to occur along the Dolores River and Salt Creek in this area. These values should be included as targets for ACEC protection where they occur in potential areas of the Palisade (including expansion), Dolores River Riparian, and Sinbad Valley ACECs. Any other plants or plant communities with a G1 or G2 ranking should be included in the values to be preserved by ACEC management.

Response

The BLM added the Rio Grande cottonwood riparian forest community, Foothills riparian shrubland community, and the New Mexico privet community to the plant communities of concern for this ACEC.

Documentation presence of these two plant communities of concern is limited to small portions of the proposed ACEC. See Table D-2 in Appendix D.

Granite Creek

Summary
Designate as Granite Creek as an ACEC to mitigate impacts of recreation.

Comments
Submission No: emc0634
Commenter: Jan Potterveld, Back Country Horsemen of Colorado
Comment: Granite Creek Area is also immensely beautiful with a deep canyon and fast flowing stream. Granite Creek is difficult to access from the Colorado side because of its remoteness and surrounding private property. Granite Creek has numerous roads suitable for jeep traffic and all other means of travel. This is area to fall in love with, if the access was better.

The Granite Creek Area is much more primitive and difficult to reach than most of the surrounding terrain. Access is limited from the Colorado side due to private land and roads along County Road MS. Access is best achieved from the Utah side at the base of Granite Creek and may also be reached via the Sheep Creek Trail ascending from the Dolores River, and perhaps via County MS road. Access from Glade Park through Utah into Ryan Park is also possible.

While there is no particular demand in this area for SRMA or ERMA designations, the pictures I took of Granite Creek near the Colorado/Utah border show how this is beautiful and worthy of protecting. This is both a great water resource, wildlife area, with good forest coverage and a historic grazing and cattle area. Remote and dispersed camping would be excellent. I find this to be one of those areas that I wouldn't want to advertise too heavily; that is, no SRMA.

Because of the network of existing roads and the need for motorized access, I would not recommend this for LWC treatment. Alt C ACEC would be an important management designation however, as it would help to ensure that in the long run BLM has the tools needed to mitigate the impacts of increased recreational visitation.

Response
To be considered as an ACEC, an area must be evaluated and determined to meet at least one relevance and one importance criterion defined in 43 CFR 1610.7-2. Commenter did not provide an indication of the relevant and important value(s) that might exist in the area. The existing use type (recreation) at the existing use level appears to be compatible with watershed function and condition. The road system is typically well buffered from the stream by distance and/or riparian vegetation that filter sediments and preserve water quality. In Granite Creek, the BLM most recently collected water quality samples on August 17, 2010 that were analyzed for a full suite of water quality parameters (inorganics). Benthic Macroinvertebrate samples have also been collected from Granite Creek and results from both of these efforts indicate good water quality and a healthy aquatic ecosystem. The BLM also conducted a rapid riparian assessment of Granite Creek in 2010 and determined the stream to be in proper functioning condition. No change has been made to the Proposed RMP/Final EIS.

Gunnison River Riparian

Summary
Plant surveys will help determine the importance of this area.

Comments
Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy
Comment: The BLM's ACEC report reflects the reasons to designate this area as an ACEC: "The Colorado hookless cactus (federally threatened) is known to inhabit the alluvial benches of the Gunnison River. Results from a rare plant inventory (which is currently in progress), will determine the importance of this area.

Response
The BLM's ACEC report reflects the reasons to designate this area as an ACEC: "The Colorado hookless cactus (federally threatened) is known to inhabit the alluvial benches of the Gunnison River. Results from a rare plant inventory (which is currently in progress), will determine the importance of this area." Surveys were performed along the Gunnison River during the summer of 2013, and Colorado hookless cactus was found. A full survey of the proposed ACEC has not been completed. Cactus surveys in 2013 and 2014 have determined that the proposed Gunnison River Riparian ACEC contains the federally listed Colorado hookless cactus. However, densities were not great enough to make this an exemplary site. Nearby areas along the Gunnison River with a greater density of cactus are being carried forward as an ACEC in the Dominguez-Escalante NCA Proposed RMP/Final EIS (see the NCA's proposed River Rims ACEC). No change has been made to the Proposed RMP/Final EIS.

Indian Creek

Summary
The Indian Creek ACEC should list kit fox.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Volume I, Table 2-2, page 2-78: The Indian Creek ACEC should include Kit Fox.

Response
The BLM agrees that this species utilizes the Indian Creek ACEC area. The Proposed RMP/Final EIS has been updated to list kit fox in the ACEC. See Table D-2 in Appendix D.

Juanita Arch

Summary
San Rafael milkvetch is noted by CNHP as occurring in the area and the species should be included as a value of the ACEC if it does occur.

Comments
Submission No: emc0917 and emc0721
Commenter: Juli Slivka, The Wilderness Society; David Inouye
Comment: This area should be designated as an ACEC because, as stated in the BLM's ACEC report, "Juanita arch is classified as the only natural bridge in the state of Colorado, thus making this a unique geologic feature to the region. The rare plant, Grand Junction milkvetch, also occurs in this area." BLM should review rare plant element occurrence information from the Colorado Natural Heritage Program, as their Potential Conservation Area for Flat Top Mesa near Juanita Arch cites San Rafeal milkvetch as occurring in the area. If that is the case, the ACEC should include the rare San Rafeal milkvetch in the values to be preserved by the ACEC.

Response
The BLM added the San Rafael milkvetch as a species of concern for this ACEC. See Table D-2 in Appendix D.

Logan Wash

Summary
This area should be designated as an ACEC because of new baseline information that DeBeque phacelia and Parachute beardtongue are now listed as threatened under the Endangered Species Act instead of just candidate species.

Comments
Submission No: emc0917, emc0924, and emc0721
Commenter: Juli Slivka, The Wilderness Society; Megan Kram, The Nature Conservancy; and David Inouye
Comment: While this area was not carried forward by the BLM for further consideration in the draft RMP, the area should be reconsidered for ACEC designation because the original ACEC assessment was based on two species assessment as candidate species, and these two species "the Debeque phacelia and Parachute beardtongue " are now officially protected as Threatened species under the ESA. As noted in the BLM's ACEC report, "Meets the relevance criteria for a natural system containing sensitive habitat for plants. Meets the importance criteria for having more than locally significant qualities and qualities of sensitive and rare plants. "The proposed area meets the criteria for both relevance and importance by containing numerous BLM sensitive plants, one federally threatened plant, and possibly two federal candidate species. The rare plant species found within this landscape include, but are not limited to: DeBeque milkvetch, adobe thistle, Naturita milkvetch, Roan Cliffs blazingstar, Colorado hookless cactus (threatened), Parachute penstemon (Penstemon debilis) (candidate), and DeBeque phacelia (candidate). The majority of the known plants are vulnerable to adverse change. The proposed ACEC area is heavily fragmented by energy . . ." As noted previously, rare plants can sometimes be conserved even though habitat is currently fragmented, and given the recently changed ESA status of two of the cited species, this area should be considered for ACEC designation.

Submission No: emc0899
Commenter: Barbara Hawke
Comment: Similarly for Logan Wash, while this area was not carried forward by the BLM for further consideration in the DRMP, the area should be reconsidered for ACEC designation because the original ACEC assessment was based on two species assessment as candidate species, and these two species "the Debeque phacelia and Parachute beardtongue" are now officially protected as threatened species under the ESA. As noted in the BLM's ACEC

report, "Meets the relevance criteria for a natural system containing sensitive habitat for plants. Meets the importance criteria for having more than locally significant qualities and qualities of sensitive and rare plants." The proposed area meets the criteria for both relevance and importance by containing numerous BLM sensitive plants, one federally threatened plant, and possibly two federal candidate species. The rare plant species found within this landscape include, but are not limited to: DeBeque milkvetch, adobe thistle, Naturita milkvetch, Roan Cliffs blazingstar, Colorado hookless cactus (threatened), Parachute penstemon (Penstemon debilis) (candidate), and DeBeque phacelia (candidate)

The majority of the known plants are vulnerable to adverse change. The proposed ACEC area is heavily fragmented by energy. . . As noted previously, rare plants can sometimes be conserved even though habitat is currently fragmented, and given the recently changed ESA status of two of the cited species, this area should be considered for ACEC designation.

Response

While the proposed Logan Wash ACEC met the relevance and importance criteria, the proposed boundary was overly broad, contained numerous isolated tracts, and would have been difficult to manage by the BLM. The present intensity of natural gas development, past oil shale mining, and general condition of the land resulted in this proposal not be recommended for further analysis. Although the status of the DeBeque phacelia and Parachute beardtongue has changed since the initial ACEC analysis, both species were considered in the relevance and importance review. The majority of the Parachute beardtongue is found on private land within the GJFO, with the two known occurrences being alongside the Oxy road, and at the Logan Wash mine site. Neither site is appropriate for an ACEC. NSO stipulations are a more appropriate management tool. DeBeque phacelia will be managed for in the existing Pyramid Rock ACEC, and would be managed for in the proposed South Shale Ridge ACEC, if designated. No change has been made to the Proposed RMP/Final EIS.

The Palisade

Summary

Expand the Palisade ACEC to cover newly discovered plants in the most recent plant inventories. Add mule deer to the list of species for this ACEC.

Comments

Submission No: emc0917

Commenter: Juli Slivka, The Wilderness Society

Comment: Since the issuance of the Grand Junction Field Office's ACEC Report, as updated in August 2012, there exist new information and changed circumstances with respect to the protection of several plant species under the Endangered Species Act. In particular, the Debeque phacelia and Parachute beardtongue (penstemon) were listed as Threatened by the USFWS on July 26, 2011 (see http://www.fws.gov/mountain-prairie/species/plants/3ColoradoPlants/index.html). While the final listing rule affecting these species is referenced in the draft RMP (Draft RMP, p. 3-96-97), it is not clear that the heightened importance of these recently listed rare plant species is recognized in the proposed ACEC designations and associated management prescriptions, or that the listing led BLM to increase or more greatly emphasize protections in areas where these species occur. For example, the proposed Logan Wash ACEC contains these two species, but was not carried through to the draft RMP, as detailed below. All management implications of the protected status of plant species under the

Endangered Species Act should be fully and robustly reflected in special management designations and prescriptions in the RMP.

We recommend the following areas be designated as ACECs in the final RMP, with the larger boundaries and more restrictive management prescriptions contemplated in Alternative C where applicable.

Palisade ACEC/ONA
This area includes a high concentration of globally rare plants, as reflected in the BLM's own multiple designations for the area. The expansion of the ACEC to the west side of the river is important to capture the primary populations of Osterhout cat's eye in the area, which is not captured by the existing boundaries of the ACEC. In addition, the expansion would encompass additional occurrences of the Dolores River Skeleton plant and Horseshoe milkvetch. The most current plant inventories should be consulted to ensure that the specific species for which the ACEC will be managed is complete. Kachina daisy and other rare plants may be recent additions to inventories around the Palisade. As noted in the BLM's ACEC report, "Recent plant inventories completed by CNHP have recorded rare plants around the base of the Palisade, and across the Dolores River. A larger area is needed to cover newly discovered plants, and to provide protection should the Wilderness Study Area designation change. Plants known to occur around the base of the Palisade, and across the Dolores River include: Dolores River skeleton plant (Lygodesmia doloresensis), San Rafael milkvetch (Astragalus rafaelensis), horseshoe milkvetch (Astragalus equisolensis), Fisher Tower's milkvetch (Astragalus piscator), tufted green gentian (Frasera paniculata), and osterhouts catseye (Cryptantha osterhoutii)." Management prescriptions should assure a high level of protection for this concentration of rare plants, and incorporate recommendations of the "Preliminary Conservation Action Plan: Rare Plants in the Gateway Priority Action Area," Sponsored by the Colorado Rare Plant Conservation Initiative, June 8, 2011 (available at http://www.cnhp.colostate.edu/teams/botany.asp#initiative).

Submission No: emc0899
Commenter: Barbara Hawke
Comment: [Palisade ACEC] The most current plant inventories should be consulted to ensure that the specific species for which the ACEC will be managed is complete. Kachina daisy and other rare plants may be recent additions to inventories around the Palisade.

A larger area is needed to cover newly discovered plants, and to provide protection should the Wilderness Study Area designation change. Plants known to occur around the base of the Palisade, and across the Dolores River include: Dolores River skeleton plant (Lygodesmia doloresensis), San Rafael milkvetch (Astragalus rafaelensis), horseshoe milkvetch (Astragalus equisolensis), Fisher Tower's milkvetch (Astragalus piscator), tufted green gentian (Frasera paniculata), and osterhouts catseye (Cryptantha osterhoutii)." Management prescriptions should assure a high level of protection for this concentration of rare plants, and incorporate recommendations of the "Preliminary Conservation Action Plan: Rare Plants in the Gateway Priority Action Area."

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: The Palisade ACEC contains several rare plant species in Colorado which are not included in the list of natural values on page 3-210. CPW believes this list of values should include Horseshoe milkvetch, Astragalnv eqmsolensis; Fisher milkvetch, Astragalus piseator, Kachina daisy, Erigeron kachinensis: Dolores River skeleton-plant, Lygodesmia doloresensis: Utah beardtongue, Penctemon utallensis; and Osterhout cat's eye, Oreocarya osterhoutii.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Volume I. Table 2-2, page 2-78: The Palisade ACEC should include mule deer.

Response
The original Palisade ACEC boundary has been expanded to include newly recorded plant locations documented by CNAP, and does overlap with the Palisade WSA boundary (Alternatives B, C, and D). The proposed boundary of the ACEC includes both sides of the Dolores River, and extends to the Unaweep Seep. No change to the boundary is needed. The Proposed RMP/Final EIS has been updated to list mule deer and additional plant species present in the ACEC. See page 3-221 and 2-123.

Rough Canyon

Summary
The Rough Canyon ACEC should be enlarged and protected.

Comment
Submission No: emc0665
Commenter: Sherry Schenk
Comment: [Rough Canyon and Bangs area] I find it personally important to know a piece of land well and I am beginning to know this area – both on and off trail. Supplemental values found here are archaeological sites, historical dumps and sites, plant life which includes rare plants, and rare or unusual wildlife. I would like to see the Rough Canyon ACEC enlarged and protected.

Response
As stated in the ACEC report (Appendix D; the full report is available on the RMP website), the Rough Canyon ACEC boundaries presented in the Draft RMP/EIS are those that contain the relevant and important values for which the ACEC is designated. No change has been made to the Proposed RMP/Final EIS.

South Shale Ridge

Summary
The ACEC designation unlawfully attempts to deny access to valid existing oil and gas lease rights and motorized routes. Because the proposed NSO stipulations cannot be applied to existing leases, the BLM would be unable to protect this species.

Comments
Submission No: cfc0098
Commenter: Brandon Siegfried
Comment: My feeling is mutual on the 28,200 acre proposed South Shale Ridge ACEC. We have a legal right to year round motorized access on the established routes on South Shale Ridge. The Spear Hunter Access Roads have been in place way before Oct 21, 1976. The hookless cactus is not in any danger in Mesa County in fact it is thriving. Oddly enough it thrives in old tire track ruts located on the south side of hills, seems motorized traffic has

helped the hookless cactus. If there were any real danger to animals or plants in this area, the BLM would probably not continue to allow cattle grazing in the area. This classic approach of removing humans and allowing cattle is laughable.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: South Shale Ridge Does not Meet Designation Requirements for Areas of Critical Environmental Concern

The South Shale Ridge area of critical environmental concern (ACEC) as proposed in the GJFO DRMP/DEIS should be removed. BLM, through its use of ACEC designation and NSO stipulations, is unlawfully attempting to deny Black Hills' valid existing oil and gas lease rights.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The purpose of ACEC designation is to protect small, isolated areas that need special designation and management based on substantial values of national significance (43 C.F.R. 1610.7 (a)(2)).

Alternative B includes the South Shale Ridge ACEC and restricts oil and gas development within the ACEC with NSO stipulations. In addition, according to the GJFO DRMP/DEIS, BLM will apply the NSO stipulation to the existing oil and gas leases as COAs. GJFO DRMP/DEIS Section 2.1 at 2-1. However, the South Shale Ridge ACEC area is already leased for oil and gas; none of the valid existing leases contain an NSO lease stipulation.

Given the valid existing leases without NSO stipulations within the proposed ACEC, BLM will be without any real regulatory mechanisms to enforce the newly-proposed NSO stipulations. Thus, because BLM lacks the mechanism to enforce its desired protections for the South Shale Ridge ACEC, there is no basis to include the South Shale Ridge ACEC in the final RMP.

Further, the South Shale Ridge ACEC does not meet the relevance and importance criteria under the BLM regulations and BLM Manual 1613 for ACECs. Under BLM Manual 1613, ACEC designations highlight significant resources where special management measures are needed to prevent irreparable damage. The ACEC designation enables land managers to specifically address the relevant and important value and formulate a prescription to manage it.

Response
Colorado hookless cactus demographic monitoring data indicate a static trend for the cacti in the South Shale Ridge vicinity (CNHP 2013). While the BLM may not unilaterally add a new stipulation (in this case an NSO) to a lease that it has already issued, the BLM can subject development of existing leases to reasonable conditions, as necessary, through the application of conditions of approval at the time of permitting. The new constraints must be consistent with the applicable land use plan and not in conflict with rights granted to the holder under the lease. The Interior Board of Land Appeals has made clear that, when making a decision regarding discrete surface-disturbing oil and gas development activities following site-specific environmental review, the BLM has the authority to impose reasonable protective measures not otherwise provided for in lease stipulations, to minimize adverse impacts on other resource values. See 30 USC 226(g); 43 CFR 3101.1-2. See Yates Petroleum Corp., 176 IBLA 144

(2008); National Wildlife Federation, 169 IBLA 146, 164 (2006). No change has been made to the Proposed RMP/Final EIS.

See Section 6.2.7.8, Energy and Minerals, for additional discussion of valid existing lease rights.

Sunnyside

Summary
The Sunnyside ACEC should list Rocky Mountain big horn sheep.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Volume I, Table 2-2. page 2-79: Sunnyside ACEC should include Rocky Mountain Big Horn Sheep.

Response
The BLM agrees that this species utilizes the Sunnyside Wildlife Emphasis Area (note: the BLM believes the commenter is referring to the wildlife emphasis area, not the ACEC). The Proposed RMP/Final EIS has been updated to list Rocky Mountain bighorn sheep. See page 2-124.

6.2.4.14 Wild and Scenic Rivers

Suitability Criteria

Summary
The BLM relied on political opposition, a non-statutory criterion, in determinations of unsuitability for 13 study segments. Political determination should be left to Congress. Local collaborative concerns about designating stretches of river under the NWSRS are insufficient to find a national, publicly owned and managed river to be "not suitable" for protection under the NWSRS. The BLM's determinations need to be balanced within a robust process that also takes into consideration the full contingent of state, regional, and national stakeholders who use and care about these rivers.

Comments
Submission No: emc0927
Commenter: Michael Saul, National Wildlife Federation
Comment: The DRMP/DEIS, in preferring to determine thirteen of the fourteen segments unsuitable, relies instead (and in fact double-counts) on an arbitrary non-statutory criterion - political opposition. See, e.g., DEIS/DRMP C-3-5, C-3-12. Based on the outstanding values clearly documented in Appendix C - see DEIS/DRMP C-ES-3 - the BLM should recognize all fourteen segments as suitable and leave the political determination, as required by statute, to Congress.

Submission No: emc0932
Commenter: Tim Brass, Backcountry Hunters & Anglers
Comment: The preferred alternative removes interim protection for 13 of the 14 rivers in Mesa County, which would qualify for a wild and scenic designation. Most of these wild, free flowing rivers have excellent water quality, host healthy populations of cold water fish and remain free development. The political basis used to justify the removal of interim protection for these wild waters is flawed as such decisions should be based on suitability criteria defined by the Wild and Scenic Rivers Act (Public Law 90-542; 16 U.S.C 1271-1287), not the current local political position.

We strongly recommend that the BLM adopt provisions within Alternative C and retain interim protection of these waterways. Any action to do otherwise would strip future generations of the opportunity to experience the wildness of these unique Colorado features. A Wild & Scenic Designation must be kept on the table - protection for all 14 rivers suitable for wild scenic status should be maintain through Alternative C.

Response
The criteria used to evaluate the eligible stream segments for suitability are identified in BLM Manual Section 8351, Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation, and Management (subsequently replaced by BLM Manual 6400, Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation, Planning, and Mitigation), and include, "federal, public, state, tribal, local, or other interests in designation or nondesignation of the river, including the extent to which the administration of the river, including the costs thereof, may be shared by state, local, or other agencies and individuals" (Draft RMP/EIS at C-2-1 through C-2-3). This criterion helps define the political context for the decision but is not the primary or only factor considered in the suitability determinations. Input provided by local stakeholder groups was only one of multiple perspectives that were considered in arriving at suitability determinations. Consideration of the suitability factors in the BLM 6400 manual automatically requires the BLM to consider perspectives that are statewide, regional, or national in nature. The 11 suitability criteria together help inform the suitability determination. No change has been made to the Proposed RMP/Final EIS.

Suitability Determinations

Summary
Finding only one, small section of the Dolores River "suitable" is not a balanced approach to the protection and development of our river corridors, especially considering the large number of river miles that were not found suitable. A suitability determination for more rivers should be brought forward.

Comments
Submission No: emc0813
Commenter: Mike Fiebig, American Rivers
Comment: 4. Finding only one, small section of the Dolores River (11.53 miles) as "suitable" for addition to the NWSRS out of the 99.5 miles of "eligible" rivers running through BLM lands is not a balanced approach to the protection and development of our river corridors, especially when one takes into consideration the large number of river miles that were eliminated - out of the total number of river miles in the planning region - during the eligibility determination process.

6. The BLM needs to develop a more balanced and protective plan to preserve the Outstandingly Remarkable Values that it has identified for its Wild and Scenic eligible streams such as the Colorado River, Dolores River, Gunnison River, Roan Creek, Carr Creek, Unaweep Canyon, and tributaries. These streams and their ORVs are important to Colorado and to the Nation. We urge the BLM to develop and implement an RMP Alternative that finds these streams to be suitable for inclusion in the NWSRS, taking into full consideration the changing conditions on the ground and their relation to critical refugia for flora and fauna, high quality river-based recreation for locals and national citizens alike, and places of cultural, historic, and archeological significance.

Response
The BLM does not believe that a comparison of river miles determined suitable and not suitable provides evidence of a balanced approach. The National Wild and Scenic Rivers System is designed to protect rivers that are the best examples of free-flowing streams in the country. By definition, only a small percentage of streams that are analyzed under the Act will be found eligible. In addition, only a small percentage of eligible streams will be found suitable because there are multiple management options for rivers. A suitability determination is made only when designation is the best management alternative. No change has been made to the Proposed RMP/Final EIS.

Appendix C, the WSR Suitability Report, has been updated with additional analysis of protections afforded to non-suitable stream segments' ORVs in the Proposed RMP (see Appendix C, Section 2.5 and the Land Use Plan Alternatives section for each stream segment discussed in Appendix C).

Relationship Between Eligibility and Suitability

Summary
Failing to find eligible stream segments suitable would sacrifice the BLM's authority to protect the identified outstandingly remarkable values in those stream segments.

Comments
Submission No: emc0865
Commenter: Scott Seibold
Comment: Suitability decisions affect values identified in wild & scenic eligibility report All of the above streams and stream segments were identified by the BLM, in its Wild and Scenic River Eligibility Report (March 2009), as being free-flowing and possessing one or more river-related outstandingly remarkable values. A failure to find those stream segments suitable would remove the existing eligibility status, sacrificing both the BLM's authority to manage the stream corridors in order to protect those values and very likely resulting in damage to, or loss of, those values.

Response
Finding a stream not suitable does not remove the BLM's authority to manage for the values identified during the eligibility stage. While the current RMP may lack management protections for these values, the proposed land use plan was designed to specifically incorporate measures to manage for river-related values. These measures are based upon multiple legal authorities that the BLM relies upon outside of the Wild and Scenic Rivers Act. No change has been made to the Proposed RMP/Final EIS.

Dolores River Suitability Determination

Summary

A suitability determination for the Dolores River is premature. The BLM should delay the determination pending additional coordination with stakeholder groups and while the Colorado Water Conservation Board processes the joint BLM and Colorado Parks and Wildlife recommendation to appropriate an instream flow on a portion of the Dolores River.

The BLM inaccurately described the impact of inclusion of the segment in the NWSRS on water development and identified the need to consider additional upstream projects, such as renewable power and fisheries, proposed and under development on the mainstem of the Dolores that might be impacted. The BLM should confirm that conditional water rights would be affected in the same way as absolute water rights (i.e., not affected) and should inventory all existing conditional rights in order to accurately disclose the impact on water users.

Comments

Submission No: emc0675

Commenter: Adam Reeves, Southwestern Water Conservation District

Comment: 2. The Suitability Designation is premature given ongoing public processes. The BLM manual requires the agency to assess: The existing support or opposition of designation. Assessment of this factor will define the political context. The interest in designation or nondesignation by Federal agencies; state, local, and tribal governments; national and local publics; and the state's congressional delegation should be considered.

BLM has noted that the key stakeholder groups have not recommended suitability for the proposed segment. Nor does there appear to have been an effort to solicit or assess SWCD's or the Colorado congressional delegations views on this issue. Given the ongoing public processes which seek to put together a package of collaborative actions to address issues on the Dolores River, a suitability recommendation is premature at this time.

4. BLM inaccurately describes the impact of inclusion of the proposed segment within the NWRS on water development. The BLM Manual recognizes that suitability determinations should be consistent with, "other agency plans, programs, and policies in meeting regional objectives", and particular consideration should be given to activities which might "limit irrigation and/or flood control measures in a manner inconsistent with regional socioeconomic goals." In assessing this factor the Draft RMP/EIS notes, "additional storage and diversion projects are under consideration for portions of the San Miguel River located upstream from this segment."

It should be noted that there are also additional upstream project proposed and under development on the mainstem of the Dolores River that might be impacted including renewable power and fisheries projects.

Although BLM correctly confirms that existing absolute water rights would not be impact by inclusion with the WSRS except by virtue of sections 7(b) and (c) of the WSR Act. BLM should also confirm that conditional water rights would only be similarly affected. Moreover, BLM should inventory all existing conditional rights potentially affected in order to accurately disclose the impact on water users of a NWSRS designation.

Response

The BLM is required by law and by BLM manual guidance to complete a suitability determination as part of the land use planning process. During that process, the BLM strives to accommodate stakeholder

processes. A stakeholder process was convened to address this stream segment; the stakeholder group was not able to arrive at a consensus recommendation for suitability on this stream reach. To the BLM's knowledge, the Lower Dolores Plan Working Group is not attempting to address the portion of the Dolores River that is being addressed by this land use plan. The BLM is not aware of any other formal group that is attempting to develop collaborative actions for this portion of the river.

The BLM acknowledges that managing flows on the Dolores River is a critical part of the State of Colorado's participation in the Colorado River Compact and in providing future water supplies. The BLM's suitability decision is designed to maintain and enhance river-related values in the segment while simultaneously minimizing impacts to future water allocation decisions.

The BLM is not aware of a requirement to inventory and list all conditional water rights that could be impacted by designation of this stream in the NWSRS. There is an extensive portfolio of existing conditional water rights located upstream from this segment designed to accommodate future water supply needs in the basin. These water rights are senior to any federal right that would be created if the segment is ever legislatively designated. The BLM's suitable determination does not create any water rights, and therefore by definition cannot impact any upstream conditional water rights in the water rights priority system. Impacts could occur to existing upstream senior conditional water rights under Section 7 of the Wild and Scenic Rivers Act, if a stream segment is designated into the NWSRS. Section 7 prohibits federal agencies from permitting or assisting projects that diminish the free-flowing condition or degrade the ORVs within the portion of the river is designated. If the development of an upstream senior conditional water right is determined to have an impact on a designated downstream segment under the Section 7 criteria, then federal permitting and assistance for that project could be conditioned or denied.

Dolores River Instream Flow Appropriations

Summary

Additional information was provided for consideration regarding instream flow appropriations for the Dolores River and the San Miguel River, which provides the majority of the flow to the Dolores River. Instream flows upstream of the reach studied should be considered in the suitability evaluation.

Comments

Submission No: emc0622

Commenter: Suzanne Sellers, Colorado Water Conservation Board

Comment: In its Suitability Report (Appendix C of the Draft RMP/EIS), the BLM recognizes that the CWCB appropriated an instream flow (ISF) water right for the segment of the San Miguel River that contributes the majority of flow to the subject reach of the Dolores River. The CWCB's water court application for that ISF water right (Case No. 11CW129) is set for trial on June 3, 2013. The CWCB has settled the case with all but one opposer and hopes to obtain a decree for the proposed ISF this summer. The Draft RMP/EIS also recognizes that the pending San Miguel ISF will protect flows to the confluence of the San Miguel and Dolores Rivers (for up to 325 cfs). The Dolores River also has an existing ISF water right (decreed in Case No. 75CW1346 for 78 cfs) upstream of the subject reaches extending from McPhee Dam to the confluence with the San Miguel River. Although these ISF water rights do not overlap the subject reaches of the Dolores River, it is important to acknowledge that, at times, these ISF water rights may deliver significant flows to a point shortly upstream of the

subject reach. Further, the BLM acknowledges that "no significant new water supply or water storage projects have been proposed for this stream segment;" thus, without any such projects, the pending ISF water right on the San Miguel River and the existing ISF water right on the Dolores River should effectively maintain flows to support the water-related ORVs in the subject Dolores River reach.

Additionally, at the CWCB's January 30, 2013 ISF workshop, the BLM and Colorado Parks and Wildlife (CPW) verbally recommended a new ISF water right for the Dolores River from the confluence of the San Miguel River to Gateway for flows ranging from 132 cfs to 900 cfs, and are expected to submit a formal recommendation for this ISF water right sometime this summer. This proposed ISF reach overlaps the Sewemup reach that is recommended for suitability by the BLM. If decreed, this newly proposed ISF on the Dolores River would maintain some flows to support the water-related ORVs in that reach.

The CWCB believes that a suitability determination for the subject Dolores River reaches is not the best method for protecting this portion of the Dolores River corridor. The CWCB believes that the existing and pending ISF water rights on the San Miguel and Dolores rivers will provide adequate protections for the stream-flow related values in the subject segments. Further, the CWCB believes that the consensus-based recommended management provisions identified in the June 30, 2010 Stakeholder letter would adequately protect the non-stream flow related values associated with the subject Dolores River reaches.

Additionally, the CWCB understands that the BLM considers "Reasonably foreseeable potential uses of the land and related waters that would be enhanced, foreclosed, or curtailed if the area were included in the NWSRS. . ." In its analysis presented in the Suitability Report, the BLM acknowledges that the "ability to change existing projects and construct new projects upstream could be affected if the [Dolores River] segment were designated and included a federal reserved water right." This is particularly true for the state line reach. For these reasons, designation may impede the state's objectives 1) to fully use its entitlements under its compacts or decrees and 2) to promote maximum utilization of waters of the state.

Based on the foregoing, the CWCB requests that the BLM not find the state line reach suitable for inclusion in the NWSRS. Additionally, the CWCB requests that the BLM defer finding the Sewemup reach suitable while the CWCB works on: (1) processing the BLM/CPW joint recommendation to appropriate an ISF that encompasses a portion of the subject Dolores River reaches; and (2) coordinating with the stakeholder groups that provided input on the Dolores River to the three BLM field offices that address various reaches of the River in their Resource Management Plans.

Submission No: emc0924
Commenter: Megan Kram
Comment: TNC encourages BLM, accordingly, to create an opportunity within the RMP that allows for the reach of the Dolores River below the San Miguel confluence and upstream of the Colorado - Utah border to be addressed in a manner similar to the reach above the confluence. We believe there is value in this collaborative process that will yield an improved management approach and desirable outcomes for the river and all the values that are intricately linked to healthy flows.

Response
The BLM acknowledges that managing flows on the Dolores River is a critical part of the State of Colorado's participation in the Colorado River Compact and in providing future water supplies. The BLM's suitability decision is designed to maintain and enhance river-related values in the segment while

simultaneously minimizing impacts to future water allocation decisions. The BLM has determined that one segment of the Dolores River is suitable for inclusion in the NWSRS for the following reasons:

- Legislative designation of the stream reach could impact utilization of the waters of the state. However, it is extremely important to note that the BLM's decision does not comprise any sort formal designation into the NWSRS, and does not create any sort of the federal water right for the segment. The BLM decision is solely a land use planning decision and not a legislative decision.
- The BLM anticipates that the CWCB would consult closely with the Colorado Congressional delegation before any legislative designation were considered, and communicate any significant negative impacts for future water supply.
- There are several river segments in the state, including segments on Rio Grande, Dolores River, and Arkansas River, that have been in suitable status for more than two decades. The BLM is not aware of any circumstance statewide in which a suitability determination has resulted in impairment of the state's ability to develop water supplies or impaired the ability of individuals to utilize or change existing water rights.
- The BLM strongly supports use of the State's instream flow program to protect the flows needed to support the outstandingly remarkable values associated with this segment. The BLM acknowledges instream flow contributions from the San Miguel River and the pending instream flow recommendation on this reach. However, until an instream flow water right for this reach is decreed by the water court, there can be no guarantee of long-term protection for flow rates. In the interim, the BLM is required to make a decision that can best protect the outstandingly remarkable values. In its decision, the BLM is indicating its intent to rely upon the instream flow appropriation made by the CWCB during 2014 for support of the water-dependent ORVs.
- A stakeholder group fully discussed this section of the Dolores River and was not able to arrive at consensus with respect to a suitability determination. Since the stakeholder discussion, the BLM has received comments from parties who strongly support a suitability determination and from other parties, such as the CWCB and Southwestern Water Conservation District, who oppose a suitability determination. It does not appear that any stakeholder process is underway that will arrive at a consensus on the suitability issue. With the lack of consensus, the BLM is required to make a determination that will balance resource needs and water supply needs.

Overall, the BLM has not seen any tangible evidence within Colorado that a suitability determination significantly impairs use of compact entitlements. Rather, the suitability determination provides the BLM with a land use management standard and management focus that does not appear to significantly affect other uses of the stream corridor, including future water supply needs. The BLM has disclosed that if the river is ever legislatively designated, a junior federal water right would be created, but the impact of such a water right would be limited because it would be junior to a large portfolio of absolute and conditional water rights located upstream.

The BLM determined that the Dolores River segment adjacent to the Sewemup Mesa Wilderness Study Area is suitable because a "suitable" provides for optimal management of the ORVs. The BLM believes that the strict land management standards associated with a suitability determination, combined with the

proposed state-based instream flow water right to support flow-dependent values, will assure long-term maintenance of the ORVs. To support this long-term partnership approach, BLM's suitable determination includes the following finding: If the Colorado water court system decrees an instream flow water right for the lower Dolores River in the locations, flow rates, and timing appropriated by the CWCB at its March 2014 board meeting, and if the instream flow right is vigorously enforced by the CWCB, the BLM does not believe it would be necessary to quantify, assert, or adjudicate a federal reserved water right if this segment is ultimately designated into the National Wild and Scenic Rivers system. Please see Appendix C, page 3-35.

The BLM determined that the Dolores River segment at the Colorado-Utah border is not suitable for the following reasons:

- In its comments, the State of Colorado expressed significant concern about having a suitable segment on the Dolores River located at the Utah-Colorado border. If this river segment at the state boundary were to be designated into the National Wild and Scenic Rivers System, the designation would include a federal reserved water right. The federal reserved water right would entail certain flow rate requirements to maintain the outstandingly remarkable values identified by the BLM. The State of Colorado expressed concern that the federal reserved water right requirements at the state boundary could conflict with the state's water obligation deliveries to downstream states pursuant to the Colorado River Compact, and could conflict with the state's ability to fully develop its water entitlement under the compact.
- The BLM concluded that this potential conflict with state plans and objectives was significant enough to warrant a change from "suitable" to "not suitable", thereby reducing the number of suitable river miles along the Dolores River.

To maintain the river-related values identified for the state boundary segment, the BLM intends to manage this segment under an Area of Critical Environmental Concern designation and under Special Recreation Management Area designation. The BLM has crafted the ACEC and SRMA designations to have similar management objectives as the management standards that are associated with a "suitable" determination.

Dolores River Outstandingly Remarkable Values

Summary

The outstandingly remarkable values are inconsistent with the preliminary classification of the stream segment.

Comments

Submission No: emc0675

Commenter: Adam Reeves, Southwestern Water Conservation District

Comment: 1. The identified ORV's for the 11.53 miles of the Dolores River identified as suitable for inclusion in the WSRS in the Draft RMP/EIS are inconsistent with the preliminary "Recreational" classification.

The RMP/EIS identifies native fish populations as among the ORV's to be protected. This is inconsistent with a recreational classification. Including native "fish" among the ORV's for a recreational river when the species of concern in no way serve recreational interests appears an impermissible attempt by the federal government to obtain a federal reserved water right for a native fishery for which it lacks any statutory authority under either Colorado or federal law. In light of the ongoing consensus based approaches to address this "ORV" this effort is likely to dampen the enthusiasm of local stakeholders which has prevailed heretofore and may result in strong opposition to any effort to obtain congressional designation. For this reason SWCD urges BLM to remove the native fishery as among the ORV's supporting the suitability determination.

3. By its own admission a suitability designation adds little additional protection to the proposed segment that BLM can't achieve under other authorities. With respect to the fish and recreation ORV's the Colorado Water Conservation Board is exclusive authority authorized to obtain a state property right to protect water for instream purposes to conserve the natural environment to a reasonable degree and only local governmental entities enjoy some limited authority to obtain in-channel water rights for limited recreational purposes. Accordingly, suitability does little to protect either the Recreational or Fish ORV's.

With respect to the Scenic and Geologic ORV's BLM has noted that the areas proposed for suitability generally abuts either Areas of Critical Environmental Concern or Wilderness Study Areas which provide more than adequate protection for these values. BLM has identified no way in which the Paleontology ORV would be protected by inclusion in the WSRS. Indeed, the increased visitor day which BLM anticipates as a result of any suitability determination will undoubtedly degrade the resource as additional visitor view and either inadvertently or deliberately disturb these resources.

Response

The preliminary classifications for eligible stream segments (i.e., wild, scenic, and recreational; defined by Section 2(b) of the Wild and Scenic Rivers Act) are independent of and do not reflect the outstandingly remarkable values (described in Section 1(b) of the Wild and Scenic Rivers Act). As such, they cannot be in conflict with each other.

The stream classification is a description of the degree of development along the river. The following description is from Section 2(b) of the Wild and Scenic Rivers Act:

> "Wild" river areas – Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
>
> "Scenic" river areas – Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places of roads.
>
> "Recreational" river areas – Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Outstandingly remarkable values are the river-related natural, cultural, and recreational resources. The "recreation" classification does not imply that recreationists are fishing for the native fish populations.

Rather, the "recreation" classification describes the level of development within the river corridor. No change has been made to the Proposed RMP/Final EIS.

Colorado River Segment 3

Summary

The BLM should find Colorado River Segment 3 to be suitable for inclusion in the National Wild and Scenic Rivers System unless/until Congress acts on the boundary changes. An alternative approach would be a deferral of any BLM decision about Segment 3 suitability until Congress acts on the boundary changes. Any finding short of suitable (made after Congress has acted on the boundary adjustments) should be considered only so long as strong, reliable protective measures (under the RMP or in other contexts) remain in place. The NCA is insufficient because it cannot permanently protect the river from federally licensed water projects.

Comments

Submission No: emc0865
Commenter: Scott Seibold
Comment: Colorado River Segment 3
The stakeholders group submitted (to the BLM and to Colorado congressional representatives) a two-part recommendation for Colorado River Segment 3:

1) The group recommended a detailed set of management and protection measures (to accompany measures already in place in other contexts), accompanied by an interim finding of not-suitable for this river segment(through 2014). This portion of the recommendation is based in a key caveat: " . . . Assuming these administrative measures are implemented and remain in place. . . " (stakeholders letter to the BLM, June 2010, emphasis added). A finding of not suitable, interim or otherwise, is appropriate only so long as existing and proposed protective measures remain in place; if those measures either are removed or are not fully implemented, a finding of suitability is required.

2) The group recommended legislation adjusting the riverside boundaries of Colorado Canyons National Conservation Area and Black Ridge Canyon Wilderness, to the river's edge (changing with river level) in order to simplify manageability of the NCA and wilderness and to enhance protection of natural values for which those designations were legislated.

Both these portions are integral to the group's recommendations, and should not be cited or considered separately.

In the three years since these recommendations were submitted "to the BLM and to Congress" no action has been initiated on part 2) above, by any member of the Colorado congressional delegation or by any other member of Congress.

The two parts of the recommendation inform, and rely on, each other. More specifically, the stakeholders' consensus agreement that the segment be found not suitable (as an interim measure) is applicable only if and when the NCA and wilderness boundary changes are implemented; a loss of suitability (and eligibility) under a final RMP

would remove the incentive to implement the boundary changes, and it thus would not accurately honor or fulfill the stakeholder recommendations.

A finding of w&s not suitable is not appropriate unless and until Congress has acted to adjust the boundaries of the NCA and wilderness as recommended.

Primary comment: Correspondingly, the BLM should find Colorado River Segment 3 to be wild & scenic suitable unless and until Congress acts on the boundary changes. An alternative approach, less comforting but probably acceptable, would be a deferral of any BLM decision about Segment 3 suitability until Congress acts on the boundary changes. Any finding short of wild & scenic suitability (made after Congress has acted on the boundary adjustments) should be considered only so long as strong, reliable protective measures (under the RMP or in other contexts) remain in place.

Submission No: rmc0058
Commenter: Larry Bullard
Comment: The Colorado River, specifically segment 3, which runs through the NCA. I found it disturbing that the documents I reviewed speak specifically about the use of kayakers, rafters and canoeists. I found no mention of the significant use and history concerning sportsmen who utilize this area. The Loma Boat Ramp which gives primary access to this area is a property belonging to the Colorado Parks and Wildlife. It was paid for with sportsmen funds. Power boats have been in constant use on this river prior to rafting becoming a popular sport. PUC permits were issued in the 50s and 60's specifically for tourist transport and hunting by motorboat on this water way. This water way is a navigable waterway for motorized traffic and has historically been so.

Response
The BLM Wild and Scenic Rivers Manual 6400 requires the BLM to consider management approaches that might serve as an alternative to a suitability determination and potential inclusion in the National Wild and Scenic Rivers System. The objective is to identify the optimal management approach for the river corridor. The suitability analysis requires the BLM to assess the current status of the river corridor, the likelihood of various types of development, and management issues that could arise within the river corridor. For the streams determined to be not suitable, the BLM concluded that the likelihood of federally licensed water project is remote based upon current conditional water rights and future water supply projects identified in Colorado's Statewide Water Supply Initiative. On such streams, complementary protective designations, such as NCAs, are often highly effective tools for managing ORVs. The BLM has modified the suitability report to note that the McInnis Canyons NCA boundary changes proposed by the stakeholder group have not yet been implemented (see Appendix C, page C-23). In the interim, the BLM believes that land use plan management prescriptions found in this plan and in the McInnis Canyons NCA land use plan do provide strong, reliable protective measures for the ORVs. Until such time that the boundary of the NCA is legislatively modified, the BLM will monitor proposed land use activities within the river corridor. The BLM will initiate a land use plan amendment to re-evaluate the suitability of the segment, based upon significantly changed circumstances, if the two following conditions are met:

- A major water diversion or storage project is proposed within this river segment, but outside of the boundaries of the NCA.
- The project would potentially degrade the ORVs associated with this segment to a significant degree.

Appendix C has been updated to include the historical information about Colorado River Segment 3 provided by the commenter (see page C-17). However, for the reasons listed above, the suitability determination has not been changed.

Dolores River, Colorado River Segment 3, East Creek, West Creek, North Fork West Creek, and Ute Creek

Summary

The Stakeholder Group specifically expressed its intention that the outstandingly remarkable values for Dolores River, Colorado River Segment 3, East Creek, West Creek, North Fork West, Creek, and Ute Creek should receive long-term protection, regardless of the suitability determination. Implementing protective measures should not be used as a justification for findings of "not suitable." These segments should be found suitable; if not, the catalog of the outstandingly remarkable values themselves will be muddied.

Comments

Submission No: emc0865

Commenter: Scott Seibold

Comment: [Refers to Dolores River, Colorado River Segment 3, East Creek, West Creek, North Fork West, Creek, and Ute Creek.] While the preferred alternative professes to maintain many of those ORVs through means other than w&s eligibility or suitability status and corresponding protective measures, the catalog of those values themselves gets muddied if eligibility is lost. The draft RMP (at Volume I, Chapter 3, page 3-215) notes that, "While there are no management measures currently in place to specifically protect the free-flowing nature and outstandingly remarkable value(s) of eligible stream segments, overlapping ACECs, Wilderness or WSAs, SRMAs, and stipulations for oil and gas leasing . . . provide protection to the areas."

The draft RMP also variously notes (at Volume I, Chapter 2, page 2-367) that, "If WSR protection is not provided (i.e., if segments are found not suitable or Congress releases them from WSR consideration), provisions may still remain to protect these river corridors under a combination of existing plans and policies and actions proposed under the action alternatives of this RMP . . . Decisions in this RMP, however, affect suitability only . . . Under a not suitable determination, all interim protections associated with the WSR Act are eliminated."

Management prescriptions included in the preferred alternative, and in certain other draft RMP alternatives, for the stream segments listed above closely approximate the management and protection recommendations submitted by the Lower Colorado Wild and Scenic Stakeholders Collaborative (2009-2010). Similarly, the preferred and other alternatives include management and protective measures recommended by the stakeholders a total of eight streams.

It is important to note that the stakeholders intended that those recommendations for streams and their corridors be implemented whether the respective stream segments are found suitable or found not suitable. Correspondingly, BLM's implementation of those management and protection recommendations should not be used as justification for any findings of not-suitable for the stream segments listed above.

Submission No: emc0865
Commenter: Scott Seibold
Comment: The stakeholders group specifically expressed its intention that the outstandingly remarkable values, identified in the BLM's eligibility report, should receive long-term protection:

"The group seeks to outline management options to recommend to the Bureau of Land Management (BLM) as a means of maintaining not only the outstandingly remarkable values (ORVs) that the agency has identified but also stakeholder uses and values that currently exist along these stream segments." (stakeholders' letters to the BLM, 2009-10, emphasis added)

Submission No: emc0865
Commenter: Scott Seibold
Comment: The BLM should find wild & scenic suitable all eligible stream segments, except those on which the stakeholders group reached consensus recommendation for not suitable. In particular, all eligible segments of Dolores River, Colorado River 3 (with special considerations noted below), East Creek, West Creek, North Fork West Creek, and Ute Creek should be found suitable and actively managed to protect the outstandingly remarkable values identified. The BLM should reconsider wild and scenic suitability decisions made in the final RMP if, in the future, circumstances, programs, and measures on which w&s values are dependent for protection change.

Submission No: emc0865
Commenter: Scott Seibold
Comment: East Creek. The outstanding geological features and sub-surface hydrological features (seeps and springs) of Unaweep Canyon warrant the highest possible level protection for those riverrelated values. The significance of those values, and the importance of protecting them, are enhanced by the extrapolation that this distinctive canyon was actually formed by an ancient version of either the Dolores River or Colorado River. The canyon's scenic values, readily accessible and visible via Highway 141, enhance the popularity of the area and further warrant strong protections for the stream and stream corridor.

Primary comment: Wild & scenic suitability is fully warranted for the eligible segment of East Creek, and it provides the strongest and most reliable form of protection for the values there. The eligible segment of East Creek should be found suitable and actively managed to protection the outstandingly remarkable values identified.

Submission No: emc0865
Commenter: Scott Seibold
Comment: West Creek
With four specifically identified outstandingly remarkable values, West Creek through Unaweep Canyon requires the highest possible level protection for those river-related values. This portion of Unaweep Canyon includes the signature Unaweep Seep and extensive network of riparian seeps and springs that both enhance that corridors scenic appeal and provide habitat and sustenance of a remarkable variety of vegetation unique to the region. The canyon's scenic values, readily accessible and visible via Highway 141, enhance the popularity of the area and further warrant strong protections for the stream and stream corridor.

While a portion of the area has been identified, in the draft RMP preferred alternative, as lands with wilderness characteristics, supplement protection for the creek and corridor-under wild & scenic suitability -is a crucial companion measure.

Primary comment: Wild & scenic suitability is fully warranted for the eligible segment of West Creek, and it provides the strongest and most reliable form of protection for the values there, a key companion measure for lands with wilderness characteristics. The eligible segment of West Creek should be found suitable and actively managed to protection the outstandingly remarkable values identified.

Submission No: emc0865
Commenter: Scott Seibold
Comment: North Fork West Creek
The scenic values found along North Fork West Creek are enhanced and complemented by the astounding variety of vegetation found along the creek, creating an environment unique not only within the larger Dolores watershed but across all of western Colorado. Wild & scenic suitability provides the best, most fitting, and most reliable form of protection for these important and unique values.

The very fact that North Fork West Creek flows through, and significantly helps define, the BLM-identified Palisade Wilderness Study Area fully warrants continued protective management under wild & scenic suitability status. A wilderness stream deserves and justifies all levels and forms of protection available, including suitability.

Primary comment: The eligible segment of North Fork West Creek should be found suitable and actively managed to protection the outstandingly remarkable values identified and to enhance protection for The Palisade Wilderness Study Area.

Submission No: emc0865
Commenter: Scott Seibold
Comment: Ute Creek
If ever there were a stream qualified for wild & scenic suitability, Ute Creek serves as a prime and outstanding example. The creek's narrow, virtually inaccessible canyon preserves a complex river-related habitat that affords healthy ecological function, outstanding opportunities for research, and an unparalleled sense of remoteness for the rare visitor. Classic stands of diverse-aged native cottonwood anchor both the ecology and the scenic charm of the corridor.

Ute Creek also traverses citizen-proposed wilderness, identified and documented using the BLM's own wilderness inventory criteria. Although overlooked during the BLM's selection of wilderness study areas thirty years ago, this area is fully qualified for WSA and wilderness status. Correspondingly, the stream that helps define, and has helped from, the wilderness warrants the strongest area protections possible. While a portion of the area has been identified, in the draft RMP preferred alternative, as lands with wilderness characteristics, supplement protection for the creek and corridor -under wild & scenic suitability- is a crucial companion measure.

Submission No: emc0865
Commenter: Scott Seibold
Comment: Wild & scenic suitability is fully warranted for the eligible segment of West Creek, and it provides the strongest and most reliable form of protection for the values there, a key companion measure for lands with wilderness characteristics. The eligible segment of Ute Creek should be found suitable and actively managed to protection the outstandingly remarkable values identified.

Submission No: emc0813
Commenter: Mike Fiebig, American Rivers
Comment: 1. Overlapping protective designations such as the National Conservation Area surrounding Ruby/Horsethief Canyons on the Colorado River are insufficient to protect a stream's free-flowing character, water quality, and ORVs. The only designation that can permanently protect a stream from federally licensed water projects is designation under the Wild and Scenic Rivers Act and incorporation into the National Wild and Scenic Rivers System (NWSRS). Overlapping protective designations are complementary and should add to a river's suitability for Wild and Scenic protection rather than subtract from it.

2. Neither the potential for development of conditional water rights, nor the lack of state reserved in-stream flows for a section of river, are valid reasons for finding a river to be "not suitable" for protection under the NWSRS, especially when the agency also argues in many instances that the Colorado River Recovery Program functions to ensure that adequate flow regimes exist to support the four endangered fish species in the Colorado River. Likewise, it is a land manager's duty to identify those special areas that should be preserved in their free-flowing state into the future. There are many areas outside of Wild and Scenic eligible stream reaches that could be used to develop valid and existing water rights.

3. Local collaborative concerns about designating stretches of river under the NWSRS are insufficient to find a national, publicly owned and managed river to be "not suitable" for protection under the NWSRS, and need to be balanced within a robust process that also takes into consideration the full contingent of state, regional, and national stakeholders who use and care about these rivers and trust the BLM to represent their interests as well.

Response
In the meetings attended by BLM personnel, it was clear that the stakeholders were discussing management tools that could serve as alternatives to a suitability determination. The BLM does acknowledge that the stakeholders believed that such tools should be implemented regardless of the ultimate suitability determination in the BLM land use plan. Questions that the suitability study is designed to answer include: Will the river's free-flowing character, water quality, and outstandingly remarkable values be protected through designation? Is designation the best method for protecting the river corridor? In answering these questions, the benefits and impacts of WSR designation must be evaluated and alternative protection methods considered (Draft RMP/EIS at C-2-1). The Draft RMP/EIS did include an alternative in which all of these stream segments are found suitable, and it also included an alternative that identified impacts associated with determining that all of the segments are not suitable. Based upon this analysis of impacts, the BLM determined that other management options could be implemented without significant negative impacts on the ORVs. No change has been made to the Proposed RMP/Final EIS.

One comment appears to misinterpret information in the suitability report for Colorado River Segment 3. When information about the potential for development of conditional water rights and the status of state-based instream flow water rights is presented, the reader should not conclude that such information was a critical rationale for determining that the segment is not suitable. Rather, the key rationales are listed in the section titled "Preliminary Suitability Determination." In the final suitability report, the BLM has clarified the "Preliminary Suitability Determination" section to note that flows receive substantial protection from the Colorado River Recovery Program despite the lack of a state-based instream flow water right. In addition, the final suitability report has been clarified to note that despite the existence of conditional water rights in the segment, the land use plan management

prescriptions for BLM-administered lands both within and outside McInnis Canyons NCA would prohibit the BLM from authorizing water development projects that would dam the segment or export major volumes of water from the segment. See Appendix C, page C-25.

Protective Measures

Summary
The stakeholders identified certain existing programs, protective measures, water management agreements, and special status species as essential to the continued protection of the outstandingly remarkable values found in and along eligible wild and scenic streams. If any those programs and measures are changed or discontinued in the future, with the potential to negatively affect the identified outstandingly remarkable values of the streams and their corridors, the BLM must then reconsider suitability decisions made in the Proposed RMP.

Comments
Submission No: emc0865
Commenter: Scott Seibold
Comment: It is also very important to note that the stakeholders identified certain existing programs, protective measures, water management agreements, and special species status "all beyond the direct purview of the BLM" as essential to the continued protection of the ORVs and other values found in and along w&s eligible streams. If any those programs and measures are changed or discontinued in the future, with the potential to negatively affect the identified ORVs and other values of the streams and their corridors, the BLM must then formally reconsider w&s suitability decisions made in the final RMP.

Response
If there is a change to existing programs managed by other entities, and those changes result in reduced or inadequate protection for the ORVs, the BLM has the discretion to implement a land use plan amendment to reconsider suitability for that stream segment. No change has been made to the Proposed RMP/Final EIS.

6.2.4.15 Public Health and Safety

Summary
There are public safety concerns regarding shooting in the North Fruita Desert SRMA and other areas.

Comments
Submission No: rmc0007
Commenter: Lori Buck, Mayor of the City of Fruita
Comment: Finally, the City of Fruita would encourage the BLM to make safety considerations regarding shooting areas mixed with other use areas. While we support an individual's right to bear and use firearms, we also understand that hiking and biking in shooting areas could create unsafe environments. According to BLM provided statistics, there was an estimated 67,480 visits in 2011 to the NFD and it was estimated that 85%-90% of those visitors were mountain bikers. The City does not desire to ban shooting in the NFD SRMA but does encourage further review and thought of mixed uses, in particular in the Mountain Bike Emphasis area.

Response
The Draft RMP/EIS considered a range of alternatives designed to meet the BLM's legal duties and purpose and need for action.

In accordance with the NEPA, the BLM has considered a range of alternatives regarding target shooting in the North Fruita Desert SRMA, ranging from a prohibition on the discharge of firearms in certain areas to allowing target shooting in designated areas (see Draft RMP/EIS, Appendix K, pages K-26 and K-27). The BLM agrees that the use of firearms, particularly in the mountain bike emphasis area which receives a high level of concentrated use, constitutes a public safety issue. No change has been made to the Proposed RMP/Final EIS.

6.2.4.16 GIS Data

Summary
Commenters request GIS data for Wild and Scenic Rivers and suggest that there are errors in the GIS data displaying land status, wildlife habitat, and areas leased for fluid mineral leasing.

Comments
Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: Figure P-5 is incorrect. For the areas shown near the McClane Canyon Mine it is hatched as not currently leased and available for lease, that is wrong. The areas had shown as available for lease should be changed to 'currently leased'.

Submission No: emc0469
Commenter: Suzanne Sellers, Colorado Water Conservation Board
Comment: Also can you provide me with an exact description of the 11.53 miles (rather than the 19.9 miles)? If the description is too complicated, is it possible to obtain a GIS shape file with the exact river segments being recommended under Alternative B?

Submission No: emc0930
Commenter: Ray Moores
Comment: Figure 2-42 Alternative A: No Surface Occupancy of Surface Disturbing activities. This map is incorrect. It insinuated that private lands north east of Gateway which BLM does not own are actually controlled by BLM. Please update the property boundaries on the map.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Grazing. Appendix A, Figure 2-11 Grazing allotments: Alternatives A and D show that the area around Jerry Creek as open to grazing. Grazing on this allotment was retired when Encana purchased the grazing allotment as a part of their habitat mitigation work for constructing their oil and gas pipeline. CPW believes that all of the alternatives and maps should depict this allotment as having a limitation on grazing.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Fig 3-11 Elk Range. This map appears to be missing some mapped elk severe winter range. The area of winter range that is missing is along Mesa County V Road in the area known as the Sunnyside. The polygon that is missing is about 19,176 acres. CPW recommends correcting the Elk Range map to include the missing polygon. CPW recommends that all references to deer in the RMP be specific and use the term mule deer throughout the document.

Response
The BLM has and will continue to make GIS datasets available. The RMP uses some datasets that contain sensitive data, such as known location of sensitive species and cultural sites, or are administered and owned by other agencies, such as CPW. GIS data used in the Draft RMP/EIS was made available on the GJFO RMP website at http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp/Appendix_A_files.html.

The wildlife maps will be updated to coincide with CPW data updated in late 2012.

Figure P-5 in the Draft RMP/EIS, now Figure 4-5 of the Proposed RMP/Final EIS, has been corrected and updated to better explain what it displays.

The Heely Allotment (around Jerry Creek) was purchased and relinquished to the BLM by Encana. Because it was not closed through a RMP amendment, it is shown as open in Alternative A. It is the BLM's intention to retire the grazing on this allotment. If circumstances change regarding grazing, Encana will be notified via certified mail and given first right of refusal. No change has been made to the Proposed RMP/Final EIS.

GIS data depicting land status and areas leased for fluid mineral development were developed using the best available information and "frozen" in April 2010 in order to ensure consistent data support for the alternatives development process and subsequent impact analysis. As stated in Section 2.1, GIS data are used for comparison and analytic purposes only. The proposed decisions in the RMP are contained in Table 2-1 and the appendices. Section 2.1 states:

> Data from geographic information systems (GIS) have been used in developing acreage calculations and for generating many of the figures in Appendix A. Calculations are dependent upon the quality and availability of data and most calculations in this RMP are rounded to the nearest one hundred acres. Given the scale of the analysis, the compatibility constraints between datasets, and lack of data for some resources, all calculations are approximate and serve for comparison and analytic purposes only. Likewise, the figures in Appendix A are provided for illustrative purposes and subject to the limitations discussed above. The BLM may receive additional GIS data; therefore, acreages may be recalculated and revised at a later date.

GIS data may be updated in the future, as needs arise, and adopted via plan maintenance. No change has been made to the Proposed RMP/Final EIS.

Route Designation Maps

Summary
Routes should be shown as they cross private property on all maps rather than not being shown at all.

Comments
Submission No: rmc0053
Commenter: John Martin, Garfield County
Comment: Additionally, and regardless of demonstrated ownership, the Board requests that access routes be shown as they cross private property on all maps rather than not being shown at all. (See Exhibit F containing seven examples of this concern where the BLM access route disappears across private land. A large County Road and Route Map is attached as Exhibit G that shows an even greater amount of these disconnects as well as locked gate data from County research completed in 2001.) If the BLM claims not to have management authority of these sections across private property, the County requests they indicate such on the maps while still showing the physical access route through those lands.

Response
Routes that access private property are shown as gray. Maps in the Proposed RMP/Final EIS have been changed to make these routes more visible.

6.2.4.17 Socioeconomics

Geographic Focus

Summary
The baseline sociological data is skewed toward Mesa County when the planning area includes land in three additional counties.

Comments
Submission No: emc0896 and emc0696 and emc0971
Commenter: Zach Harsh; Bradley Schluter; and Travis Lindsey
Comment: The RMP provides extensive analysis of many social factors for Mesa County but similar analysis is not provided for Garfield County and at no point are the possible impacts from changes in economic contributions related to these social factors despite obvious relationships of some factors such as spending and employment or tax revenue.

Response
While a small portion of the GJFO in this RMP is in Garfield County, it was determined that the BLM lands in the GJFO were not immediately proximate to major populated communities such as Rifle or Glenwood Springs. While there certainly is some effect from this RMP on the social settings of surrounding counties such as Garfield, Rio Blanco and Delta; the social impact studies were limited to communities within or immediately adjacent to the GJFO planning area. This is consistent with the social impact research in other RMPs around the state.

Outdated Baseline Data

Summary
The baseline data used to inform the analysis is outdated.

Comments
Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Socio-economics. Generally the entire socio-economics section should be updated using 2010 Census data. Old employment & unemployment data is also used in the DRMP (2000-July 2009). Population projections need to be updated using latest Colorado Demographers Office projections of much slower growth rates.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Population section -entire section should be updated using 2010 Census data.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Old employment & unemployment data used (2000-July 2009) - should update.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Update population projections using latest CDO figures (much lower now).

Response
The socioeconomic data in Chapter 3 was the most updated information available at the time the draft was written and sent out for public comment. All socio-economic data were revised once to reflect changes in economy after 2008 recession.

6.2.5 Direct and Indirect Impacts

6.2.5.1 Air Quality

Control Efficiency

Summary
The Draft RMP/EIS air resources impact analysis failed to disclose how the BLM will enforce a control efficiency of 50 percent for fugitive dust control from pad, road, and pipeline construction.

Comments
Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Chapter 4. page 27. Fugitive Dust Control: Fugitive dust control from pad, road, and pipeline construction using frequent watering and speed control with an assumed control efficiency of 50 percent.

COMMENT: The BLM arbitrarily proposes a 50 percent control requirement; Oxy is uncertain how this will be enforced and requests clarification. For instance, given that EPA uses AP-42 emission factors to determine control efficiency based on watering, how does the BLM intend to enforce this control requirement?

Response
The 50 percent standard is accepted by the state and federal agencies for watering controls. The Western Regional Air Partnership Fugitive Dust Handbook shows the PM_{10} control efficiency for water application on unpaved roads ranges from 10 percent to 74 percent. The BLM uses the acceptable (i.e., accepted by CDPHE and EPA) 50 percent dust control efficiency assumption for water application. Multiple Colorado-based near-field modeling assessments show that dust emissions controls are required in order to protect air quality. The BLM will make determinations and requirements for the use of watering as part of BMPs and COAs at the project-level stage. No change has been made to the Proposed RMP/Final EIS.

Prescribed Fire

Summary
The Draft RMP/EIS air resources impact analysis incorrectly stated that with less prescribed burning, the emissions from fire will go down.

Comment
Submission No: emc0930
Commenter: Ray Moores
Comment: Chapter 4-Pages 4-34 and 4-38 The authors assert that with less prescribed burning the emissions from fire will go down. However, on page 4-68 the authors state that with less fuel management fires that do happen will be larger and likely result in greater emissions. The analysis seems to be inconsistent.

Response
Verbiage on page 4-38 of Chapter 4 has been revised to correctly state that prescribed fire impacts are increased under Alternative C. Page 2-147 of Chapter 2 states that priority is given to using planned (i.e., prescription) fire over unplanned wildfire. The BLM is not able to predict emissions from wildfires because fire starts are speculative; there are too many variables to accurately predict. Therefore, the analysis uses the same number of wildfires in 2021 as base year fires. As stated in the AQTSD, mechanical treatments for Alternative D decrease the least relative to the base year. According to the calculations, mechanical treatments cause higher emissions compared to prescribed burns. Though it is true that Alternative D proposes the least amount of prescribed burning, it would have the highest amount of mechanical treatments, and thus the greatest emissions of any of the alternatives.

Impacts Outside of the Planning Area

Summary
The Draft RMP/EIS air resources impact analysis failed to disclose that emissions resulting from BLM activities within the planning area also have the potential to adversely impact air quality resources

downwind and outside of the planning area, including the potential effects of implementing each alternative on the Maroon-Bells-Snowmass Wilderness.

Comments
Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 4-16, Summary of Impacts and Conclusions. The first paragraph in this section indicates that the BLM's analysis looked at air quality impacts within the RMPPA. Please modify this section to include a statement that recognizes that emissions resulting from BLM activities within the RMPPA area also have the potential to adversely impact air quality resources downwind and outside of the RMPPA.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 4-17, second bullet
We could not find any data to support the statement that implies that only Alternatives B and D would have the potential to adversely impact air quality related values in the Maroon-Bells-Snowmass Wilderness. Without modeling emissions impacts from each of the four alternatives, this statement is not well supported as it is possible that Alternatives A and C may also result in adverse air quality impacts. Please modify the statement in this section to more accurately state that the risk of visibility degradation increases with the amount of emissions such that Alternatives B and D have a higher potential to impact visibility and other air quality related values in downwind Class I and sensitive Class II areas.

Response
The BLM's role in air resource management includes ensuring that BLM activities, programs, and projects comply with applicable air quality standards and that BLM-authorized activities comply with conditions and stipulations in leases and permits. This work is accomplished through interagency coordination, participation in state implementation plan development and processes, collecting and acquiring data, modeling air quality impacts, monitoring changes in air resource conditions, performing environmental impact analyses as required by NEPA, and implementing adaptive management practices as outlined in BLM Handbook H-1601-1.

The BLM is also responsible for analyzing impacts from RMP management actions to the nearby airsheds, which can be a larger area than BLM planning area. Updates to Section 4.3.1 include information on potential impacts on air quality resources downwind and outside of the planning area, including a greater discussion of potential impacts on air quality related values in Class I and Class II areas.

Grand Valley Airshed

Summary
The Draft RMP/EIS air resources impact analysis should have included a definition/delineation of the Grand Valley Airshed and include specific air quality impact evaluations for proposed projects within the Airshed, particularly oil and gas development projects.

Comments

Submission No: Emc0847

Commenter: Bo Meulengracht, Trout Unlimited

Comment: TU believes the discussion and analysis on air quality is dated and does not consider recent findings on air quality from studies conducted in Colorado on impacts from oil and gas development since 2008. Increases in methane emissions from increased development must be part of the analysis. Flaring activities and increased dust from road development must also be more thoroughly analyzed. In Table 2- 5, Alternative B should be recognized as having greater air quality emission issues than Alternative A or C, due to the higher number of oil and gas wells and acreage available for development.

Submission No: Emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: The BLM should update the information regarding the EPA's regulation of greenhouse gas emissions from oil and gas production facilities, Appendix A of the GJ RMP ARTSD utilize the API compendium for GHG emission estimates. There are updated GHG emissions from 40 CFR Part 98. Also, although not specific to greenhouse gases, the EPA issued significant new regulations regarding oil and gas related emissions on August 16, 2012, which will reduce emissions GHG emissions from oil and gas activities. 77 Federal Register 49,490 (Aug. 16, 2012) (to be codified at 40 C.F.R. parts 60 and 63).

The BLM indicates that under Alternative B, 50% of drilling and completion fluids will be delivered and disposed of through overland pipes and liquids gathering systems. GJ DRMP/EIS, pg. 4- 32. Three-phased gathering systems have been shown to have an environmental benefit by reducing the site footprint, lowering truck traffic, and reducing well site emissions. However, three-phased systems are not always possible and the various terrains in Colorado make these systems very difficult to build except under ideal conditions. Typical, three-phase gathering systems require that all the wellheads are either at the same elevation or higher than the gathering station. If the system doesn't have sufficient "fall" the wellhead pressures are often not strong enough to push the liquids uphill or over rough terrain. As a result, large pumping systems and localized field stations would be required. The varied terrain and huge elevation differences may prohibit the use of three-phase gathering systems on 50% of federal oil and gas leases within the Planning Area.

Submission No: cfc0122

Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee

Comment: The MCAQPC recommends the BLM include a definition/delineation of the Grand Valley Airshed and include specific air quality impact evaluations for proposed projects within the Airshed. Mesa County Resolution MCM 97-184 (Attachment B) defines this airshed as 'that area in Mesa County… which falls below 6,000-foot.' Local geography and meteorology within the valley create unique dispersion conditions that may require more stringent modeling evaluations and more enhanced emission controls than development planned for areas outside of the designated airshed. In addition, the proximity to the relatively large population base within the Valley suggests additional scrutiny on the air quality impacts of development projects in this area. These evaluations should not be limited to any one use for the land, such as leasing for Oil and Gas extraction, but instead should apply to all potential uses of land managed by the BLM. It should be noted that all SLAMS ambient air quality monitoring is currently limited to areas within the Airshed and that data may not accurately represent areas covered by the RMP that are located outside the designated Airshed.

Response

In accordance with FLPMA, BLM authorizations should provide for compliance with substantive environmental laws, including the Clean Air Act. Because the RMP does not actually authorize any oil

and gas development, any proposed project would be subject to additional analysis of possible air effects before approval. Site-specific NEPA air quality analyses, including modeling, as appropriate, would be done when specific projects are put forth by potential proponents. In addition, photochemical grid modeling is being performed as part of a unified regional air quality modeling study to address the air quality and air quality related values (air quality/air quality related value) impacts due to development activities within the GJFO planning area as well as all of BLM Colorado's development activities (see discussion of the CARMMS effort, below). As stated above, no development of a new or modified source of air pollutants would be allowed to proceed unless it could be demonstrated that the proposed source or facility will not prevent attainment or maintenance of any state or federal ambient air quality standard.

Chapter 4 has been updated to reflect the understanding that liquids gathering system feasibility is dependent on project-specific considerations. See pages 4-32, 4-36, and 4-41.

The emissions inventory includes criteria air pollutants, hazardous air pollutants, and greenhouse gas emissions, including methane. Flaring emissions and control have been included in the analysis along with road dust emissions resulting from oil and gas development. Impacts are discussed for air quality in terms of the potential impacts based on the emission inventory estimates. A full air quality modeling study is needed to estimate actual air quality impacts resulting from development under different alternatives. The CARMMS is intended to fill this gap and directly address air quality impacts associated with different management actions across multiple field offices. No change has been made to the Proposed RMP/Final EIS.

The effects of EPA's Subpart OOOO regulations have been included in the inventory and the usage of API compendium emission rates is limited to nitrous oxide emissions which are typically very small relative to methane and carbon dioxide emissions in oil and gas inventories. No change has been made to the Proposed RMP/Final EIS.

The CARMMS analysis includes the Grand Valley Airshed and discloses regional air quality impacts at locations within the airshed. There are no plans to specifically delineate the boundary of the Grand Valley Airshed within CARMMS because the analysis is at a regional scale. Analysis of CARMMS results has been added to Section 4.3.1. The emissions inventories developed for CARMMS consider more than just oil and gas emissions; emissions from coal mining and uranium mining are included.

Near-Field Analyses

Summary

The Draft RMP/EIS air resources impact analysis should have included the near-field air quality analysis for the Colorado River Valley Field Office DRMP/DEIS and White River Field Office DRMP/DEIS in its entirety rather than by reference.

Comments

Submission No: emc0920

Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment Page 4-24: Near-Field Air Quality Modeling Analysis

The near-field air quality analysis that was referenced for the Colorado River Valley Field Office DRMP/DEI and White River Field Office DRMP/DEIS should be included in its entirely rather than by reference. By including the near-field air quality analysis, the disclosure of air quality impacts is fully documented within a self contained document and made readily available for review by the effected population. The most current version of the near-field model should be used for the Grand Junctions RMP along with representative meteorological data and topography for the planning area should be used in the near-field analysis.

Response

Section 4.3.1 of the Proposed RMP/Final EIS has been updated to remove the references to the near-field modeling analyses from the White River Field Office and Colorado River Valley Field Office RMPs. The near-field discussion has been revised to include references to two modeling analyses that have been performed for Environmental Assessments in the GJFO planning area (Fram Whitewater Unit Master Development Plant and Black Hills Debeque Exploratory Proposal).

Year 10 and 20 Inventories and Other Sources

Summary

The Draft RMP/EIS air resources impact analysis did not analyze emissions inventories for Year 10 and Year 20. The BLM needs to better explain the potential air quality impacts for each of the alternatives identified in the Final EIS. It also did not include relevant modeling information from a variety of sources, such as the modeling information developed as part of the Draft White River Field Office Resource Management Plan Amendment (WRFO RMPA) air quality study (2012) and information available from the Western Regional Air Partnership (WRAP) Oil and Gas Emission Workgroup Phase III Inventory for the Piceance Basin. The Draft RMP/EIS included potentially faulty assumptions regarding coal extraction and methane emissions and no explanation of the rationale behind the estimated number of truck trips associated with oil and gas development.

Comments

Submission No: emc0853

Commenter: Suzanne Bohan, US Environmental Protection Agency

Comment: Absent GJFO pre-development modeling to evaluate air quality impacts, the EPA agrees with the BLM that analysis of existing air quality information, including emission inventories for future development, existing regional modeling data and current air quality conditions and trends is critical. The Draft EIS provides emission inventories for both Year 10 and Year 20, which we recommend analyzing in the Final EIS to explain the potential air quality impacts for each of the alternatives identified in the Final EIS. The EPA believes this is a necessary component to the Final EIS to ensure full disclosure of air quality impacts.

Submission No: emc0853

Commenter: Suzanne Bohan, US Environmental Protection Agency

Comment: To further inform the BLM's air quality impact analysis, we also recommend including a discussion of existing modeling information developed as part of the Draft White River Field Office Resource Management Plan

Amendment (WRFO RMPA) air quality study (2012), and information available from the Western Regional Air Partnership (WRAP) Oil and Gas Emission Workgroup Phase III Inventory for the Piceance Basin. We understand that projected oil and gas emissions inventories for year 2020 GIFO oil and gas development and operations were modeled as part of the Draft WRFO RMPA air quality study. Including this information in the Final EIS, together with the commitment to conduct initial West-CARMMS modeling now, and a commitment to conduct analyses as needed into the future would provide a clear assessment of future air quality in the planning area and serve as a useful planning tool for the air quality adaptive management strategy. Again, we believe that with this information, the Final EIS will have adequately evaluated and disclosed air quality impacts associated with the GJFO RMP.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Chapter 4 Environmental Consequences.
Assumptions relating to air quality (for Alternatives A and D) as shown on page 4-28 assume one large coal mine with production up to 8 million tons per year, and 3 small coal mines with production up to 2 million tons per year. What and where are the three small coalmines with production of up to 2 millions tons per year? There is the McClane Canyon Mine, and the potential for a mine to result out of the Bookcliffs LBA. The addition of two other coalmines with production totaling 4 millions tons per year will significantly skew the methane contribution of coalmines.
I was not able to locate input assumptions for Tables O-7 to O-10 but would like to make sure the methane calculation is correct and not based on numbers used for the Red Cliff Mine EIS, which we believe to be a gross over-estimate. Attached at the end of this letter is a methane report detailing the necessity of using the correct coalfields for the methane emission estimate. This report was submitted as part of the public comment period by Rhino Energy for the Red Cliff Mine EIS.

Submission No: emc0929
Commenter: Ryan Leonard
Comment: A recent report completed for Douglas County, CO. estimates 11,040 loaded truck trips for one well pad (containing six wells) over a 265 day period. 6,000 trips were made to haul fracking water. 3,000 trips were for wastewater disposal. Bureau of Land Management report estimates 1,160 truck visits are required to develop each well. Does the GJFO have data to support your estimations?

Response
Emission inventories for development and production activities within the Planning Area were compiled for this analysis for total nitrogen oxides (NOx), sulfur dioxide (SO_2), carbon monoxide (CO), carbon dioxide (CO_2), particulate matter less than or equal to 10 microns in size (PM_{10}), particulate matter less than or equal to 2.5 microns in size ($PM_{2.5}$), volatile organic compounds (VOC), and hazardous air pollutants (HAPs). Lead emissions are negligible and were not calculated in the inventory. In addition, methane (CH_4), nitrous oxide (N_2O) and carbon dioxide (CO_2) emissions were included in the inventory for purposes of quantifying greenhouse gas (GHG) emissions.

Operational, production, and construction activity data used to estimate emissions for proposed emission sources were obtained from Grand Junction Field Office staff, the Reasonable Foreseeable Development Scenario for Oil and Gas for the Grand Junction Field Office (BLM 2012), the Mineral Potential Report (BLM 2010d), and from NEPA analyses currently being conducted for BLM actions within the planning area. Emission factors used to estimate proposed emissions were obtained primarily from the following sources: EPA's AP-42 Compilation of Air Pollutant Emission Factors (USEPA 1995);

EPA's NONROAD 2008a Emissions Model (USEPA 2009); EPA's MOVES2010a Motor Vehicle Emissions Simulator (USEPA 2010); API Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and Natural Gas Industry (API 2009); Colorado Department of Public Health and Environment (CDPHE); and Western Governor's Association - Western Regional Air Partnership (WRAP). The inventory accounted for all applicable emissions controls such as CDPHE Regulation 7 and Federal New Source Performance Standards.

In addition to the emission inventory-based analysis contained in Section 4.3.1 in the Draft RMP/EIS, the BLM is also performing a unified regional air quality modeling study (i.e., CARMMS) to address air quality/air quality related value impacts resulting from development activities within the GJFO planning area as well as all of BLM Colorado's development activities. Results of the CARMMS modeling study (the high modeling scenario only) are presented in Section 4.3.1 of the Proposed RMP/Final EIS. In the past, individual RMPs have generally performed their own air quality/air quality related value analysis for a long-term year (e.g., 20 years out) when the maximum RMP development is projected to occur. This has resulted in inefficiencies and potential inconsistencies in the RMP's air quality/air quality related value analysis. In addition, making emissions projections for such a long-term future year increases uncertainties and may create potential inconsistencies in the RMP planned and actual development activities. Thus, the CARPP contains a commitment to perform a unified regional air quality modeling study to address the air quality/air quality related value impacts resulting from development activities within the GJFO planning area as well as all of BLM Colorado's development activities.

Truck traffic activity estimates including the number of trips per activity, trip distance, and trips speed were all estimated based on data provided by operators in the GJFO planning area.

The number of future mines assumed in the air quality analysis is consistent with the GJFO Mineral Potential Report and the RMP. Methane emissions were conservatively taken from the Red Cliff Mine project Draft EIS; this project has been canceled. In future project-specific analyses, such as the Book Cliffs leasing project, that the BLM will revisit the associated methane estimates. No changes have been made to the Proposed RMP/Final EIS.

Analysis Deficiencies

Summary

The Draft RMP/EIS air resources impact analysis has a number of deficiencies in the modelling of air quality impacts, including failing to disclose what screening levels were used and what specific determinations were made in the analysis; accurately reflecting realistic emissions from likely development scenarios; providing quantifiable analysis to support the conclusion that indicates that the cumulative effects of NOx, sulfur dioxide and particulate matter under Alternatives A, B and C would be likely to have minimal air quality impacts; and containing insufficient conclusions based on emission inventory data instead of on modeled concentrations. The Draft RMP/EIS air resources impact analysis was also too simplistic and inadequate to analyze the transport, atmospheric chemistry, spatial distribution in emissions, temporal distributions of emissions and other factors that influence. Ozone concentrations are not accounted for in the analysis.

Comments
Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 4-22, top paragraph
This section mentions that the magnitude of change in emissions was analyzed to determine the potential significance of air quality impacts. However we could not find further reference in the document or in the Air Quality Technical Support Document on what screening levels were used and how significance was determined. Please disclose what screening levels were used and what specific determinations were made in this analysis.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 4-46, first and second bullets
We could find no quantifiable analysis to support the conclusion in the first bullet statement that indicates that the cumulative effects of NOx, sulfur dioxide and particulate matter under Alternatives A, B and C would be likely to have minimal air quality impacts.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Additionally Table 4-14 shows that emissions of both PM10 and PM2.5 under Alternative A and D are similar in amount which conflicts with the above mentioned conclusion. In fact the cumulative emissions under Alternative A for PM10 are shown to be 28,087 tons/year which is greater than the emissions under Alternative D at 21,547 tons/year. Please change this statement to accurately reflect the potential magnitude of impacts as it is possible that each of these alternatives may have more than minimal air resource impacts.
The second bullet statement implies the cumulative emissions under Alternatives A, B and C would result in little to slight impacts to visibility. Again, we could find no analysis to back this statement up. We feel that without a modeling analysis a more accurate portrayal of impacts should be disclosed in terms of the magnitude of emissions. As such, we suggest that this bullet statement state that the impacts to visibility under Alternatives A, B and C would likely be less than under Alternative D.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: 4.3.2. page 4-17. Air and Climate. Summary of Impact and Conclusions: The RMP/DEIS provides the following:
"The magnitude of and increases in estimated emissions from BLM authorized oil and gas activities
predicted in Alternatives B and D have the potential to cause impacts related to short term and long term exposure to hazardous air pollutants."
"The magnitude of estimated emissions from BLM authorized oil and gas activities at the level of development predicted in Alternatives A, B, and C over the life of the plan have the potential to contribute to increased ambient concentrations of ozone in and adjacent to the Planning Area during the summer and/or winter ozone seasons. Emissions from BLM authorized oil and gas activities under Alternative D have the potential to contribute significantly to ozone formation in the region." "The magnitude of and increases in estimated emissions from BLM authorized oil and gas activities at the level of development predicted in Alternatives Band D have the potential to degrade visibility and increase atmospheric deposition at sensitive areas such as the Maroon Bells - Snowmass Wilderness Area."
COMMENT: These statements are based on simple emission inventory data, not on modeled concentrations. Though increased emissions would suggest the potential for impacts, there is no way to quantify any impact

without first using dispersion and atmospheric chemistry models, and secondly, without having actual measured impacts from ambient air monitoring data. The BLM is arbitrarily assuming impacts, where it instead needs to use science and models to predict the associated impacts. Oxy recommends that these statements be removed in the final RMP/EIS unless dispersion and atmospheric chemistry models are completed prior to its issuance.

Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: Chapter 4 Comments. Section 4.1 . 1. Page 4.2: Analytical Assumptions-First Bullet. Comment: It is unclear whether there is sufficient funding and personnel available for implementing the final decision as it relates to the Air Resource Management Plan. Could BLM describe in detail the funding mechanism for fulfilling the commitments made in the Air Resource Management Plan as well as the resource commitments?
Section 4.3 . 1. Page 4-1 5: " Air and Climate Resources, Summary of Impacts and Conclusion"
The DRMP indicate that all the alternatives have the potential to contribute to ozone in and adjacent to the Planning area. This is concerning since the Rangely monitor, which is directly adjacent to the Planning area and where BLM authorized oil and gas activity has a large growth potential and is in violation of the 75 ppb ozone NAAQS from data collect in 2011 ·- 2013. All of the alternatives potentially could contribute significantly to further violations of the ozone NAAQS at Rangely and could potentially prevent the area from attaining the ozone NAAQS in the future given the growth potential from all of the alternatives. In addition, the Grand Junction $PM_{2.5}$ monitor is also very close to violating the NAAQS.
The air quality analysis presented in the DRMP relies on an evaluation in the changes in emissions. This change in emissions analysis is not adequate given that this type of analysis cannot disclose whether the changes in NOx and VOC emissions from BLM authorized oil and gas activities for any of the alternatives will significantly impact the Rangely Ozone monitor or the Grand Junction $PM_{2.5}$ which would prevent the region from reaching attainment and maintenance. The change in emissions analysis results in a mass/unit time (i.e. TPY) difference which is not comparable with the ozone and $PM_{2.5}$ NAAQS which are in the units of concentration (i.e.. PPB or ug/m^3). The change in emissions analysis too simplistic and is inadequate to analyze the transport, atmospheric chemistry, spatial distribution in emissions, temporal distributions of emissions and other factors that influence Ozone concentrations are not accounted for in the analysis. In order to evaluate the impacts in the changes in emissions, a regional photochemical model and near-field plume models Section should be ran and the resultant change in concentration compared to the ozone NAAQS before any decision on which alternative should be pursued under the ROD.
Section 4.3.1, Page 4 ·17: First Bullet,
Comment: The text discloses that Alternatives A, B, and C have the potential to contribute to ambient concentrations adjacent to the Planning area during the summer and/or winter Ozone seasons. Further, the text discloses that Alternative D has the potential to contribute significantly to ozone formation in the area. Ozone data from the Rangely Ozone monitor during 2011 ·- 2013 indicate that the design value for ozone violates the NAAQS for ozone. Given that all four alternatives have the potential contribute to the ozone exceedance at Rangely and possibly prevent the region from attaining the ozone NAAQS, it is imperative that the contribution to the regional ozone monitors from the Alternatives be disclosed in the RMP.
Page 4 · 18: Methods of Analysis 6th Bullet.
Without and air quality impact assessment achieved through air quality modeling, it is not possible to determine the potential for future impacts on air quality nor decide which alternative is better from an air quality prospective.
Page 4 ·18: Methods of Analysis
Comment: The text states "The purpose of conducting the emissions based analysis was to evaluate the magnitude of emission of each pollutant from BLM authorized activities to identify the potential for those emissions to cause adverse impacts on air quality in the context of air quality conditions."

It is unclear how the emissions based analysis can be used to evaluate whether the emissions "cause adverse impacts on air quality". Routinely, air quality models are used to evaluate the air quality impact of increase or decreases in emissions and how those changes in emissions effect concentrations of various air pollutants. More importantly, it is unclear how emissions, which are estimated in mass per time, can be compared with the NAAQS which are based on pollutant concentrations. The emissions based analysis falls short in evaluating whether BLM actions will have an "adverse impact on air quality".
Page 4- 18 Methods of Analysis: 6th Bullet.
Without and air quality impact assessment achieved through air quality modeling, it is not possible to determine the potential for future impacts on air quality nor decide which alternative is better from an air quality prospective.
Page 4-22: Second Paragraph
This paragraph is misleading. Air quality models are routinely used and required to assess the impact of future emissions changes for State Implementation Plans, as well as for permitting activities. Air quality modeling for this RMP should be conducted in accordance with EPA guidance. In order for any type of disclosure to be made about air quality impacts, some certainty needs to exist about the level of development planned.
Also, in the same paragraph, the text, "The NEPA analysis may include air quality modeling", should be changed to, 'The NEPA analysis will include air quality modeling".
The last sentence in the paragraph commits to doing a regional air quality modeling study which conflicts with earlier statements in the paragraph which indicate that air quality modeling is not possible without "actual" data.
Page 4-24: Second Paragraph
It should be noted that there is not any type of Memorandum of Understanding (MOU) that exists between CDPHE, BLM and other Federal agencies to share review, and analyze emissions data, modeling results, and mitigation measures for development projects within the Grand Junction RMP planning area. There are other agreements in place in other areas such as the three slate region and the four corners areas that may serve as examples where there are MOUs in place between CDPHE, BLM and the other Federal Land Managers.

Response
The impact analysis for air resources has been updated to utilize the high modeling scenario from the Colorado Air Resources Management Modeling Study (CARMMS). CARMMS utilizes the Comprehensive Air-quality Model with extensions (CAMx) to assess statewide impacts to air quality and air quality related values from projected oil and gas development out to year 2021 for three development scenarios (low, medium, and high). Projections for oil and gas development are based on either the most recent BLM field office Reasonably Foreseeable Development (RFD) documents / analyses (high), or by projecting the current 5-year average oil and gas development paces forward to year 2021 (low). Please see Section 4.3.1, page 4-45.

The context for the claim "the cumulative effects of NOx, sulfur dioxide and particulate matter under Alternatives A, B and C would be likely to have minimal air quality impacts" is supported by the change in BLM authorized emissions relative to the baseline and current regional emissions for the planning area.

The BLM is not directing other agencies to provide any materials or funding for implementation of the CARPP, nor is the BLM's funding availability an issue open to comment. The Federal Leadership Forum is the appropriate place to handle these regional issues (See the 2011 Interagency MOU). No change has been made to the Proposed RMP/Final EIS.

Air Quality Technical Support Document

Summary

Changes to the Air Quality Technical Support Document are needed so that the resulting analysis of potential air quality impacts is accurate and transparent.

Comments

Submission No: emc0920

Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment

Comment: Page 33, Technical Support Document, Section 2.2.1.2. 13.2, equation 53: In this equation the scaling surrogate for the source category is 'S', however in the definition of the variables the scaling surrogate is represented by 'N'. The Division recommends clarifying whether the scaling surrogate is represented as an 'S' or an 'N'.

Page 33, Technical Support Document, Section 2.2.1.2.13.3, first paragraph: This paragraph indicates that the voc emission factor for Garfield, Mesa, Rio Blanco, and Moffat counties is 10 lbs VOC/bbl. However, the emission factor published by CDPHE for Montrose County is II.5 lbs VOC/bbl. The Division recommends incorporating this higher emission factor into the equations used to calculate estimated emissions from condensate tanks in shale gas developments in the Planning Area. In conjunction with this, the Division recommends revising total emissions estimations for the entire Planning Area to account for this different emission factor in Montrose County.

Page 34, Technical Support Document, Section 2.2. 1.2. 15, first paragraph: This paragraph indicates that "It was assumed a hauling volume of condensate per truck of 200 barrels". The Division recommends explaining how the preparers arrived at this value and why it is appropriate.

Page 34, Technical Support Document, Section 2.2.1.2.15.2, first paragraph: This paragraph indicates that "It was assumed that the produced water truck capacity (volume) is 100 bbl and that all water was hauled out." The Division recommends explaining how the preparers arrived at this value and why it is appropriate.

Page 39, Technical Support Document. Section 2.2.1.2. 18. 1, equation 67: In this equation the dehydrator emissions from APENS database for pollutant I in base year 2008 [tons/yr] is represented by $E_{dehy,I,j}$ The Division recommends replacing the 'j' with ' 2008' and representing this as $E_{dehy,I,2008}$ to clearly demonstrate that the values are from base year 2008.

Page 40, Technical Support Document, Section 2.2.1.2.20, first paragraph: This paragraph describes the calculation used to estimate emissions from flaring emissions and states, "This section describes flaring emissions for source categories that potentially could be 100% controlled by flare under certain scenarios." The Division recommends clarifying whether this suggests that 100% of the emissions are routed to the flare or whether the flare will achieve 100% control efficiency. It should be noted that the Division does not apply flare control efficiency above 95%.

Page A-6, Technical Support Document, Section Appendix A, Combustive Emissions Estimation for Wellpad and Access Road Traffic table: This table indicates that the round trip distances for semi and pickup trucks to construction sites are 3 or 4 miles. While these estimates were originally from operator surveys, the Division recommends furher analysis of these travel distances as they do not appear sufficiently conservative. The Division also recommends explaining why these round trip distances vary by vehicle type and emission estimation type. This same recommendation applies for the remaining tables that apply round trip distances including: 'Combustive

Emissions Estimation for Drilling and Completion Road Traffic', 'Fugitive Dust Emission Estimations for Road Traffic', 'Emission Estimations for Road Traffic', 'Fugitive Dust Emission Estimates for Condensate Tank Loadout Road Traffic', 'On-Road Exhaust Emission Estimations for Road Traffic'.

Page A 19, Technical Support Document Section Appendix A, Fugitive Dust Emission Estimations for Condensate Tank Loadout Road Traffic: This table indicates that the average vehicle speed is 15mph. While these estimates were originated from operator surveys, the Division recommends further analysis of these vehicle speeds as they do not appear sufficiently conservative. This same recommendation applies for the remaining tables that apply round trip distances including 'Emission Estimations for Road Traffic per Year', the 'Emissions Estimations for Commuting Vehicles' tables, 'Fugitive Dust Emissions for Road Traffic'.

Response
Clarification for the scaling surrogate has been added in the Technical Support Document.

The Grand Junction Field Office only includes a very small portion of Montrose County, and Montrose County only comprises a small fraction of the oil and gas production in the Grand Junction Field Office. The Technical Support Document has been updated to clarify that the Montrose County emission factor is not used.

Section 2.2.1.2.15, first paragraph of the AQTSD: A haul volume of 200 barrels was based on engineering judgment and allows for estimation of truck trips that are consistent with condensate production estimates. No changes have been made to the Technical Support Document.

Section 2.2.1.2.15.2, first paragraph of the AQTSD: A haul volume of 100 barrels was assumed based on engineering judgment and allows for estimation of truck trips that are consistent with water production estimates. No changes have been made to the Technical Support Document.

The Technical Support Document has been updated per the comment regarding the dehydrator emissions from APENS database for pollutant I in base year 2008.

Section 2.2.1.2.20, first paragraph of the AQTSD: The Technical Support Document has been updated to clarify that 100 percent refers to the percent of emissions are routed to the flare.

For the "Combustive Emissions Estimation for Wellpad and Access Road Traffic" table, the trip lengths are based on operator surveys and reflect only within field trip distances. A number of operator surveys were combined to calculate the truck traffic estimates, which is why the trip distances vary by vehicle type and activity type. No further analyses of trip distances are planned for the RMP analysis, however, future project-specific analyses will account for project-specific trip distances. No changes have been made to the Technical Support Document.

For the "Fugitive Dust Emission Estimations for Condensate Tank Loadout Road Traffic" table, the trip speeds are based on operator surveys and reflect only within field trip speeds. No further analyses of trip speeds are planned for the RMP analysis, however, future project-specific analyses will account for project-specific trip speeds. No changes have been made to the Technical Support Document.

Modeling Protocol

Summary
The BLM should clarify the modeling protocol that will be used for air quality modeling.

Comments
Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: Section G.7.3: Modeling Protocol (page 0-12)
One of the purposes of a Modeling Protocol is to present the plan that will be used for air quality modeling prior to the commencement of modeling to reach consensus on the approach and data sets that will be used for the modeling to avoid adverse comments later in the process. It is recommended that BLM present a draft modeling protocol that CDPHE and other land managers can review prior to the commencement of modeling.

It is unclear if the Air Quality Impact Assessment Protocol for the GJFO RMP dated November 2009 and as presented on April 8, 2010 is the protocol BLM is proposing to follow. Could BLM verity if they intend on following the November 2009 protocol or does BLM intend to issue a new protocol base on the ARMP?

Response
As part of the CARMMS and per the 2010 Interagency MOU, the BLM has provided a new modeling protocol to agencies for review and comment. Comments on the new protocol were received and incorporated into the document as necessary.

Project-Specific Modeling

Summary
The BLM should clarify the “no net increase” provision.

Comments
Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: Section G.7.3: Section 0.7.3: (page 0-12) Project Specific Modeling
"The BLM will not require an air modeling analysis when the project proponent can demonstrate that the project will result in no net increase in emissions of the pollutants of concern."

Could BLM be more specific as to the geographical extent whereby "no net increase in emissions" will occur. For example, if there is a net decrease in emissions in one part of the GJ planning area but an increase in an area of elevated air pollutants, then the ARMP would allow an increase in pollutant concentration in an area with already elevated air pollutants possibly resulting in an exceedance of the NAAQS.

Further, the geometry of the source which effects the dispersion characteristics, changes in meteorology from one location to another, proximity of public access are further details that should be consider when an emission source changes.

Response
The "no net increase" in emissions is for the geographical extent of the GJFO Planning Area. No changes have been made to the Technical Support Document.

Regional Air Modeling

Summary
It is unclear whether an MOU is needed for regional modeling.

Comments
Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: Section G.7.4: Regional Air Modeling (page 0-12)
It is not clear if a Memorandum of Understanding or some other agreement between the State, the Federal Land Managers, and other organizations like WGA is needed for the planning effort and/or the technical effort given the commitment in Section 0.7.4.

Response
The Air Resources Management Plan has been replaced with the CARPP. As a statewide document, questions regarding MOUs at a statewide level are outside the scope of this RMP/EIS. No change has been made to the Proposed RMP/Final EIS.

6.2.5.2 Soil Resources

Summary
The impact analysis relies on faulty assumptions regarding the primary causes of erosion in the planning area.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: OHV's have not shown they contribute substantially to sedimentation or salinity in the GJFO. There is no comparative analysis to justify these actions or to suggest that the current vehicle use on wet soils is impacting watershed health and water quality.

Submission No: cfc0153
Commenter: Ben Nicols, III
Comment: In regards to Table 2-2, page 2-127 as it relates to fencing The North Fruita Camp Ground, this will probably interrupt livestock traveling through and utilizing forage to several areas. These trails being used by the bicycles are actually livestock trails and have been for several decades. There is substantial erosion happening on these flats and ridges when single tracks don't follow the trials exactly and straighten them out and will need to be addressed. The impact by the cows is not impacting the area in a negative way and probably keeping the fire danger down and the range healthy. Even with the best of intentions thousands of people camping and enjoying the area are having a greater impact than the livestock. Building a fence is not promoting multiple use.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Soil resources in the GJFO include significant acreage containing fragile and unstable soils. The DRMP does little to acknowledge how these fragile and highly erosive soils will be protected from the impacts of oil and gas resource development and associated water quality. Well pads, access roads, pipeline corridors, staging and facilities areas - all contribute to surface clearing and results in hundreds of tons of accumulated soil removal. Studies have shown that tens to hundreds of tons of soil per hectare are removed during the development of one well pad (Williams, H., et. Al. 2008. "Field-based monitoring of sediment runoff from natural gas well sites in Denton County, Texas, USA". Environmental Geology 55(7):1463-1471; Adams, M. B., et al. 2011. "Effects of development of a natural gas well and associated pipeline on the natural and scientific resources of the Fernow Experimental Forest". U.S. Department Agriculture Forest Service. Newton Square, PA. General Technical Report NRS-76). Table 2-5 does not account for the increase in road development and impacts; rather the table chooses to illustrate that by closing some travel trails, soil impacts will decrease due to a decrease in off-road miles. The table needs to represent a summary of the significant points of differences among the alternatives. In this case, oil and gas development in the GJFO will include a substantial number of new roads, which unquestionably impacts the soil structure and erosion potential. The DRMP is negligent in addressing this significant issue of soil loss.

TU believes steep slopes are poorly addressed and stipulations must include NSO for slopes greater than 35% rather than the 40% identified in the DRMP. Slope stability remains a concern with respect to stream contamination. Snow melt, heavy rains, and subsurface groundwater movement can all affect slope stability. Water is implicated as either the primary or a major controlling factor in 95% of all landslides (Chassie, R. G., and R.D. Goughnr. 1976. National highway landslide experience. Highway Focus 8 (1):1-9). The DRMP states that steep slopes are concentrated adjacent to stream courses, especially in the northern portion of the planning area (DRMP 3-43). Additionally, more than 480,000 acres are identified as fragile soils and these, too, are concentrated in the northern portion of the planning area. And, as illustrated in the DRMP Oil and Gas Map 5.2, most of the development activity is concentrated in the northern portion of the planning area. The DRMP fails to adequately address the significant soil related impacts, including the extremely unstable Mancos Shale deposit located throughout the northern portion of the planning area. How development proceeds with regards to these soils could significantly affect water quality. We strongly recommend a stronger analyses, including updating the RMP with recent USGS studies on the impacts of soil disturbance to selenium-laden soils.

Response
To better clarify the leading causes of erosion in the planning area, text has been added to the Proposed RMP/Final EIS (page 4-58) summarizing the best available science and the nature and type of impacts from recreation and other activities on soil resources

As required in 43 CFR 8342.3 and in accordance with BLM Manual 1626, the Travel Management Plan describes the proposed monitoring and evaluation measures that the BLM would implement to guide future route maintenance and designations. See Appendix M, Section 3.4.

Existing stipulations are protective of sensitive soils and the definition of fragile soils does use the 35-percent-slope value as a key indicator. CSU-7 for natural slopes (i.e., 25 to 40 percent) protects these areas through site-specific relocation and implementation of BMPs and COAs (see Alternative C). Additionally, the fragile soils CSU stipulation in Alternative B is protective of these sensitive areas. Likewise, CSU stipulations for all Mancos Shale and saline soils would require site-specific COAs or relocation before surface disturbing actions could occur. These stipulations, combined with stipulations

for stream buffers and standard COAs, add an additional layer of protection to water and soil resources. Finally, the Proposed RMP/Final EIS has been updated to include statewide stipulations that fulfill obligations in the BLM's oil and gas leasing reform program (IM 2010-117). These stipulations include NSO and CSU stipulations for major rivers, perennial, intermittent and ephemeral streams; riparian areas, fens and/or wetlands; and water impoundments; groundwater public water supply wells. These stipulations would protect soils and water (see Tables B-5 and B-6).

The BLM is faced with the complicated task of striking a balance among the many competing uses to which land can be put. The BLM's multiple use mandate does not require that all uses be allowed on all areas of the public lands; that would preclude any kind of balance. The purpose of FLPMA's mandate is to require the BLM to evaluate and choose an appropriate balance of resource uses, which involves tradeoffs between competing uses. Fencing the North Fruita Desert Campground is provided as a hypothetical example in Sections 4.4.2 and 4.4.3 to illustrate the impacts of trading a long-term loss of grazing opportunities for improvements in recreation experiences and settings. The North Fruita Desert Campground is not currently proposed to be fenced. Fencing or other measures would be considered in the future if monitoring demonstrated a need and if site-specific analysis was completed and the project was approved. No change has been made to the Proposed RMP/Final EIS.

The BLM Land Use Planning Handbook (H-1601-1) requires the BLM to identify watersheds or specific soils that may need special protection from the standpoint of human health concerns, ecosystem health, or other public uses. As shown in Chapter 2 and Appendix B, a series of management actions have been proposed to protect specific soils. These include stipulations that prohibit or limit surface-disturbing activities on fragile soils, slump areas, steep slopes, and mapped mancos shale and saline soils. In addition, soils derive direct and indirect protections from protections afforded to other resources. Section 4.3.2 discusses the impacts on soil resources from implementing each of the alternatives. This section quantifies the number of miles of certain types of routes that overlap specific soils. If any new roads are constructed as part of ROW or energy projects, they will first be subject to review under NEPA at the implementation level and are outside the scope of this RMP. Although the BLM has projected the number of oil and gas wells anticipated under each alternative, it is impossible to estimate the number of miles of roads that may need to be constructed to support this development. No change has been made to the Proposed RMP/Final EIS.

6.2.5.3 Water Resources

Estimated Erosion Rates

Summary
The analysis should include an estimate of erosion rates for each alternative.

Comments
Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: Because sediment loading has already caused impairment of numerous water body segments in the planning area, and planned oil and gas activities will contribute to erosion, it is important the Final EIS include additional information about this concern. Erodible soils represent a significant nonpoint source in the planning

area, and runoff could introduce sediments, as well as salts, selenium and other heavy metals into surface waters. To ensure sufficient intonation is included about the potential impacts of soil disturbance, the EPA recommends including in the Final EIS an estimate of erosion rates for each alternative in tons per year based on amount of surface disturbance, soil types, topography and slope, to avoid significant sedimentation. As an example, the Wyoming BLM's Bighorn Basin Draft RMP/EIS estimated sediment runoff based on projected surface disturbance, types of surface disturbance, and general characteristics of the basin (erodible soils, slopes, etc.). Erosion rates were calculated using the Water Erosion Prediction Project (WEPP) model. The WEPP model used by the BLM is a web-based interface designed by the United States Forest Service and can be accessed at: http://forest.moscowfsl.wsu.edulfswepp/. We recommend that BLM consider using this model and including the results in the Final EIS.

Response

Quantification of sedimentation from BLM-administered lands is typically done on a project-specific basis as erosion/sedimentation can be more accurately estimated at this scale. The use of WEPP is utilized by the GJFO (most recently for erosion estimates of the Book Cliff Restoration Project) and different WEPP modules are utilized for different disturbance types (e.g. wildfire, grazing, and roads). At the RMP level, lands are identified as either closed or open to fluid minerals leasing; it would be speculative to identify the number of miles of roads that will result from future development on BLM-administered lands. Importing unknown parameters into the WEPP model would produce speculative results unsuitable for use in a land-use planning document such as an RMP. The BLM continues to work with USGS to parameterize the Rangeland Hydrology Erosion Model (RHEM) specifically for calculating erosion of soils derived from the Mancos Shale. Defining areas of specific concern (such as fragile soils, slump areas, Mancos shale soils, saline soils, and steep slopes) and applying stipulations or additional mitigation and BMPs to land use actions will help reduce the contribution of non-point source pollutants to area streams as well as be protective of soils in these areas. Quantification of sedimentation rates is important but is more accurate and meaningful at the project level when considering the specific proposed action and design features specifically created to minimize erosion associated with the action. No change has been made to the Proposed RMP/Final EIS.

Flow Back and Produced Water

Summary

The Proposed RMP/Final EIS should include analysis of how flowback and produced water will be managed.

Comments

Submission No: emc0847

Commenter: Bo Meulengracht, Trout Unlimited

Comment: Produced Water, Flowback Water, Wastewater, and Water Management. The DRMP is lacking in any analysis of management actions and issues associated with the resultant contaminated waters that occur during the business of oil and gas drilling. The question of how to handle the waste water used in the hydraulic fracturing process must be addressed in further detail. This contaminated water will need to be removed and either recycled or processed to remove the impurities that have been added during the hydraulic fracturing process. Either way this water is removed from the ecosystem. Unconventional drilling, especially in shale gas, potentially involves fracturing a well multiple times over the life of the well. As mentioned above, the use of large quantities of water

to fracture one well might not be of significant impact but fracturing many wells, often repeatedly over time, could possibly remove large quantities of water from the ecosystem causing significant environmental impacts. There is much still to be learned in the new field of shale oil and gas development and the DRMP fails to account for the significance of these impacts. A cradle-to-grave approach to oil and gas development, including exploration, drilling, production, water use requirements, to water quality and quantity should be applied in the final RMP.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: In addition, the EPA recommends the Final EIS analyze how flow back and produced water will be managed, including:
• Estimated volumes of produced water;
• Options and potential locations for managing the produced water (i.e. UIC wells, evaporation ponds, and surface discharges);
• Possible target injection formations, formation characteristics and depth of any UIC wells; and
• Mitigation of potential impacts of produced water management.

Response
The volume of produced water per well is dependent on the producing formation and location within the basin. Permitting of injection wells would be done through the State of Colorado and wells would meet all State requirements (delegated to the State through the EPA). This is a federal requirement delegated from the EPA to Colorado Oil and Gas Conservatin Commision. COGCC and BLM approves down hole work and the BLM approves surface facilities if the wel is located on BLM surface.

There are approximtely 18 water injection wells in Mesa and Garfield County. The wells are completed in several formations but primarily Williams Fork and the Wasatch. This variability makes it difficult to quantitatively assess impacts, especially at the land use planning level when specific project details are unknown and modeling would result in unreliable results. Thus, no change has been made to the Proposed RMP/Final EIS.

Disposal methods would be limited to injection on public lands but could include evaporation ponds on private lands. Trucking to an approved disposal facility is also a viable option as is recycling and re-use. Surface discharge would be regulated by the state but should follow BMPs outlined for mine dewatering in Appendix H. No change has been made to the Proposed RMP/Final EIS.

Estimated Water Demand

Summary
The Proposed RMP/Final EIS should include analysis of the estimated water demand for the anticipated oil and gas development in the planning area (including hydraulic fracturing and access road dust abatement), possible sources of this water, and potential impacts of the water withdrawals.

Comments
Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: Water Management
Given the large number of oil and gas wells projected in the Reasonable Foreseeable Development (RFD) scenario for the planning area, water demand associated with the drilling and completion of these wells is an important consideration that will benefit from careful analysis and disclosure. The EPA recommends the following analysis be included in the Final EIS:
• Estimated water demand for the anticipated oil and gas development in the planning area;
• Possible sources of this water; and
• Potential impacts of the water withdrawals (e.g. drawdown of aquifer water levels, reductions in stream flow, impacts on aquatic life, wetlands, and other aquatic resources).

Response
Water demand for fluid mineral development is dependent on the type of drilling and depth of target formations. Potential impacts are discussed in Section 4.3.3. The Programmatic Biologic Assessment for BLM's Fluid Minerals Program in Western Colorado contains estimates for fresh water demands per well and per basin. This document pertains to water depletions and effects on four endangered big river fish: Colorado pikeminnow (*Ptychocheilus Lucius*), humback chub (*Gila cypha*), bonytail chub (*Gila elegans*), and razorback sucker (*Xyrauchen texanus*). If the water depletion amounts that were consulted on in the Programmatic Biological Opinion are exceeded, consultation will be reinitiated. The RFD in the RMP does not exceed the amount of water depletions consulted on in the Programmatic Biological Opinion.

Page 3-62 of the Proposed RMP/Final EIS has been updated with the following text:

> Oil and gas well development uses both fresh and produced water during the drilling process. Well completion operations may use fresh, produced, or recycled completion water. Freshwater is used for dust abatement of associated oil and gas development. The freshwater sources can be located near the drilling activity and may affect local freshwater supplies.

Impacts of Oil and Gas Development

Summary
The Proposed RMP/Final EIS should include the following:

- Analysis of impacts on water resources from various methods of oil and gas development, including hydraulic fracturing
- Justification of the statement that oil and gas development is the primary culprit for impacts on shallow groundwater
- Recognition of the CDPHE's and COGCC's authority over water resources related to oil and gas development activities
- Clarification of the requirements related to protecting and monitoring water quality and quantity

Comments
Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The DRMP is correct in stating that freshwater is scarce and valuable in the GJFO (DRMP, page 3-45). TU's concern with the Water Resources section includes the lack of discussion on available water, and water withdrawal requirements and location of these withdrawals. In addition, management of wastewater and treated water needs significant discussion. Discussion on watershed and water quality issues in the DRMP should be expanded to include details on potential harms from oil and gas development activities, especially as it applies to fish and wildlife habitat.

Of particular importance is the impact to watersheds in light of the recent expansion in the use of hydraulic fracturing during oil and gas well development. Recent studies on drilling, hydraulic fracturing, and impacts to trout appear to show an emerging threat (Weltman-Fahs, Maya, J.M. Taylor. 2013. "Hydraulic Fracturing and Brook Trout Habitat in the Marcellus Shale Region: Potential Impacts and Research Needs." Fisheries, January 2013; 38(1)4-15). Estimates of water use range from 6 million to 300 million gallons of water per well per hydraulic fracturing occurrence. Given that over the life of one well, several work-overs requiring fracturing techniques may be required, it is realistic to expect that water resource depletion and handling of wastewaters should be a major consideration in the DRMP. This is particularly significant when one well pad may contain multiple wells. However, the DRMP fails to account for such water use and its associated disposal. This is a significant omission and must be addressed through a supplemental DRMP.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: We contend that the discussion on watershed and water quality issues in the DRMP should be expanded to include details on the impacts of hydraulic fracturing. We find the DRMP deficient in addressing water quantity associated with this practice. Current estimates of water use for hydraulic fracturing range from 6 million up to 300 million gallons of water per well (FracFocus.org). Based on the estimated 3,938 wells drilled over the next 20 years this represents a use of over 10 trillion gallons of water that, once contaminated, would be removed from the hydrologic cycle. And those gallons represent just a single fracture of one well; most wells require fracturing several times over the life of the well in order to increase productivity. In addition, consideration must be given to well pads that have multiple wells, each well requiring millions of gallons of water from the same source.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Roads and Water Impacts. The DRMP lacks a thorough discussion on the impacts associated from the increased development of access roads in oil and gas fields. Given the high number of road miles proposed in BLM's preferred Alternative B, the DRMP fails to account for the cumulative effect such increases will mean to watersheds, vegetation, air, and wildlife. Road-related flooding can cause major changes in drainage patterns and create new drainage patterns. When a web of intersecting roads to well pads and facilities is created other problems are created in terms of drainage issues and pooling of water. Stormwater runoff from roads is a significant contributor to stream and riparian pollution. The addition of culverts may not always alleviate the problems, as culverts tend to freeze in winter and don't always thaw prior to spring runoff. All these problems can incrementally increase to change the entire landscape area and eventually the ecosystem relationship. Plants not normally subjected to flooding now become flooded, fish with normal access to spawning areas are now subjected

to migration blockages by inappropriate culverts, and wildlife can no longer depend on particular habitat types for breeding and cover because the habitat no longer exists.

Other water uses in an oil and gas play include water required for dust abatement on native and partly graveled roads. The DRMP fails to consider the amount of water required for this use which could be considerable. General estimates have ranged from 9,000-10,000 gallons of water per mile of road per day assuming watering at a minimum of two times a day on a single lane road. Based on the truck's carrying capacity and distribution capacity, a single well sight could potentially require up to 1.6 million gallons of water over an estimated 80-day drilling period. The DRMP must include this analysis in order to provide a more realistic outlook on water consumption in the oil and gas scenario.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The DRMP does not discuss recent and current study efforts and reports on hydraulic fracturing compiled by EPA and the Department of Energy (DOE). EPA is undertaking a study on hydraulic fracturing and its impacts on drinking water. DOE's recent subcommittee report on hydraulic fracturing emphasizes the need for government agencies to take a more proactive role in management of oil and gas development projects. The DOE report also emphasizes the need to recognize the public's perception of hydraulic fracturing and the issues of concern the public has from all aspects of drilling (US Department of Energy. The SEAB Shale Gas Production Subcommittee Ninety-Day Report. August 11, 2011). The BLM is in the final stages of developing a hydraulic fracturing rule for managing fracturing activities on public lands. In light of the current controversies and high public interest with respect to hydraulic fracturing and contamination issues, TU recommends the BLM provide a more thorough discussion of the impacts from various methods of oil and gas development practices, including hydraulic fracturing, in the final RMP.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM suggests that mineral development is the primary activity with the potential to impact shallow ground water quality and quantity. GJ DRMP/EIS, pg. 4-79. To date, as recognized by the Secretary of the Interior, there are no confirmed instances of oil and gas stimulation methods directly impacting ground water resources. The BLM has provided no analysis as support for its assertion and it should be removed from the final EIS for the GJ RMP. The BLM must justify this statement and provide analysis or research to support its determination.

BLM references many problematic actions and requirements in its description of the environmental impact of Alternative B. First, BLM states that it "would implement specific actions related to protecting and monitoring water quality and quantity." GJ DRMP/EIS, pg. 4-87. This statement is extremely broad and could have significant associated cost depending on BLM's water monitoring plan. The BLM also says "Oil and gas operations near domestic water supplies using a groundwater well or spring would be restricted and appropriate design features or conditions of approval would be developed in order to avoid contaminating water resources." Restrictions near wells would have a significant impact on oil and gas operations. It also suggests that BLM would have veto authority over water use related to oil and natural gas development, which could infringe on state water laws and have implications for water rights holders in Colorado. Furthermore, Encana is opposed to the broad discretion for BLM to determine "appropriate design features or conditions of approval" in these circumstances.

Throughout the water section, the BLM does not recognize the authority CDPHE and COGCC have over water resources related to oil and gas development activities. The BLM should more carefully describe the extent of

CDPHE and COGCC's authority over the protection of water quality, the disposal of water produced in conjunction with oil and gas development, and the protection of surface and ground water resources administered by those agencies. Absent such information, the public may believe BLM has primacy over these matters.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The DRMP states that groundwater accounts for approximately 5% of water uses. TU would like an updated accounting of groundwater use and estimated groundwater use with the proposed increase in drilling activities. With the increase in oil and gas development there is a significant chance of incidents which could contaminate water resources. The lack of groundwater discussion and protective water management actions from future contamination incidents is alarming. The DRMP implies, and TU agrees, that there will be an increase oil and gas development within the resource area (including unconventional new gas exploration). Cumulative effects of increased and multiple surface and/or groundwater use (which has not been addressed in the DRMP) throughout a watershed have the potential to impact trout in numerous ways, including connectivity and downstream hydrology (Rahm, B.G., and S. J. Riha. 2012. "Toward strategic management of shale gas development: regional, collective impacts on water resources." Environmental Science and Policy 17:12-23).

The ground-water-flow system (a three-dimensional system illustrating moving ground water extending from areas of recharge to areas of discharge) can be an all-encompassing entity and includes effects of geologic deposits, interactions with surface waters, pumping, and other stresses on movement of water controlling advective transport of contaminants (USGS. 2002. "Understanding the Hydrologic System and the Associated Behavior of Contaminants: A necessary step in scientific assessments of groundwater vulnerability." Circular 1224-Assessing Groundwater vulnerability to contamination: providing scientifically defensible information for decision makers). The DRMP does not provide a thorough discussion on how these interactions will affect the environmental resources within the GJFO area.

There is significant communication between groundwater and surface waters in a natural ecological setting. Contamination events often surface further downstream or much later in time. Flow paths of groundwater can extend from a few feet to tens and sometimes hundreds of miles, which is why it is so important for the GJFO to have a clear understanding of how the system may transport potential contaminants. Groundwater communication with toxic chemical releases often results in plumes of groundwater pollution that can be highly mobile and often go unnoticed over time until it presents itself downstream in domestic wells, livestock wells, or through surface emersion. When blowouts during the drilling process occur, they leave a trail of toxic fumes, chemical mixes of brine and gas, soil and subsoil contamination, surface and groundwater contamination, vegetation contamination, and human health issues. Blowouts from drilling activity occur most often at gas wells, according to statistics presented by state oil and gas conservation commissions.

Well bore ruptures, caused from improperly sealed wells, have resulted in hundreds of incidents nationwide and western states continue to experience the effects of previous blowout incidents. In August 2006 in Clark, Wyoming, the Crosby 25-3 well blew during drilling activity after encountering an overpressured zone at a depth of 8,500 feet. Since that blowout, contamination plumes underground continue to plague the area, its resident population and the Line Creek aquifer which flows into the Clarks Fork River (Wyoming's first Wild and Scenic River). In this case, the blowout happened when the well's steel casing and cement surrounding the casing ruptured underground.

A second example exists in the community of Pavillion in central Wyoming where contamination continues to plague the drinking water wells in the area. Natural gas wells drilled in the area are suspected as contributing to the contamination events and investigations are ongoing. In 2011 the EPA determined that residents in the area should not drink their domestic well water due to the serious levels of contaminants found in the water, and most recently, EPA released draft documents with the results of their findings indicating fracking contaminants were directly released into a drinking water aquifer (EPA November 2011) contaminating the surrounding groundwater.
A recent final example is in Colorado as the public follows the news regarding the contamination event along Parachute Creek. The spill (located at a gas plant) was originally discovered in December 2012 with the leak being plugged in January 2013. On March 13, 2013 it was determined that hydrocarbons had reached groundwater and according to the Colorado Department of Public Health website (http://www.colorado.gov/cs/Satellite/CDPHE-HM/CBON/1251642662859): "Based on data from the many ground water monitoring wells spread widely throughout the area, natural gas liquids have traveled approximately 900 feet southeast of the release point, while trace amounts in ground water have been detected approximately 1,500 feet southeast of the release point. As of June 4, 2013, the ground water contamination plume was stabile, meaning not increasing in size by any dimension, and was estimated to be 462,000 square feet in area (approximately 10.6 acres). Trace amounts of contamination were detected in surface water of Parachute Creek early on, but contamination readings have been non-detect (less than 1.0 partper billion) in all but one location since the last week of May 2013. Benzene is still occasionally detected at low concentrations (<2 ppb) in the surface water adjacent to where contaminated groundwater enters the creek." (Emphasis added) Additionally, the site is quoted stating: The cleanup process does not have a timeline because many factors could speed up or slow down the process. At a typical spill site, a large proportion of the cleanup can be completed within a few years, but complete remediation of the residual contamination, bound up in the soil or aquifer material, may take many years. Giving the above examples, TU recommends that the BLM provide a more in depth discussion of groundwater and methods to protect groundwater in the final RMP.

Response
Variables such as proximity to water recycling plants or other wells make a difference in the volume of fresh water used in hydraulic fracturing. Fresh water is typically only necessary when drilling surface casings while water used during the fracking operation can be recycled. The amount of available water is difficult to ascertain. The State and water courts, not the BLM, implement the water rights program for Colorado. Entities can exercise their water rights according to prior appropriation doctrine. Oil and gas operators are no different. However, with more companies recycling water and utilizing this water to fracture wells, it is difficult to get exact amounts of freshwater used.

Groundwater is managed by the State through Water Quality Control Commission Regulations 41, 42 and 43. The Draft RMP/EIS discusses groundwater as it relates to oil and gas as well as protective measures on pages 4-78, 4-82, 4-83, 4-87, 4-91 and 4-396. Water use is discussed in an analysis published by the Colorado Division of Water Resources, the Colorado Water Conservation Board, and the Colorado Oil and Gas Conservation Commission. While cautioning that "the various factors that influence oil and gas development, and the resulting variations in development activity, make it extremely difficult to predict future development levels," they estimate that during the period from 2010 through 2015 hydraulic fracturing will require the following volumes of water (acre-feet): 13,900 (2010); 14,900 (2011); 16,100 (2012); 16,900 (2013); 17,800 (2014); and 18,700 (2015) (CDWR, CWCB, COGCC 2010). The BLM is not aware of exact figures for groundwater use by industry in the decision area. Groundwater use figures could vary widely, as surface water diversions can impact near stream alluvial groundwater levels. Chapter 3 outlines sensitive areas for groundwater which are limited and primarily unconfined in in the decision area. Allowable uses and stipulations outlined in Chapter 2 were

developed to protect surface and groundwater quality and quantity; the BMP/COAs in Appendix H also outline protective measures. Actions developed to protect water quality are also protective of trout species. In addition, the Programmatic Biologic Assessment for BLM's Fluid Minerals Program in Western Colorado contains estimates for fresh water demands per well and per basin. This document pertains to water depletions and effects on four endangered big river fish: Colorado pikeminnow (*Ptychocheilus Lucius*), humback chub (*Gila cypha*), bonytail chub (*Gila elegans*), and razorback sucker (*Xyrauchen texanus*). If the water depletion amounts that were consulted on in the Programmatic Biological Opinion are exceeded, consultation will be reinitiated. The RFD in the RMP does not exceed the amount of water depletions consulted on in the Programmatic Biological Opinion.

Chapter 4 describes in general terms areas that are more vulnerable to groundwater contamination and the potential activities may be responsible. Chapter 4 also indicates that water quality contamination could result from leaks or spills, but "the severity of these direct and indirect impacts would vary, depending on the different types of fluid mineral leasing activities and the intensity of development, as well as the type and volume of contaminants released to the environment" (see page 4-79 in the Draft RMP/EIS). The geographic area of greatest concern (Plateau Valley) also happens to be an area of high potential for fluid mineral development and consists of a mixture of federal, state, and private mineral estate, making groundwater protection even more complex and limiting the effectiveness of the BLM's management actions because they would not apply to all lands in Plateau Valley. Chapter 4 concludes that no-leasing stipulations would protect surface and groundwater resources from these types of impacts in areas that are currently un-leased. No change has been made to the Proposed RMP/Final EIS.

The Draft RMP/EIS, page 4-79, did not single out hydrologic fracturing practices (e.g., stimulation methods) and rather referenced shallow groundwater being most vulnerable to land use authorizations utilizing potentially harmful substances at the ground surface which can and have been released to the environment and degraded water quality. A review of the COGCC spill report database confirms that groundwater within the State of Colorado has been impacted by accidental releases. In many cases, groundwater contamination can occur from other land uses such as irrigation and application of herbicides, pesticides and fertilizers. However, on BLM-administered lands, the use of herbicides is strictly regulated in areas where potential contamination issues could occur, and irrigation and the application of fertilizers or pesticides is not a common practice. Mineral development, though, is permitted throughout the planning area lending to increased potential for accidental releases of harmful substances, although these instances are rare in comparison to the number of authorized actions. The Proposed RMP/Final EIS has been updated to clarify this information (see page 4-89, 4-442).

Section 2.4.2 of the Draft RMP/EIS recognizes the CDPHE's authority over water resources by stating that "…all action alternatives contain the following regulations … Adhering to the Colorado Department of Public Health and Environment's (CDPHE) Water Quality Control Commission Regulations, as required by law, to ensure that the Clean Water Act is not violated…" (see page 2-14). No change has been made to the Proposed RMP/Final EIS.

The BLM implements multiple responsibilities and authorities that are complementary to the state's authority for water allocation. For example, any water diversion facility on BLM-administered lands requires explicit land use authorization from the BLM. In these land use authorizations, the BLM's role is to fulfill mandates expressed in federal laws for resource maintenance and protection. This responsibility is fulfilled by imposing terms and conditions on the land use authorization or by denial of land use

applications if terms, conditions, and mitigation are not sufficient to address resource management requirements. No change has been made to the Proposed RMP/Final EIS.

Water Quality Monitoring

Summary
The RMP/EIS should address how water quality monitoring in the planning area will occur prior to, during, and after anticipated development to detect impacts to both surface water and groundwater resources, including private well monitoring.

Comments
Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: Water Resource Monitoring
The EPA recommends that the Final EIS address how water quality monitoring in the planning area will occur prior to, during, and after anticipated development to detect impacts to both surface water and groundwater resources, including private well monitoring. A recent example of a water quality monitoring plan is the "Long-Term Plan for Monitoring of Water Resources" developed by BLM for the Gasco Energy Inc. Uinta Basin Natural Gas Development Project Final EIS. The National Ground Water Association's Water Wells in Proximity to Natural Gas or Oil Development Brief provides additional information on the importance of baseline sampling for private wells and types of analysis recommended.

Response
The Proposed RMP/Final EIS has been updated to include the new COGCC Rule 609 for statewide groundwater baseline sampling and monitoring. This rule was adopted in 2013 after publication of the Draft RMP/EIS. Rule 609 requires operators to collect baseline water quality samples at two different groundwater sources within 0.5-mile of the well site before drilling any new oil or gas well. The rule also requires the operator to take subsequent water samples to ensure no groundwater contamination occurred during drilling or after production. See page 4-89.

Definable Streams

Summary
The BLM needs to clarify "definable streams" and how they are different than the streams included in NSO-1 and NSO-2. The BLM must also analyze impacts on definable streams. Further consider and explain protection of intermittent and ephemeral streams.

Comments
Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The DRMP refers to "Definable Streams" but fails to adequately describe, identify, and analyze how these will be impacted. If the term "Definable Stream" is meant to refer to intermittent and ephemeral streams, our concern is that these types of drainages quite often provide important spawning and brood-rearing habitat from spring runoff. However, the protection of intermittent and ephemeral streams merits further consideration

and explanation in the DRMP. In most mountain regions during runoff or sudden event storms, ephemeral drainages can become flowing mountain streams in a matter of hours and can run for a period of weeks or often months (Elmore, Wayne. 2009. Riparian Ecologist, BLM Retired. Prineville, Oregon. Personal conversation). Trout may enter these drainages and may be spawning or have spawned and are at an early life stage. A thorough inventory of the streams and drainages in the planning area would potentially reveal those areas containing new flow systems or potential flow systems and would be subject to stronger buffering protections.

Response

The commenter is correct that ephemeral systems are a critical piece of the hydrologic cycle and warrant protection. Most ephemeral drainages in the planning area only flow during convective thunderstorms or spring snowmelt and flow may last only a few days. They are typically steep headwater channels that provide water, sediment, and nutrients to downstream aquatic habitat. Destabilization of these systems directly (e.g., surface disturbance to channel and/or banks) or indirectly (e.g., increased surface run-off caused by improper road drainage or soil compaction) can alter the streams' ability to efficiently move sediment and water to lower portions of the watershed. Decreased water quality and morphologic destabilization can result. Intermittent streams flow continuously at certain times of the year, such as when snow melts or after rain, but shrink in dry times to become individual pools filled with water. They typically flow for several months and can be important to fish habitat as the commenter states. The streams having spawning or brood-rearing habitats during spring run-off would be covered under protections for streams with lotic riparian characteristics. This information has been added to page 4-90.

The Draft RMP/EIS's definition of "definable streams" was in error. The following definition has been added to the Glossary in the Proposed RMP/Final EIS: "Definable/ephemeral streams: Streams that contain running water only sporadically, such as during and following storm events. Ephemeral streams with a definable channel are considered "seasonally flowing" or intermittent when they show evidence of scour and/or deposition."

6.2.5.4 Fish and Wildlife

Summary

The Draft RMP/EIS failed to consider certain scientific information pertaining to the impacts of recreation and other human disturbances on wildlife and their habitat.

Comments

Submission No: emc0826

Commenter: Nick Payne, Theodore Roosevelt Conservation Partnership

Comment: We suggest BLM utilize additional published articles and guidance, particularly the use of the Western Association of Fish and Wildlife Agencies recommendations on mule deer habitat guidance and energy development (Lutz et al. 2011), the recently approved technical review by The Wildlife Society on impacts of oil and gas development on wildlife (Riley et al. 2012), and a recent USGS synthesis of sage grouse research (Manier et al. 2013). Other relevant articles on sage grouse we did not see in the RMP include Doherty et al. (2008, 2010), Holloran et al. (2010), Kirol (2012), Naugle et al. (2011), and Walker et al. (2007).

Submission No: emc0077
Commenter: Robert Gutowski
Comment: The riders, Motorcycle, Quads, and 4x4s serve a safety purpose by keeping many of the animals "passively" away from the airport. Grand Junction airport, even with a 3-strand barbed wire fence does not have nearly the animal incursions that the other airports I have worked at have with 8 foot security Fences. I fear that when you omit a safety zone (buffer zone so to speak) that is created by the existing OHV plan, you will have more wildlife on the runway in a short time and there is a higher possibility of aircraft to wild life "deaths" on this airport, as happens on other Airports in the USA.

Submission No: emc0932
Commenter: Tim Brass, Backcountry Hunters and Anglers
Comment: We would like to see the BLM include consideration of the impacts of motorized/mechanized shed hunting on winter habitat within proposed WEA's tailored to the protection of big game habitat, specifically wintering habitat. While we fully embrace this pursuit and activity, we also understand there is a large body of research available that highlights the impacts of motorized/mechanized use on big game. Thus, we would like to see further consideration given to this within the WEA's, to complement consideration given to motorized impacts to big game in the TMP. Http://www.backcountryhunters.org/index.php/our-work-our-values/orvresponsibility/ 261-research-illustrates-the-need-for-responsible-ohv-use).

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: BLM claims that "wildlife emphasis areas" are not designations. However, for nearly every identified area discussed in Chapter 2, BLM proposes the use of NSO and/or CSU stipulations. Of similar concern is that BLM fails to effectively explain how the lands with the 'polygons' described in Chapter 2 will ultimately be managed. Has BLM fully analyzed the benefit to species juxtaposed with the impact on economic activities in the planning area that will result from the designation of wildlife emphasis areas? If not, we recommend such an analysis be completed before including them in the final planning documents.

Submission No: emc0701
Commenter: Craig Grother
Comment: When I reviewed Chapter 4 of the Draft EIS there were several references and acknowledgements of the impacts of human activities on wildlife habitats and big game species. However, I feel there is a need for additional consideration and recognition of the impacts of motorized and mechanized (aka bicycles) upon big game distribution, productivity, vulnerability, and population structure, as well as hunter success in relation to open road/trail density on the landscape. There is a large and growing body of research available that needs to be recognized and implemented by the BLM. We have posted several of the most relevant research studies on our website at backcountryhunters.org:

Literature Reviews of OHV Impacts on Hunting, Fishing and Habitat:
1. ATV Impacts on the Landscape and Wildlife (2011). A white paper by BHA which provides a synthesis of OHV-related articles in three sections focused on the effects of ATV use on: 1) soils, water quality and vegetation 2) wildlife (primarily elk) 3) the habitat and environment that wildlife depend upon.
2. Off Road Vehicle Impacts on Hunting and Fishing. An excellent illustrated literature review by the Isaac Walton League highlighting the impacts that off road vehicle use has on our sporting heritage.
3. Environmental Effects of Off-Highway Vehicles on Bureau of Land Management Lands (2007). A synthesis of literature compiled by the Department of Interior.

4. The Effects of Off-Road Vehicles on Ecosystems. A research review by Texas Parks and Wildlife.
5. Effects of Roads on Elk: Implication for Management in Forested Ecosystems (2005). Research which builds on a large body of research demonstrating the impacts of roads on elk behavior and habitat.
6. Behavioral Responses of North American Elk to Recreational Activity (2008). A study which found that "activities of elk can be substantially affected by off-road recreation. Mitigating these effects may be appropriate where elk are a management priority. Balancing management of species like elk with offroad recreation will become increasingly important as off-road recreational uses continue to increase on public lands in North America."
7. Reproductive Success of Elk Following Disturbance Following Disturbance by Humans During Calving Season (2011). A study which shows that cow/calf ratios decrease when disturbance increases and therefore "maintaining disturbance-free areas for elk during parturitional periods" is necessary.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM includes several studies indicating oil and gas development may have an adverse impact on Big Game Species. The BLM does not, however, include information regarding how species habituate to oil and gas activities. See Reeve, A.F. 1984, Environmental Influences on Pronghorn Range and Pronghorn Habitat, PhD Dissertations, Erv, Irby, L.R., et al., 1984; "Management of Mule Deer in Relation to Oil and Gas Development in Montana" Proceedings III: Issues in Technology in the Management of the Impact to Wildlife. The BLM should update the RMP with this information. As currently drafted, the RMP unfairly describes impacts to big game species from oil and gas activities.

Submission No: emc0845
Commenter: Ron Lambeth
Comment: Comment on Chapter 4: Since a large amount of the furor that is being hurled at the DRMP is over road closures the environmental consequences chapter should have the adverse effects of human travel routes presented in more ways. There are good research data on the effects of Road Density (linear miles/square mile). This statistic is readily available in the BLM GIS database. So use it. Use it often, everywhere. It is quantitative information that will facilitate monitoring the effects of your travel management plan. It will facilitate explaining road closures. It will help to make comparative/contrasting site descriptions. To see more regarding this subject an informative source is at the following webpage:
http://www.wildlandscpr.org/road-riporter/how-many-too-many-review-road-density-thresholdswildlife.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: In addition to a GAP-type planning and analysis process the WEAs should include a density threshold; CPW recommends implementing a road density analysis with direct and indirect impact analysis and an established road density threshold of 1.0 mile of road per section as a trigger for mitigation necessary to offset the unique resources of the WEA. Also, CPW suggest that performance based reclamation should be included and used instead of prescriptive reclamation standards.

According to a recent literature review of ungulate response to road and well development, significant impacts to ungulate populations begin to manifest themselves when road densities reach 0.5 — 1.0 mile of road/sq. mile (Table 6, p.88 Hebblewhite 2008. A similar road density threshold has been implicated for maintaining sustainable populations of sage-grouse, large carnivores and bears (Doherty et al. 2008, Van Dyke et al. 1986 and Clevenger et al. 1997.

In addition to mitigation thresholds, CPW supports streamlining the BLMs internal clearance and permitting process by which the GJFO analyzes individual habitat treatment projects required as mitigation for impacts to wildlife habitats and use associated with oil and gas development/production activities. CPW requests that BLM create a mechanism to expedite oil and gas offsite mitigation habitat treatments in WEAs. CPW would support and assist BLM in efforts to develop and implement a programmatic environmental assessment (EA) for wildlife habitat mitigation plans for oil and gas exploration and development within WEAs. The programmatic EA should be tiered to this RMP.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The wildlife research we have reviewed also is consistent: disturbance that causes the area around the route to be underutilized by wildlife is from roads that are far more heavily travelled by larger and heavier vehicles, far more than the amount of use that occurs in the existing condition in the GJFO Planning Area. The research that shows road effects to wildlife due to the traffic is reporting on heavily travelled roads, usually highways and paved roads, or heavily travelled, graded and ditched logging roads used by loaded and unloaded trucks, and all travelling at much higher speeds than are possible on the undeveloped roads in the GJFO Planning Area.

Submission No: emc0917
Commenter: Julie Slivka, The Wilderness Society
Comment: BLM should determine appropriate route density targets for areas within the Grand Junction Field Office based on wildlife habitat, recreation settings and other resources affected by route use and development. Those targets should be set in the RMP to guide future travel planning.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Contamination and Fish. The DRMP fails to adequately discuss impacts from oil and gas development to sensitive fish species such as Colorado River cutthroat trout (CRCT). Many of today's existing native cutthroat trout populations that are located in the periphery range of their habitat fail to meet effective population thresholds. As a result, these populations have an increased vulnerability to loss (Haak, A. L., Williams, J.E., Neville, H.M., Dauwalter, D.C. and W. T. Colyer. 2010b. Conserving peripheral trout populations: the value and risk of life on the edge. Fisheries 35:530-549). TU's main concern with the DRMP is the lack of discussion of how oil and gas development could affect native cutthroat trout population persistence, population abundance and habitat patch size both within the planning area perimeters and downstream from the planning area boundaries.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The DRMP mentions the challenges with Mancos Shale and selenium laden soils in the GJFO planning area. The issue of selenium and soil disturbance from oil and gas operations is being given additional study by USGS (Muddy Creek in Wyoming) due to a noticeable increase in selenium activity once the surface has been disturbed. Additional USGS studies are confirming fish contamination of selenium from eating insects which have eaten plants which occurred in selenium rich soils. Sediment and selenium are the primary water quality impairments within the GJFO planning area and must be thoroughly analyzed in environmental impacts (DRMP 3-49).

As we discussed under Water Issues, potential impacts to surface and groundwater sources include increased sedimentation, turbidity of surface water, erosion, wetland loss, effects on water quality from contamination with drilling fluids, petroleum, hydraulic fracturing chemicals, other industrial chemicals used during drilling practices,

and the disruption of historic and normal flow patterns of surface water due to the increased number of roads, well pads, and traffic. The DRMP fails to adequately address these significant impacts as they impact fisheries, and threatening the important watershed systems in the planning area.

Moreover, these populations are vulnerable to local environmental alterations from events such as wildfire and floods that could eliminate entire populations. Alterations in drainages through construction activities could potentially allow non-native fish (such as rainbow trout) to access conservation populations of CRCT (who are particularly vulnerable to hybridization) and hybridize these populations. Any of these events could eliminate entire populations, placing CRCT in a potential listing status. The DRMP makes no mention of these potential harms nor does it reference protection standards for this unique environment other than recommending the placement of inadequate 98 to 328-foot buffers on perennial streams. CRCT remain the most sensitive of the cutthroat subspecies to impacts resulting from energy development, based on energy development activities that increase surface sedimentation runoff and industrial waste contamination. As an example, in the 1970's an entire pure conservation population of CRCT was lost due to an oil spill in a tributary of LaBarge Creek in western Wyoming (Wyoming Game and Fish Department [WGFD] internal report, Binns, A.) That particular population never recovered and not until recent efforts by the forest service, WGFD, TU and others have CRCT been reintroduced into that system (WGFD 2010).

The discussion in the DRMP on long term and short term impacts should be expanded to better qualify the impacts to wildlife and fish longevity. The DRMP defines short-term impacts as less than 2 years and long-term impacts as anything over 2 years. It fails, however, to discuss the relevance as to what 2 or 5 or 10 years may mean to each species' survival. For fish, 2 years' worth of sediment loading may be a death sentence. In Michael Young's paper on the assessment of CRCT ("Colorado River Cutthroat Trout (Oncorhynchus clarkii pleuriticus): A Technical Conservation Assessment", prepared for the USDS Forest Service, Rocky Mtn. Region, March 2008), the identification of primary threats includes a discussion of how CRCT populations located in small isolated headwaters (such as those experienced in the planning area) become vulnerable to extirpation from disturbances in the short-term due to lack of connectivity to other populations. While unique, their isolation makes them vulnerable. Thus, a shortterm impact (such as a landslide or a gas spill) can permanently eradicate a population. For mule deer, 10 years' worth of impacts was determined to have a significant detrimental effect on the status of the Sublette mule deer population (Sawyer, et al. 2010) in Pinedale, Wyoming. TU finds the DRMP's use of such timeline references broadly and vaguely defined, unsupported and in need of further analysis.

Response

<u>Travel Management in Wildlife Emphasis Areas</u>

The Proposed RMP/Final EIS has been updated with additional analysis concerning the effects of route density on wildlife. See pages 4-147 through 4-149. The BLM followed guidance in Manual 1626 and the CFR minimization criteria when designating routes and selecting route designation criteria. While a density threshold is not required and would vary by species even in the same area, all guidance and regulations were followed and monitoring can address impacts on resources such as fish and wildlife (see Appendix M, Section 5.6).

Offsite mitigation is addressed in IM 2013-142 and Draft Manual 1794, which replace IM 2008-204, Offsite Mitigation. The draft manual promotes consideration of mitigation within a broader regional context and clarifies the 2008 offsite mitigation policy. The BLM believes that this new policy provides the flexibility to expedite offsite mitigation where necessary throughout the field office. The suggestion

that a programmatic EA be written after the RMP is finished is not within the scope of the RMP. No change has been made to the Proposed RMP/Final EIS.

Species Habituation to Disturbance

The Draft RMP/EIS relies on the best available science when describing the impacts of disturbance such as energy development on fish and wildlife. The Proposed RMP/Final EIS has been updated on page 4-147 to include reference to the studies identified by the commenter, but a larger, more recent body of research supports the conclusion in the Draft RMP/Final EIS that disturbance causes long-term changes in wildlife behavior. Impacts from selenium on fish species are discussed on page 4-157; no change has been made to the Proposed RMP/Final EIS.

Actions that may threaten a species' survival are identified regardless of whether they occur over the short- or long-term. However, sediment loading at levels that would result in the elimination of entire populations from actions or programs in the plan is not identified and is unlikely. All ground-disturbing actions would be managed with protective stipulations and BMPs that would eliminate or reduce erosion and sediment transport. Roads are a chronic source of sediment input, but, given the number of proposed road closures, effects would be reduced under most alternatives, including the Proposed RMP. Natural events (e.g., fire, flood) could have catastrophic effects but are not a decision in the RMP.

Potential impacts from accidental spills and leaks are difficult to predict as there is no way to know where, what, or how much of any contaminate might occur or in what proximity to live water and occupied habitats. Instead, the RMP/EIS relies on stipulations and protective measures outlined in Chapter 2 and the BMP appendix as means to reduce risk and minimize impacts. Although spills or leaks may be unavoidable, the BLM does not plan to have any issues with chemicals or drilling because they generally fall under the category of accidents. BMPs, applied on a site-specific level, help to reduce risk and potential. No change has been made to the Proposed RMP/Final EIS.

6.2.5.5 Wildland Fire Management

Summary

The impact analysis did not adequately consider the effects of road closures on suppression of wildland fires, impacts on watersheds, impacts from forest health, or that natural fire intensities and return times vary by vegetation type.

The Draft RMP/EIS did not consider research showing that the expansion of limited management areas is unlikely to improve forest health and may cause a decline in the health of forested areas.

Comments

Submission No: cfc0064

Commenter: Brian Bond

Comment: Closing these roads will also hinder the suppression of forest fires, resulting in a potential environmental disaster.

Submission No: emc0694
Commenter: Bonnie Petersen
Comment: Expansion of limited management areas is unlikely to improve forest health and may cause a decline in the health of forested areas. Recent lack of forest management can be pointed to as resulting in devastating wildfires along with significant loss of property. Research has concluded that lack of management in unhealthy forest areas impairs the health of other areas adjacent to unmanaged areas and concludes that active management is a critical tool in maintaining watershed health. This research is not considered in the Proposed RMP and suggests that new designations of WSAs or WCOs in the GJFO planning area may well be inappropriate.

Submission No: rmc0069
Commenter: Roger Granat, Mayor, Town of Palisade
Comment: The Town is concerned with the allowance of Unplanned Fire for Resource Benefits within the Palisade Watershed. It is imperative that vegetative management techniques including prescribed burns, properly planned and permitted be employed to minimize the negative consequences of an unplanned fire.

Submission No: emc0845
Commenter: Ron Lambeth
Comment: The discussions on the use of prescribed fire is still too general. It doesn't show recognition of what conditions in what vegetation types signal that fire would be beneficial. Natural fire intensities and return times need to be acknowledged to exist and vary depending on the vegetation type.

Response
Regulations at 43 CFR 8340.5 specifically exempts any fire vehicle used for emergency purposes from closures. As such, fire suppression activities would not be affected by the proposed route designations. BLM has the ability under emergency situations to access wildland fires that are off road. Also, the majority of wildland fires the BLM responds to now do not have direct road access. Thus, lack of roads will not hinder the response to wildfire. No change has been made to the Proposed RMP/Final EIS.

Section 4.3.11 analyzes impacts on the Wildland Fire Management program from implementing the alternatives, including Alternative C, which generally includes more areas with less-intensive management. The analysis discloses a potential increase in fuel levels sufficient to produce a landscape with larger and more costly fires. The BLM can use planned and unplanned fire in limited management areas, such as WSAs, as a tool to address forest health. Planned and unplanned fire management tools are available under all alternatives. (Consistent with current agency guidance, the BLM is not considering the designation of any new WSAs.) No change has been made to the Proposed RMP/Final EIS.

The wildland fire management program's goal is to manage fire to maximize ecological health benefits (including consideration of water resources) while providing for firefighter and public safety. Any consideration to use unplanned fire for resource benefit within a municipal watershed would consider the water resource ahead of vegetation objectives and other decision factors. It is correct the proactive vegetation management is a key to minimizing negative effect of unplanned wildland fire. In addition, the action alternatives propose a variety of fuels treatments to restore fire regimes, which would provide indirect benefits to water resources. No change has been made to the Proposed RMP/Final EIS.

Wildland fire management is focused in part on restoring or maintaining the fire regime condition class (FRCC). FRCC is a classification system that describes the amount of departure an area or landscape has

experienced from its historic regime to the present condition. It is used to classify existing ecosystems by looking at conditions of ecosystem components, including different vegetation types. Inherent in maintaining or restoring FRCC through prescribed fire is a consideration of the vegetation type and its characteristics when burned. Once the RMP is complete then a subsequent Fire Management Plan tiered to the RMP will give further implementation level detail of discussion of benefits to prescribed fire to individual vegetation types. No change has been made to the Proposed RMP/Final EIS.

6.2.5.6 Visual Resources

Summary

The Draft RMP/EIS contains inadequate analysis of the relationship between visual resources, cultural resources, oil and gas development, and transportation.

Comments

Submission No: emc0711

Commenter: Claire Moseley, Public Lands Advocacy

Comment: Pages 2-103-104, Visual Impacts to Traditional Use and Public Use Categories – The DEIS indicates that visual impacts will be considered for projects in proximity to Traditional and Public Use categories.

COMMENT: The Draft EIS/RMP fails to describe in any specificity the types of visual impacts it is referring to, nor does it detail any remedial actions for those impacts, including infrastructure design, camouflaging, or relocation. This level of vagueness is unacceptable because it makes assessment of regulatory requirements for projects that may be in proximity to these sites virtually impossible. Furthermore, we remind BLM that most of the oil and gas infrastructure commonly associated with visual impacts is temporary in nature. The most conspicuous equipment, such as a drill rig, is only present for a relatively very short period of time. As wells are completed, the infrastructure, well pad acreage, etc., are systematically removed through interim reclamation efforts. As the initial footprint shrinks, visual impacts greatly lessen. We recommend BLM take into account the essentially temporary visual impacts of oil and natural gas development and revise its approach in the final planning documents.

Submission No: emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: When the BLM has issued oil and gas leases, it has made the decision to allow the surface disturbance and facilities that accompany oil and gas development. 43 C.F.R. § 3101.1-2. VRM Class II objectives, on the other hand, provide that the level of impact to the visual resources should be low. BLM Manual Handbook 8410-1 at 6. In a VRM Class II area, "management activities may be seen, but should not attract the attention of the casual observer." Id. VRM Class II objectives may be viewed as inconsistent with even the most responsible development of Encana's existing leases. The proposed VRM Class II designation for lands covered by leases may be in conflict with, and provide confusion about, prior decisions made to lease the same lands without restrictions for visual resources under the current RMP.

Submission No: emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: The BLM should also more clearly analyze the potential impacts VRM classifications I and II will have upon future oil and gas development throughout the EIS. The BLM acknowledges that surface disturbing operations would be generally prohibited within VRM I or II areas. See, e.g., GJ DRMP/EIS, pg. 4-138. To the extent the BLM

will attempt to impose VRM Class II requirements on Encana's existing leases through COAs, Encana's operations will be significantly impacted. The BLM should more clearly analyze the potential negative impacts VRM classifications will have on oil and gas operations. Similarly, the BLM should clarify how the creation of significant new ACECs under Alternative B, and the associated VRM Class I or VRM Class II conditions attached thereto will negatively impact oil and gas operations. As noted throughout these comments, the BLM must ensure that it does not attempt to impose stipulations on existing leases that would limit or otherwise foreclose future oil and gas development.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Visual resource management- classifications are more stringent. The oil and gas industry use BMP and the BLM Gold Book in making structures less visually intrusive. Consideration should be given to that fact that many oil and gas activities are temporarily intrusive and there impacts short lived.

The potential visual impact mitigation measures associated with the Public Use and Traditional Use categories are vague and fail to provide regulatory certainty, nor do they acknowledge the temporary nature of the visual impacts associated with oil and gas development.

Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: The DEIS fails to disclose the potential impacts of Visual Resource designations on such things as transportation and energy infrastructure. The FEIS should supplement the analysis with a full disclosure of how the VRM standards are applied.

Response
Cultural resource sites allocated to traditional use are identified as traditional cultural properties and sacred sites in consultation with Native American tribes. Because of their significance to tribes, visual impacts must be considered in consultation with tribes to ensure that these sites are maintained in the setting for which the area is used. The mitigation measures employed to protect the setting would be determined on a case-by-case basis based on tribal consultation. See Appendix H, Best Management Practices and Standard Operating Procedures, of the Draft RMP/EIS for possible mitigation measures; project relocation or redesign is preferable to other forms of mitigation. Not all sites allocated to traditional use necessarily have a related visual resource concern to tribes.

Cultural resource sites allocated to public use hold a local or regionally recognized visual value (e.g., historic cabins, railroad grades, roads and trails, mine ruins, and mine workings). Projects in the vicinity of these sites should consider visual resources in order to maintain the historic setting of these resources, if they are dependent upon such a setting. Not all sites allocated to public use necessarily have a related visual resource concern.

The BLM has added suggested analysis of impacts from VRM classes on recreation (pages 4-328, 338, and 344), lands and realty (pages 4-359 and 4-361), and new energy and minerals leases (pages 4-373, 376, 385, and 385).

For a discussion of the relationship between valid existing rights and the actions proposed in the RMP/EIS, see Section 6.2.7.8.

6.2.5.7 Energy and Minerals

Reasonably Foreseeable Development Scenario

Summary

The Reasonably Foreseeable Development Scenario (RFDS) for the RMP relies on outdated information and lacks adequate information describing the methodology used for determining well projections. The BLM needs to provide a site-specific RFDS for areas such as Shale Ridges.

Comments

Submission No: emc0711

Commenter: Claire Moseley, Public Lands Advocacy

Comment: Of additional concern is that BLM doesn't clearly explain the severe impacts each of the new management alternatives would have on current and future oil and gas leasing and development opportunities. For example, based upon the referenced geologic potential cited in the RFD, it was projected that nearly 4,000 wells could be drilled over the next 20 years. However, due to the constraints contained in Alternative B, only 780 wells are projected and it is as low as 220 wells under Alternatives A and C. It is unclear how BLM reached its conclusion that only 220 wells would be drilled under current management when it is projected, despite a host of additional severe restrictions on leasing and development, that nearly 800 wells could be drilled under the Preferred Alternative B. BLM needs to provide clarification of these issues in the final planning document.

Submission No: emc0893

Commenter: William Sparks, Black Hills Plateau Production, LLC

Comment: BLM should include language explicitly stating that the RFD is not a cap on development, but that it is a tool for analysis only. BLM must ensure that the RFD accurately reflects all proposed and planned oil and gas development over the next 20 years, including the exploration and development of the Mancos formation.

Submission No: emc0893

Commenter: William Sparks, Black Hills Plateau Production, LLC

Comment: BLM Must Utilize a Valid and Accurate RFD. The reasonable foreseeable development (RFD) scenario discussed in Section 4 of the DRMP/DEIS is not up to date and does not accurately reflect the most recent technological advances in oil and gas development, the current pace of oil and gas development, and the impacts from oil and gas development.

Submission No: emc0917

Commenter: Juli Slivka, The Wilderness Society

Comment: The BLM must develop and include in the Final RMP an RFD specifically for Shale Ridges. The BLM must base that RFD on current information concerning economics and technological developments, and must use the RFD to inform the development and selection of RPMs.

Submission No: emc0923

Commenter: Larry Moyer

Comment: The lack of a Resource Characterization and Assessment for oil and gas means that the RMP does not meet any reasonable standard of best practice nor does it meet criteria in Reference Manual on Scientific Evidence

where rules on the reliability of scientific evidence consistent with the Supreme Court opinion in Daubert v. Merrell Dow, 509 where rules were set out.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM indicates that the Reasonably Foreseeable Development Scenario ("RFD Scenario") was developed for the GJ Planning Area. GJ DRMP/EIS, pg. 1-15. Unfortunately, this is one of the only few clear references to the RFD Scenario in the entire Draft EIS for the Grand Junction RMP. The BLM additionally briefly mentions the RFD Scenario in the air quality and socioeconomic sections of the Draft EIS. GJ DRMP/EIS, pgs. 4-20, 4-402. The BLM should more clearly explain how the RFD Scenario was developed for the Grand Junction RMP and how it is utilized in the BLM's analysis.

As indicated by the number of decisions cited above, the purpose of the RFD Scenario continues to be a source of confusion and litigation. The BLM must carefully explain to the public that the RFD Scenario is not a cap or limitation on future development in the GJ RMP. In the most recent published decision from the IBLA regarding the RFD Scenario, the IBLA unequivocally determined that the RFD Scenario is not, and cannot be used as, a limitation on future oil and gas development. "While an important tool in the land use planning process, RFD Scenarios do not constitute fixed or maximum limits on development under FLPMA such that exceeding them constitutes a violation of that statute." Biodiversity Conservation Alliance, et al., 174 IBLA 1, 11 (2008).

In order to prevent future litigation and appeals, the BLM must include language in the Record of Decision ("ROD") and the GJ RMP describing the purpose of the RFD Scenario and the fact that the RFD Scenario is not a planning decision or limitation on future oil and gas development. Instruction Memorandum 2004-089, Policy for Reasonably Foreseeable Development (RFD) Scenario for Oil and Gas (Jan. 16, 2004). For example, the BLM could expressly adopt and incorporate the position that the Secretary of the Interior, through the IBLA, has expressed regarding the RFD Scenario in a recent published opinion:

Noting that an RFD scenario is an analytical tool, we expressly rejected both the idea that it establishes a point past which further exploration and development is prohibited, and the assumption that the underlying environmental analysis has no validity beyond the RFD scenario. In rejecting that assertion, we implicitly agreed with BLM that an RFD scenario is neither a planning decision nor the No Action Alternative in the NEPA document. National Wildlife Federation, et al., 170 IBLA 240, 249 (2006) (internal quotations and citations omitted). The BLM must carefully draft any and all references to the RFD Scenario in the GJ RMP and accompanying EIS.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Preserving the ability for the oil and gas industry to operate, extract and explore is of great importance to the region due to positive economic impacts. In general we do not support closing areas to leasing. The DRMA does not discuss nor anticipate new technologies which may alter the determination of high to low occurrence of oil and gas resources and the ability to discover and extract the resources.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: It is apparent that the GJFO RFD was prepared without taking into account technological advances which allow operators to drill many more than the 8 wells per pad projected. Moreover, based upon current

information, the initial surface disturbance of 12 acres per pad is overstated. We recommend that BLM revise its assumptions by taking into account recent technological advances along with up-to-date information on geologic potential before committing to the proposed highly restrictive management approach for oil and gas resources contained in both Alternatives B, preferred, and C.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The assumptions used for the RFD Scenario--averaging eight drilled wells per pad, 12 acres of initial disturbance per pad--represent a worst case scenario for pad efficiency and disturbed acres per well. For example, while subject to change, Encana development plans could have significantly more wells per pad with less disturbance (i.e., 18-well pad with 8 acres of initial disturbance and 4 acres of long-term disturbance). The RFD Scenario used by BLM in its analysis overestimates the environmental impacts of future development activity.

For conventional wells, the BLM says that "few, if any, wells are expected to be drilled to depths exceeding 10,000 feet." The BLM does not reference an expected depth in its summary of Mancos Shale Gas Development potential. While conventional wells deeper than 10,000 feet are unlikely, the BLM should clarify that wells in the Mancos shale will be deeper than 10,000 feet. The BLM also states that "all" Mancos shale gas wells will be developed with multi-well pads. While that will be true for the majority of wells, industry will probably continue to drill single-well pads in some circumstances, especially in the exploratory phase.

The BLM also developed a map of expected development areas with ratings of very high, high, and moderate. Because of advances in drilling technology and better understanding of the geology, BLM should make clear that high potential areas may change. The area currently listed as "moderate" potential could be considered "high potential".

Encana urges the BLM to increase its development scenario to recognize that horizontal drilling and other technological advancements may create greater potential in the future and to consider the positive economic impact that accessing these resources would create. The BLM must ensure it is not limiting future development options by unreasonably limiting its analysis.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM does not appropriately explain how the RFD Scenario for the GJ Resource Area was significantly curtailed in each of the action alternatives. The BLM indicates that the RFD Scenario based on geology alone could approach 4,000 wells during the 20-year life of the plan, nonetheless, under the actual alternative BLM assumes as few as 220 wells may be drilled in the entire project area during the next 20 years. GJ DRMP/EIS, pgs. 4-328 - 4-348. The BLM must provide significantly more information regarding how it arrived at these incredibly low numbers given the geologic potential of the area.

Response
In accordance with IM 2004-089 (Reasonably Foreseeable Development Scenario for Oil and Gas), a Reasonably Foreseeable Development Scenario (RFD) for oil and gas is a long-term projection of oil and gas exploration, development, production, and reclamation activity. The RFD covers oil and gas activity in a defined area for a specified period of time. The RFD projects a baseline scenario of activity assuming all potentially productive areas can be open under standard lease terms and conditions, except those areas designated as closed to leasing by law, regulation or executive order."

The RFD is neither a planning decision nor is it a no action alternative. In the NEPA document, the RFD baseline scenario is adjusted under each alternative to reflect varying levels of administrative designations, management practices, and mitigation measures. Under each alternative, the new adjusted level of projected oil and gas activity then leads to an analysis of related environmental effects in the "Environmental Consequences" section of the RMP/EIS.

The RFD for the planning area was based on a reasonable, technical, and scientific estimate of anticipated oil and gas activity based on the best available information and data at the time of the study. The RFD Study Area (i.e., the "defined area") includes all lands within the GJFO boundary regardless of surface or mineral ownership. Also, in an attempt to gain more insight as to what may occur in the Study Area, major oil and gas companies operating in the GJFO Study Area were contacted by letter and asked what development activity they anticipated during the next 20 years. These data were compiled and were used to help predict locations and amounts of future drilling activity within the Study Area. Available technical data were also reviewed to assist with these projections. A detailed description of the methodology used to determine well projections is provided under Section VIII, RFD Baseline Scenario Assumptions and Discussion, in the RFD.

Additional RFDs for site-specific areas will not be completed as part of this RMP effort. While in certain circumstances it may be necessary to develop an RFD scenario for an area that coincides with generally smaller areas defined by the RMP (per IM 2004-089), the BLM has not identified any areas warranting such analysis to date. The GJFO RFD provides the necessary baseline scenario to analyze the effects that discretionary management decisions have on oil and gas activity and provides basic information that is analyzed in the EIS under the various alternatives.

The RFD analyzes several different types of wells and associated short and long term surface disturbance. For example for conventional directional drilled wells in high potential areas the RFD assumed 8 wells per pad and 5.4 acres per pad of initial disturbance. For the wells identified as Shale, the average pad size was assumed to be 6.75 acres. The Shale Gas pad size for high density areas only did indicate an average 12 acre pad with 21 wells per pad. It is unclear where the commenter obtained information asserting the RFD assumed an average of 8 wells per pad and 12 acres of initial disturbance. The disturbance factors used in the RFD are based on historical and projected development. Operators were consulted for their development plans and this information was used in the RFD. The BLM is comfortable with the acreage disturbance factors. Actual areas of disturbance could differ from these estimates as a result of advances in technology, changing industry needs, and site-specific measures employed to protect resources. The RFD will not be modified at this time.

Page 4-3 of the Proposed RMP/Final EIS has been edited to clarify the number of wells expected under each alternative.

Impact of Actions and Stipulations

Summary

The BLM should revise the impact analysis to include an analysis that describes the impacts from overlapping and cumulative lease stipulations and an analysis that accurately depicts the economic impact from proposing various closures and restrictions on fluid minerals.

Comments

Submission No: emc0902

Commenter: Chris Clark, Occidental Petroleum Corporation

Comment: Oxy is particularly concerned with the proposed action alternatives B (Preferred) and C (Resource Protection). For example, the Preferred Alternative (B) proposes to more than double the amount of acreage currently unavailable for oil and gas leasing (from 96,500 acres to 202,400 acres). Alternative C goes even further, proposing the removal of 623,500 acres, which is nearly 6.5 times the amount of acreage reserved under the current Resource Management Plan. These action alternatives are proposed without proper analysis or scientific studies justifying the needs for such drastic measures. They also lack any supporting information as to the economic impact that will result if either of these alternatives is chosen. The BLM has failed to analyze the immense impact to both current and future leasing under the proposed action alternatives, leaving many questions for the public and operators in the GJPA. These action alternatives must be accompanied by a detailed economic analysis that specifically describes the economic impact of each of the alternatives. This lack of analysis risks violating the FLMPA. The resulting management plan is likely to create a significant roadblock to energy development. Moreover, much of these proposed acres are already leased, impacting existing lease rights and further straining the ability for operators to develop domestic energy resources on federal lands.

Submission No: emc0893

Commenter: William Sparks, Black Hills Plateau Production, LLC

Comment: The GJFO DRMP/DEIS must be revised to analyze the impacts that overlapping and cumulative lease stipulations would have upon a lessee's ability to conduct exploration and development activities upon its leases.

Response

BLM land use planning policy (i.e., H-1601-1, Land Use Planning Handbook) for the oil and gas program requires an RMP to identify where the BLM has opened or closed the planning area to leasing. For open areas, the RMP also must identify the constraints (i.e., stipulations) that will apply to future leases, such as timing limitations, controlled surface use, or no surface occupancy (H-1601-1, Land Use Planning Handbook, Appendix C, II, H, (pages 23–24). The impacts on energy development from open and closed leasing allocations and related constraints (e.g., stipulations) are discussed in the Draft RMP/EIS on pages 4-338, 4-341, 4-344, and 4-347.

A detailed analysis discussing the impacts on fluid mineral leasing and development from actions proposed under Alternatives A through D is provided in Section 4.4.5. In Table 4-48, a quantitative summary of impacts is presented by alternative, displays the amount of area that would fall under restrictions outlined in Chapter 2, and outlines the impact of those restrictions on mineral development. Additionally, this table describes (quantitatively) the impact that overlapping stipulations would have on areas otherwise managed as open to fluid mineral leasing. For a discussion of the relationship between valid existing rights and the actions proposed in the RMP/EIS, see Section 6.2.7.8.

An analysis specific to economic impacts on fluid mineral leasing and development is provided under Section 4.6.3. See Tables 4-65-71. No change has been made to the Proposed RMP/Final EIS.

Uranium and Vanadium

Summary
Mining remaining uranium or vanadium resources in the planning area would not be economically feasible using surface methods.

Comments
Submission No: emc0739
Commenter: Eddie Shelton
Comment: On page 4-17, one of the bullets references uranium and vanadium surface mining. We do not believe there are any remaining uranium and vanadium resources in the area that could be mined economically using surface methods. Underground mining has been the standard mining method for uranium/vanadium resources in this area.

Response
The BLM concurs that mining any remaining uranium and vanadium resources in the planning area would not be economically feasible using surface methods. As such, this sentence has been revised. Underground mining has been the standard mining method for uranium/vanadium resources in this area. Please see page 4-17.

Master Leasing Plan Objectives and Actions

Summary
The BLM should establish resource conservation objectives and protection measures for the master leasing plan.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The BLM must develop RCOs and an adequate range of RPMs for each of the Shale Ridges MLP's "important resources." Furthermore, the BLM must "demonstrate" how the proposed RPMs will achieve the RCOs in the "Environmental Consequences" chapter.

Response
The MLP is being integrated throughout the Proposed RMP/Final EIS and updated to comply with new guidance (IM 2013-101, "Oil and Gas Leasing Reform – Master Leasing Plans"). Per H-1601-1, Land Use Planning Handbook, the applicable RMP may already include resource condition objectives for all or a portion of the MLP analysis area. If so, an MLP may retain the resource condition objectives in the applicable RMP. Alternatively, the BLM may adopt new resource condition objectives for the MLP area based on new or updated information or policy standards and incorporate these new objectives into the RMP through amendment or revision. See the revised MLP section in Chapter 2 on page 2-386.

6.2.5.8 Recreation

Backcountry Airstrips

Summary
The BLM should not close any backcountry airstrips.

Comments
Submission No: emc0867
Commenter: Spencer Wilson
Comment: Closing the backcountry airstrips Dolores Point, Hubbard, Little Dolores, West Creek Bluff, Arrow Head Camp, Calamity Camp, Flattop Mesa, and Blue Mesa Airstrip in your new Resource Management Plan is both unnecessary and completely over reactive. The footprint left by transient general aviation pilots is so infinitesimal that trying to limit their access to BLM land will have little to no effect on the actual management and stewardship of the land. The proportional effect on pilots will far outweigh any sort of conservation efforts that such a measure could ever seek to accomplish. Increasing access, not limiting it should be the first priority.

It is unfortunate that the general aviation is such a small minority that most likely nothing much will come of our protest of you decision to evict our community from your beautiful lands. It is unfortunate because private pilots through their own generosity and goodwill are an asset, not a liability, to the BLM. General aviation pilots who have a vested interest in seeing the preservation and successful stewardship of BLM land represent thousands of extra eyes harmlessly droning thousands of feet above the areas under your care providing an extra layer of safety and security. Limiting our access by closing these strips means losing all of that.

Submission No: emc0883
Commenter: Vern Burke
Comment: These [backcountry air] strips are also a large part of our western history as rich as the mines and ranches that these served. Preservation of these strips would be preservation of our local history.

Response
No known backcountry airstrips are proposed for closure. The Hubbard airstrip was found to be missing from the original inventory and has been added to the Proposed RMP/Final EIS (see Route Designation Maps in Appendix P). Chapter 2, Page 2-413 of the Draft RMP/EIS, states, "require full public notice, consultation with local and state government officials, the Federal Aviation Administration, and compliance with all applicable laws, including NEPA, when considering any closure of an aircraft landing strip." The Proposed RMP/Final EIS is in accordance with all applicable laws and no other changes have been made.

34&C Road Area

Summary
The 34&C Road area should not be managed as an ERMA because it needs more intensive management.

Comments
Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; Steve Acquafresca, Mesa County Board of County Commissioners
Comment: 34 and C Road
Creating an "ERMA" at 34 and C Road is in error because the area needs a higher management intensity, due to the activities occurring there (shooting) and the proximity to residential areas. The shooting opportunity can best be protected by providing a level of management that ensures the shooting is continued in a safe manner.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The installation (by volunteers) of shooting benches goes a long way toward achieving that goal, but we fear that if the area is left to "custodial care" only (BLM Handbook H-1601-1, definition of ERMA) the benches may deteriorate and become unusable, possibly causing people to move to different, less safe sites.

Response
Section 4.4.3 specifically analyzes the proposed ERMA and the issue of recreational shooting and public safety. It states:

> Management and administration BMPs would support recreational target shooting and cross-country use by providing facilities and signage needed to support and sustain the principal recreation activities and the associated qualities and conditions of the ERMA. Providing a structured recreation setting would also help address urban interface issues including conflicts between users and homeowners and shooting safety concerns with adjacent private property. Moving the current open area to a location with better opportunities and easier access would help concentrate use. The ERMA, providing more focused management, would also aid BLM's ability to address trash dumping and the area's night-time party scene.

The proposed management framework for this ERMA is presented in Appendix K and follows the decision guidance in BLM Handbook 1601-1 – Appendix C for Recreation and Visitor Services (which was updated through the issuance of IM 2011-004). In particular, this guidance states, "The ERMAs must have measurable objectives. Supporting management actions and allowable use decisions must facilitate the visitors' ability to participate in outdoor recreation activities and protect the associated qualities and conditions. Non-compatible uses, including some recreation activities, may be restricted or constrained to achieve interdisciplinary objectives." No longer are ERMAs slated for custodial management. In Appendix K, each ERMA identifies the management focus, management actions and allowable use decisions, and best management practices necessary to facilitate the visitors' ability to participate in outdoor recreation activities and protect the associated qualities and conditions.

The 34&C Road area is now part of the larger Horse Mountain ERMA. The ERMA includes specific management direction to facilitate safe and enjoyable target shooting and OHV opportunities in separate zones within the ERMA. See page 2-205.

Target Shooting

Summary
The Draft RMP/EIS does not contain an adequate justification for the need to close areas to recreational target shooting.

Comments
Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: In Chapter 3: Affected Environment pages 233-235 under Target Shooting, it addresses environmental risks associated with lead ammunition and states:

The main human exposure to lead associated with shooting ranges is through lead contaminated soil. However, other pathways are discussed below, along with lead's detrimental effects on humans and animals. Lead can be introduced into the environment at shooting ranges in one or more of the following ways. Each of these pathways is site-specific and may or may not occur at each individual range: Lead oxidizes when exposed to air and dissolves when exposed to acidic water or soil. Lead bullets, bullet particles, or dissolved lead can be moved by storm water runoff. Dissolved led can migrate through soils to groundwater.

Further, in Chapter 4, it states under the heading of Environmental Consequences (Fish and Wildlife) that "Closing areas to recreational target shooting would result in reduced risk of lead poisoning and elevated lead concentrations in tissues of bird species that utilize these areas (USGS 2009)."

These statements are broad statements of risk that have no context. Nothing is stated with specific reference to the lands and shooting ranges covered by the RMP/EIS, nor has the BLM provided any findings of studies conducted of the soils, runoff, groundwater, or wildlife that indicates there is any measurable level of risk to humans or wildlife populations posed by recreational shooting. BLM managed lands tipically do not have acidic soils, have relatively low precipitation and do not have high water tables supplying domestic water.

The entire indented paragraph above was lifted from EPA's "Best Management Practices for Lead at Outdoor Shooting Ranges" without accreditation. The guidance document was written in cooperation with the NRA, National Shooting Sports Foundation, The Wildlife Management Institute, Massachusetts Department of Environmental Protection, and a private consultant. The EPA notes that shooting sports organizations have "researched different methods to effectively address potential and actual lead mobility and exposure without detracting from the enjoyment of the sport."

Chapters 3 and 4 do not set out the environmental consequences of recreational shooting on the lands under this planning document. Instead, the consequences are nothing more than statements lifted from other documents, out of context and without explanation as to site-specific conditions. There is no explanation on how the affected environment and environmental consequences can be addressed other than through closures. Although, the plan does not call for closure of the shooting ranges, it sets up a scenario for that to happen by the broad-based statements made.

Chapter 4 page 17 of the GJFO's Final Analysis of the Management Situation document identifies existing conflicts associated with recreational target shooting, public safety and the area's wild horse and burro population. The

document goes on to suggest that possible management actions to address these conflicts include "establishing a no target shooting zone in the vicinity of the Coal Canyon Trailhead including portions of Coal and Main Canyon."

Subsequently, the tables on Chapter 2 page 99 and Chapter 2 page 125 of the draft RMP suggest that Alternatives B and D would include wholesale (4,000 acres) closures of the Coal and Main Canyon areas in order to address public safety and wild horse and burro concerns. The document falls short in providing an analysis of why the actions proposed in Alternatives B and D differ from the suggestions in the scoping document; specifically, why broad shooting closures are being proposed rather than the site-specific closures at the trailhead and only portions of Coal Creek and Main Canyons as suggested previously.

We are concerned over continued agency-wide attempts to justify closures with the reassuring statement that millions of acres remain open to recreational shooting.

Commenter: Boone and Crocket Club
Comment: In closing, the RMP/EIS attempts to show that even the highest number of acres recommended for closure to recreational shooting (53,600) is minimal compared to the million plus acres that would remain open. However, the RMP and its four Alternatives do not provide clear justification for most of the closures, and do not provide any analysis of the effect on shooters displaced by these closures and how their use of areas remaining open will affect other shooters.

When areas are closed and planning efforts do not identify relatively scarce areas near communities that are better suited to more intensive but informal recreational shooting, the plans fall short of meeting their intended purpose. This shortcoming raises concerns about whether the needs of recreational shooters are fully understood. Further, the RMP/EIS makes statements that are not supported by the science. This could lead to future closures to recreational shooting. In addition, the RMP/EIS has not analyzed the effect of prohibiting motorized big game retrieval on the retention of existing hunters and the recruitment of new hunters.

Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: However, the plan does not provide any analysis of consequences on the shooter as a result of these proposed closures. There is no discussion in Chapter 4 Environmental Consequences of the level of use by shooters in the areas proposed for closure and the effect of the closures on them. The plan should explain where the displaced shooters can go to shoot and whether the distance to the next open area could impact those shooters. Further, the plan should address what effect the displaced shooters will have on areas that they move to. Will those areas be able to accommodate increased use?

Submission No: cfc0009
Commenter: Leonard Pisciotta
Comment: My only concern is in the Bangs Canyon area down at the Gunnison River. It appears that this could be a no shooting area in the future.

There are a couple of great water fowl hunting areas alongside the river (south side) that I would love to keep open for Shotguns only. I can see the dangers of rifles in the area, but Shotguns pose no threat to the city of Grand Junction or the public down by the river.

For example, in the Horsethief Canyon SWA across from I-70, you can shoot towards the highway and I've heard of no issues. There are also numerous duck hunters alongside the river that I hear from my house on private land (20.5 RD). Our houses are much closer than any in the Bangs Canyon area. No issues due to the hunters.

Response
Section 3.6.2 contains a detailed description of current problems caused by unmanaged recreational shooting. An analysis of proposed management actions to improve public health and safety and the target shooter's experience is presented in Section 4.4.3, including discussion of revised recreation objectives and actions focused on shooting opportunities in the Grand Valley Shooting Ranges ERMA and Horse Mountatin ERMA (RMZ 3 Target Shooting). Tradeoffs are also presented. The analysis notes the reduced opportunity for shooting in areas like Gunnison Bluffs and the North Fruita Desert.

The BLM agrees that the statement on Draft RMP/EIS page 4-128 regarding lead poisoning should be removed from the Proposed RMP/Final EIS. Lead poisoning is more likely to happen in areas where upland shooting is followed by irrigation/flooding and subsequent use by waterfowl and shorebirds. This is not occurring in the GJFO planning area. Please note that hunting is not restricted under any of the alternatives.

Bangs SRMA

Summary
The Draft RMP/EIS fails to consider the loss of quiet recreation experiences in the Bangs SRMA.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: [Bangs Canyon area] In Appendix K, the focused activities for RMZ 2 in all three action alternatives "include rock crawling, all-terrain vehicle use and motorcycle riding." (K-19) However, hiking, horseback riding, photography and other quiet forms of recreation are excluded. While this might be a reasonable description of the current management and conditions for Area 4, this would represent a huge management shift for portions Area 5 now falling under Zone 2 and the DEIS never adequately considers other uses or acknowledges that the shift is taking place. Some of the eastern portions of old Area 5 are now in Zone 3, which appropriately will manage for non-motorized activities.

Response
The BLM followed guidance in Appendix C of the BLM Land Use Planning Handbook (H-1601) and BLM IM 2011-004 in its impact analysis for the Bangs SRMA. The Draft RMP/EIS, Section 4.4.3, analyzes potential shifts in the recreational setting characteristics and recreational experiences they facilitate as a result of proposed management actions for the Bangs area under each alternative. The analysis discloses impacts on quiet and motorized recreation. In response to public comments, the Bangs SRMA boundary has been expanded and now includes two RMZs (i.e., RMZs 3 and 4) managed to protect and enhance quiet recreation activities, experiences and outcomes. See Page 2-231.

Castle Rock Area

Summary
The Castle Rock area should be designated as an ERMA to protect sensitive resources.

Comments
Submission No: emc0665
Commenter: Sherry Schenk
Comment: I believe the Castle Rock area should be designated as an ERMA so that the cultural resources and rare plants found there can be given a higher level of protection. There are a number of single track trails around Castle Rock which seem to be prized by motorcycle riders and mountain bikers. If any of those trails that were user created endanger cultural sites or rare plant populations, those trails should either be closed or rerouted.

Response
Section 4.4.3 analyzes the potential for resource damage if the area were managed as an SRMA or ERMA. The analysis specifies that appropriate mitigation measures and consultation would be required before motorized routes could be designated to recreational use (see Draft RMP/EIS page 4-310). In response to public comments concerning cultural and special status plant resources, the Castle Rock area will not be given an RMA designation in the Proposed RMP/Final EIS. The BLM needs to gather additional data on recreation and sensitive resources in the area before proposing which RMA designation, if any, the area should fall under.

User Conflict

Summary
By emphasizing certain uses in certain areas, the Draft RMP/EIS facilitates increased user conflict, the impacts of which are not analyzed properly.

Comments
Submission No: emc0694
Commenter: Bonnie Petersen
Comment: No analysis is provided on how management changes will reduce user conflicts other than by closure of trails and further reduced access to public lands for all types of recreational opportunities.

Submission No: rmc0013
Commenter: Steve Chapel, Western Slope ATV Association
Comment: BLM needs to stop creating such things as Bicycle emphasis areas. By doing so, BLM is creating conflict areas. BLM is taking places where conflict does not exist and creating areas of conflict because the bicycle group, by their own admission, do not want to share routes or areas with motorized users.

Submission No: emc0623 and emc0886
Commenter: Walt Blackburn, Thunder Mountain Wheelers and Walt Blackburn, Individual
Comment: TMW doesn't expend its energy opposing other forms of recreation or user group, or try to undermine other activities on public lands. We recognize the diverse interests and needs of all Colorado residents and applaud, rather than oppose them. It shows quite clearly however that the RMP, TMP has created emphasis

areas. In doing so it creates conflict between user groups where conflict does not exist. We suggest that unless you can make special recreational/riding areas for all individual groups that the plan should reflect multiple uses.

Response
Per the BLM Land Use Planning Handbook (H-1601-1), RMAs are designed to provide specific recreation experiences and opportunities and minimize negative user interactions. In response to public comment, and research on recreation user conflict, the Proposed RMP/Final EIS presents modified recreation objectives, actions, and analysis to address recreation user interactions more broadly. Research by Marcouiller, Scott, and Prey promotes a management approach that focuses on managing for compatible uses that maximize positive user interactions and minimize negative user interactions (Marcouiller, Scott, and Prey 2008.) The range of alternatives proposes recreation management objectives and actions that support a wide variety of clearly defined activities, experiences and outcomes. As a whole, that range of alternatives is designed to provide a diverse set of recreation opportunities while promoting positive user interactions. Analysis in Section 4.4.3 examines whether shifts in the recreational setting characteristics (for SRMAs) or qualities and conditions (for ERMAs) of the area would have a detrimental impact on users who recreate in these areas. The analysis of RMAs details the BLM's ability or inability to achieve desired recreational setting characteristics, including those that directly and indirectly influence user interactions (see Draft RMP/EIS pages 4-292 to 4-312).

North Fruita Desert SRMA

Summary
The North Fruita Desert boundaries should be adjusted and the area should be closed to mineral material sales.

Comments
Submission No: rmc0007
Commenter: Lori Buck, City of Fruita
Comment: While mineral materials extraction is currently allowed in the Draft RMP, the City of Fruita would support designating the NFD, SRMA closed to such activities. This area was originally planned in the Draft RMP to be closed to mineral materials extraction prior to the State of Colorado's review, but was changed during that review process. The City of Fruita concurs with the original designation and believes that materials extraction in the NFD, SRMA is incongruous with outdoor recreational activities, and would severely diminish the experience of mountain bikers, hikers, and off-roaders. A diminished recreational experience would be unattractive to recreationists and could, subsequently, harm the tourism industry in Fruita.

Submission No: rmc0007
Commenter: Lori Buck, City of Fruita
Comment: The City of Fruita and the surrounding area has been developed into an international destination for outdoor recreation, particularly mountain biking. The NFD is a major piece of mountain biking inventory that visitors utilize. Reducing the size or the potential growth of outdoor recreation resources of the NFD Special Resource Management Area (SRMA) would potentially diminish the usefulness of this area and have a negative impact on the City of Fruita. Therefore, we are recommending against the proposed reduction in size of the NFD SRMA.

The City of Fruita would advocate that the NFD, SRMA boundaries remain as they are currently designated in Alternative A (see Figure 2-18 in the Draft RMP). Reducing the size of the NFD, SRMA would limit the future growth of outdoor recreational activities in the area, including, but not limited to: mountain biking, horseback riding, and OHV travel. Currently, on the southwestern corner of the SRMA, is the Highline Colorado State Park, a popular camping destination for all outdoor recreationalists. Reducing the SRMA to the proposed size in Alternative B (see Figure 2-19 in the Draft RMP) would remove this park from within the SRMA, and disconnect it from the designated outdoor recreation area.

Response

The SRMA boundary in the Proposed RMP/Final EIS has been modified to match current and projected use patterns and desired recreation outcomes for the north central portion of the North Fruita Desert where mountain biking and camping are the predominant use. The North Desert ERMA would encompass additional BLM-managed lands surrounding the SRMA, with objectives to protect opportunities for multiple-use trail-based recreation. Opportunities for trail system expansion or development of new facilities in the SRMA would be dealt with during implementation-level planning in the future. The SRMA is proposed for closure to mineral material sales in the Proposed RMP/Final EIS (see page 2-311).

Impacts of Route Closures on Recreation

Summary

Route closures will negatively impact recreation.

Comments

Submission No: emc0896
Commenter: Zach Harsh
Comment: High levels of closures will impact all forms of recreation on the GJFO as motorized access is a key component of many recreational activities, even if it is not the primary activity.

Submission No: emc0869
Commenter: Terry Burnett
Comment: The RMP fails to address that routes being closed are multiple use routes providing all users access to the recreational opportunities on the GJFO for a wide range of uses. It is very common that these uses may not be directly associated with motorized recreation.

Response

Section 4.4.3 discusses the impacts of route closures on all types of users. The BLM has considered public comments on the proposed route designations, including comments relating to trailhead access for non-motorized users. Route designation criteria specific to recreation include the need to provide high-quality route-based recreational experiences (e.g., loop trails and fewer redundant and/or dead-end trails). Revised route designations are provided in Appendix P, the route designation CD-ROM, and are available on the RMP website.

Big Game Retrieval

Summary
The Proposed RMP/Final EIS should contain provisions whereby off-route motorized big game retrieval is permitted.

Comment
Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: Mesa County is very supportive of hunting on our public lands. Although the "preferred alternative does not allow motorized or mechanized travel off routes for game retrieval except for with hand-held wheeled game carts" (May 8 Response), we encourage the BLM to consider carefully the feasibility of allowing game retrieval off of designated trails in areas where the landscape can handle such use. Per the May 8 Response we encourage BLM to coordinate with CPW and other interested parties and appreciate clarification that the Grand Mesa Travel Plan (USFS) also "does NOT contain special allowances for down game retrieval."

Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: The final concern these comments raise is over the prohibition against game retrieval. It is practically buried with little notice in the RMP/EIS and found in Chapter 2 Alternatives page 137 which notes that motorized game retrieval within 200 meters of designated routes is allowed under Alternative A (No Action) but prohibited in the other three alternatives. The proposal to prohibit motorized retrieval deserves written analysis.

BLM has the resource information to determine whether one time motorized retrieval of legally harvested big game in OHV limited use areas would do such significant or irreparable harm that such retrieval should not be permitted in specific locations. One time motorized retrieval of legally killed big game where such action would likely be unnoticeable in over a short period of time (a year for example) would be consistent with Executive Order 13443: Facilitation of Hunting Heritage and Wildlife Conservation. In addition, it would permit older hunters and handicapped individuals to continue to hunt and support the Colorado Division of Parks and Wildlife through purchase of licenses. During warm weather the likelihood of losing usable meat is greatly reduced or eliminated.

Response
Prohibiting the use of motorized vehicles off designated routes for big game retrieval is consistent with policies on adjacent National Forest System land. While there may be a trade-off with retention or recruitment of hunters, this action is necessary to mitigate impacts on water and soil resources (see analysis of cross-country travel on those resources in Sections 4.3.2 and 4.3.3). No change has been made to the Proposed RMP/Final EIS.

6.2.5.9 Comprehensive Travel and Transportation Management

Summary
Motorized route closures and OHV Open area reductions are unsubstantiated and not supported by facts or rationale. Some resource programs or criteria may have too much influence in the route designation process. Motorized travel only has a short-term impact on most resources. The RMP/EIS

inflates the true impact of travel when compared with other influences such as geologic change, livestock grazing, and natural hazards such as fire and flooding.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: The DEIS contains some assumptions or conclusions, on which resource decisions may be made, that are unfounded. While extolling the benefits of large-scale reduction of OHV opportunities, the DEIS often fails to provide the nexus, whether logical or empirical, between the preferred alternative and the assumptions on which it relies. Generally speaking, the DEIS assumes and concludes that reduction of OHV use within an area will provide a beneficial result on a particular resource. However, the DEIS fails to connect specific closures with site-specific data justifying the closure.

This approach does not comply with the law. The agency must establish a "rational connection between the facts found and the choice[s] made. . . " Motor Vehicle Mfrs. Ass'n. v. State Farm Mutual Automobile Ins. Co., 463 U.S. 29, 43 (1983) (applying "arbitrary and capricious" standard of judicial review to agency action). The agency is entitled to deference in making informed choices, but "unless [the courts] make the requirements for administrative action strict and demanding, expertise, the strength of modern government, can become a monster which rules with no practical limits on discretion." Burlington Truck Lines, Inc. v. United States, 371 U.S. 156, 167 (1962) (quotation omitted). When federal agencies evaluate technical issues or apply specialized expertise, NEPA requires them to rely on valid sources and to disclose the methodology, present hard data, cite by footnote or other specific method to technical references, and otherwise disclose and document any bases for expert opinion. 40 C.F.R. § 1502.24; Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1150 (9th Cir. 1998).

In preparing the FEIS and Final Plan(s) we urge BLM to revisit many of these conclusions and reconsider some of the assumptions and conclusions suggested by the DEIS.

Submission No: emc0866
Commenter: Scott Williams
Comment: The Plan fails to explain the high levels of closures or why particular routes are being closed.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
The same deference can be claimed for the outdoor recreation that uses the roads and trails. In other words, the productivity of the land for human uses includes allowing the public the right to continue to use the existing roads and trails. The roads and trails are the product. Closing the roads and trails will reduce the productivity of the lands under the terms of the NEPA. Closing too many roads and trails will permanently constrain the productivity of the land. The soil on the road is being productive by being a road or trail. BLM must minimize the impact, but it is not directed by Congress to relinquish the roads and trails for the sake of no impact. In studying this DRMP, it appears that "no impact" to the vast majority of the planning area acreage is the BLM's goal. Yet this is already present; referencing a separate comment's calculations, the roads and trails occupy only 4/10ths of one percent of the planning area. 99.6% is unoccupied. It is left to the production of natural values.

Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: Open Area
The proposed reductions to the Grand Valley OHV Area in the North Desert are irrational and not warranted by the facts. The DRMP fails to identify any resources at risk nor identifies any conflict of uses in this area.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
[North Desert Open area] BLM is not giving this area appropriate consideration as mandated in Section 102(B). BLM does not explain what will be gained by cutting it in half and fencing it in. BLM is literally dismantling the essence of this special environment, with no rationale. No species will be saved; no waterway will be cleaned up; the area is in full air quality attainment. On the other hand over 250,000 people annually will be denied this unique amenity, and BLM may try but it cannot deny that there will be an economic cost to dismantling this special place. Any attraction that draws over 250,000 people annually does have an economic impact on the adjacent community. We cannot count only the dollar contributions of visitors from out of the area in our economic equation; that is the single biggest mistake in BLM's economic calculations. BLM is obligated to calculate it accurately because NEPA instructs us to do so in Section 102(B).

Submission No: emc0857
Commenter: Shawn Hill
Comment: Limiting roads and trails will only overcrowd the remaining areas. In turn forcing people wanting access to outdoor activities to go elsewhere. Many of the proposed closures are accessible only by Jeep, (21 Road, Billings Canyon, etc.). These roads should remain open and accessible to the many people in our community who enjoy the thrill of Rock Crawling. They should not have to drive to Moab or elsewhere to enjoy it. Being able to ride here locally keeps the revenue generated from the activities local too.

Submission No: emc0886
Commenter: Walt Blackburn
Comment: [North Desert Open area] Reducing the area would only cause more congestion and user conflicts if forced into a smaller area.

Submission No: emc0869
Commenter: Terry Burnett
Comment: I completely disagree with the closure of any of our public lands to OHV usage as well as the majority of the proposed closures in the current RMP. I also feel the RMP provides a path of management for the field office that is completely inconsistent with projected growth in demand and usage and fails to protect the significant economic benefits that result to local communities from the high levels of multiple use currently available in the planning area.

Submission No: emc0614
Commenter: James Solomon
Comment: One of the critical areas that the BLM has to look at when making land use decisions is the human impact on the environment and the impact to the human because of the decision made regarding how the land should be managed. The concern that I have is that there is a disconnect between importance of cultural issues and the human issue. It would appear that many trails are closed to motorized use but open to foot or horse

regardless of what might be in the area that is culturally sensitive. The following are my comments regarding this method of decision making:

- Motorized trail based recreation does not have to impact culturally sensitive areas. Mitigation procedures can be used.
- Well designed trails that meet user need and effective signage will keep riders on the trail.
- Planned motorized recreation does not impact cultural sites, people impact cultural sites and mainly by foot.
- I would like to propose that the BLM take a more educated approach to managing public lands with regard to the policy aimed at elimination of motorized recreation.

Submission No: rmc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: In the route designation criteria we see that the BLM has clearly placed natural values above all others. FLPMA does not mandate this. At Title I Section 102(7) of FLPMA, (7) goals and objectives be established by law as guidelines for public land use planning, and that management be on the basis of multiple use and sustained yield unless otherwise specified by law; (emphasis added). NEPA does not mandate this, in fact, NEPA states in Title I Section 101(a) that it is the continuing policy of the Federal Government,... to create and maintain conditions under which man and nature can exist in productive harmony, NEPA further mandates in Title I Section 101 (5):

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities.

This the legal mandate from Congress. Yes, the mandate includes protecting the resource, but just as important is achieving "productive harmony," so that all humans can avail themselves of the amenities found (in this case) via access to BLM lands. In other words, NEPA tell us to share it. We are supposed to be looking for the balance between man's use and the effects of that use. Furthermore, the greater the benefit from that use, the more impacts are acceptable. This has been established in NEPA case law.

10) BLM omits any use of "benefits" in its route selection criteria. This causes the appearance that there must be no benefits at all other than commercial and to connect point A to point B. The "fun factor" and the associated social amenities that go with driving or riding on a remote and beautiful road or trail, with family and friends, are left out of the selection criteria. BLM doesn't consider any possibility that the visitor's enjoyment can and does come from the route itself, and that such enjoyment has a high value and does in fact benefit society. Recreation: to re-create one's self, to renew, to refresh, in order to continue a productive and satisfying life.

Submission No: cfc0070
Commenter: Brandon Siegfried
Comment: In the Grand Junction 1987 RMP, Table 3, Responses 192-194, reveal the following: "all are historical ORV use areas. Designation to smaller acreage ..... could create hazardous crowding of casual and competitive use ..... and would not address public demand. This statement was made by the GJ BLM 26 years ago, ridership has now quadrupled and the BLM wants to reduce OHV areas by 57% in Alternative B ofthe Grand Junction DRMP. This is an indication that the BLM does not value the safety of motorized users or the local economic benefits of these OHV intensive uses areas. The Grand Junction area needs more OHV intensive use areas not a massive reduction. Alternative B, prefers reducing our Grand Valley OHV Areas from 12,500 acres "total" to 5,400 acres "total", this would be a huge liability for the BLM, surely the young riders in valley would be put at higher risk in this situation. An increasing OHV rider population will be forced into a much smaller riding area???? This makes no

sense. I was unable to find any substantial reasoning behind the BLM OHV area closure recommendations in the DRMP.

Submission No: emc0623
Commenter: Walt Blackburn, Thunder Mountain Wheelers
Comment: The North Desert open area is invaluable for TMW's. We time and time again have used the area for the education of some of our younger and newer rider. This area is perfect for the enhancement of education of the enthusiast. The area resources do not have prohibitive soils, endangered wildlife, water issues or culture or heritage sites to be an issue. Reducing the area would only cause more congestion and user conflicts if forced into a smaller area.

My suggestion is that the GJ BLM office doubles the current OHV Intensive use areas to 25,000 acres to help compensate for closing 450,000 acres to cross country travel and to provide safe riding conditions for the increasing number of riders in the area.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: There is no place anywhere in the DRMP that considers the factor of time. The analysis never describes what "visitation" means. In the context of travel management, it is the use of a route. Use is a transient event. Part of the description of a transient event is that it is of limited duration. We illustrate with a simple example: 3 vehicles a week cross a dry wash, each one takes 30 seconds to cross. The vehicles are gone in just a few minutes, and the disturbance is settled as soon as the vehicles are gone. The presence of the motorized use effect lasts for 90 seconds out of 168 hours (one week). Whatever the effects are of the route itself, the effects of the use of the route are only a tiny percent of it. If this is to be an "analysis," it needs to account for the reality: that of all the time the route is present and contributing "effects," the use of routes happens in a very brief period of time. There is a wealth of research that reveals that the amount of use and the types of use a route receives determine its condition and, in turn, the extent of any actual effect on the surrounding environs. The effects of routes and their different uses is not only borne out by the research, it is intuitive as well:

The amount of time a route is in use depends directly and entirely on the number of users and the type of use. Dispersed use with light weight vehicles equals low impact, with the duration of the disturbance very minor and long intervals of no use. Crowding the use and the resulting frequent heavy vehicle use equals intense use and high impacts, and the duration of the disturbance is much longer, with few intervals of no use.

This DRMP analysis fails to consider or report on any of these factors, and thus has no support for any management change at all, and in particular, has no supporting documentation for drastic closures.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The BLM proposal is completely disconnected from the facts. It is completely disconnected from BLM's claimed recreation program goals. BLM knows demand has increased and will increase, BLM knows this is the single most popular recreation attraction in the Field Office, and yet BLM proposes to dismantle it, in spite of the fact that BLM stated way back in 1987 that crowding would be hazardous. Visitation to this area has increased since 1987, not decreased, yet BLM proposes to shrink it by more than half --from 11,400 acres to 4,900 acres. This is a reduction of 56 percent. BLM knows that there is not 56% less usage since 1987; BLM states that use has increased (cited above) and repeatedly implies the increases are dramatic. BLM fails to provide any analysis that

shows how confining more than 250,000 people to only 4,900 acres will have a positive outcome, recreational or otherwise. Visitor satisfaction cannot possibly be expected to be positive with such drastic crowding. If we add to those 250,000, those people who formerly used the Whitewater Hill Open area (slated for closure) and the proposed 50% smaller North Fruita Desert Open Area, we are most definitely not planning for the future --all according to BLM's own information. In fact, BLM fails to provide any explanation for how this could ever be considered even a childish attempt to plan for the future.

BLM fails to explain how this proposal is connected to the facts before it. In fact, this proposal is not warranted by the facts and is a "fanciful" proposal in that it will be hard to enforce (cited above, 1987). BLM fails to provide any rationale whatsoever for dismantling a highly valued community recreation resource and a regional and national attraction.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: This is an unreasonable change given the facts that we learn elsewhere in the document about rising demand. The historical trends are showing rising demand; more people want to access the land via motor vehicle every year. As the population ages ("baby boomers" make up the largest demographic in the country right now) this demand will only grow. At DRMP page 3-181 it shows demand increasing at three to seven percent per year. Page 3-186 describes " the growing use of public lands as a community-based recreation asset. Page 3-195 BLM states that current OHV use exceeds historic levels. Table 3-12 shows projected population growth, not shrinkage. For all forms of recreation, access is necessary, and because of the high-desert environment, motor vehicle access is the most popular and the most practical way to get to any given recreationist's favorite places. Some will pursue other activities after the use of the vehicle such as hunting, rockhounding, bird-watching, hiking, bicycling, camping, or whatever. Others simply enjoy the drive (or ride) for its own fun. This is "driving for pleasure," and although it is not disclosed in the DRMP, it is one of the most popular activities in America. Without motor access, BLM lands are not "open to everyone." They are not being managed for outdoor recreation (per FLPMA Section 102 (a)(8)) nor are they being managed for human occupancy and use (per FLPMA Section 102 (a)(8)).

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The second actionable item is that this sort of blanket closure, using whatever resource the BLM fancies, is arbitrary. It is especially arbitrary when multiple, entire zones are affected by the conflict with "other." It is the essence of arbitrary and capricious to use this "resource" regardless of what it is. There can be no single (unknown) resource that so significantly affects every route in multiple, entire zones. There simply can't be so many conflicts in every zone with every route, and still have Chapter 4 state that the cumulative effects are not significant. That's why the facts cannot possibly warrant the wholesale closures. If the facts do not warrant the action, or the BLM cannot provide a plausible rationale, or the evidence does not support it (in this case there is no evidence), the action is deemed arbitrary and capricious.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The historical background on the planning area includes over-grazing, fire, drought, disease and flooding. These are the landscape scale factors that created the landscape we have now. Low level motorized use on 4/10ths of one percent of the planning area is not a landscape scale factor. It only approaches a landscape-scale event in the area BLM has set aside for intensive use, and nowhere else.

History confirms that major damage occurred a long time ago. The DRMP ignores this. For example, BLM has not measured the information in the catalogue of geologic changes against present conditions. BLM has not quantified the effects of 100 years of grazing in areas with less than 10 inches of rainfall in any chapter. The discussions about the effects of motorized use is not set in its proper context, of both scale and time.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: Here we call attention to an oversight. BLM has failed to disclose what the objective is of denying general public use on these routes. Given the present mileage, all use is dispersed widely across the Planning Area, (except for the North Desert Open Area), and this causes most use to be very light (only a few vehicles a day, or even in a week).

Even without the very light vehicle use the routes presently receive, the effects of the closed routes themselves remain. Think, in particular, about routes that the grazing permitees use: mostly unmaintained, and not always well-sited due to the nature of the activity. BLM does not disclose what will be gained by removing the general public from these roads. By the same token, the oil and gas roads are extremely well-maintained, and BLM fails to disclose what will be gained by removing general public access to these roads. As we pointed out already, and as the DRMP has stated, most of these roads receive very light use. The road effects research we have reviewed are all consistent in their findings: lightweight, infrequent motor vehicle use is almost as uneventful as no use. But, the effects of the routes themselves will not stop just because some of the traffic is removed.

Response
As described in Section 1.2, and further in Section 1.6, travel management is one of 17 planning issues that are addressed through the proposed management goals, objectives, and actions in Chapter 2. To help the BLM's resource programs achieve their goals, objectives, and actions, and to comply with 43 CFR 8342.1 and BLM Manual 1626, the travel management plan delineates route designation criteria (see Appendix M, Section 2.7.2). Section 4.4.3 specifically describes the trade-offs across the range of alternatives for the North Desert Open area.

Chapter 4 analyzes the direct, indirect, and cumulative impacts of implementing each alternative over the life of the plan. Where impacts are anticipated from actions that have direct, immediate, and more prominent effects, they are disclosed in the analysis. This includes an analysis of the impacts of motorized travel based on the best available science (see Sections 4.3.5 and 4.3.2). The comprehensive designated routes travel system is analyzed throughout Chapter 4, including its impacts on recreation, socioeconomics, and natural and cultural resources. Continued development of trail based recreation and construction for access to other commodity based development on public lands within the planning area will occur through the life of this plan. In the Proposed RMP/Final EIS (Appendix M), the travel plan includes a more thorough discussion of methodology, resource data analysis (as appropriate), and rationales for change based on recreation objectives, access needs, safety considerations and resource protection. See Appendix M for changes that have been made to the format of the travel management plan to address these types of comments.

As described in Appendix M, Section 2.7.2, there are specific route designation criteria that were used to develop the range of alternatives for the travel system. To meet the minimization criteria in 43 CFR 8342, restrictions are proposed when sensitive resources are threatened. The BLM worked to create a range of alternatives that balanced recreation objectives, access needs, safety considerations and

resource protection. For each route, the BLM recorded the minimization criteria that influenced the route designation. As discussed above, the impacts of these designations were described throughout Chapter 4 (see sections for air quality, water resources, soil resources, fish and wildlife, recreation, and others in Chapter 4). For example, a discussion of the impacts of route-based travel on wildlife is provided in Section 4.3.5 (Draft RMP/EIS pages 4-127 and 4-128) and includes discussion of short-term versus long-term impacts. The Draft RMP/EIS analyzed the impact of all different types of route designations on various sensitive soils and steep slopes (see Tables 4-18, 21, 23 and 25).

In response to public comments, the acres open to intensive OHV use (i.e., OHV Open areas) have increased from 5,400 in the Draft RMP/EIS to 10,200 acres in the Proposed RMP/Final EIS. This change was driven by additional information from users regarding use patterns, the uniqueness of the experiences, and opportunities provided by OHV Open areas, among other factors. In addition, the North Desert OHV Open area is proposed for management as an SRMA to better protect and enhance recreational outcomes (i.e., experiences).

Seasonal closures were proposed where sensitive resources (e.g., soil types, wildlife species) required additional protection during certain times of the year. For example, some soil types are more susceptible to erosion during the spring. These seasonal closures were determined sufficient to minimize impacts on resources while providing for recreational opportunities during other times of the year. Please refer to the route designations to see the routes which are proposed for seasonal closures. Public comments and input from groups, such as local jeeping clubs, have resulted in the reduction of seasonal closures in areas such as 21 Road. Access to broader areas can be maintained year-round while user groups can assist the BLM in ensuring seasonal closures in sensitive areas can be maintained.

6.2.5.10 Public Health and Safety

Summary

Congestion resulting from road and area closures will cause hazardous riding situations and overcrowded and unsafe hunting conditions.

Comments

Submission No: cfc0074

Commenter: Having a variety of areas to ride OHV's

Comment: Not only does the Grand Junction BLM office wish to close 450,000 acres of cross country travel in the Grand Junction Travel Management District but they also wish to reduce our OHV Intensive Use Areas by 57%-100% in Alternatives B and C. Hunting would be negatively impacted as closing 60-83% of the public's motorized access routes would cause bottlenecked and overcrowded unsafe hunting conditions.

Submission No: cfc0074

Commenter: Brandon Siegfried

Comment: Having a variety of areas to ride OHV's in the Grand Valley will offer safer riding conditions for our youth, visitors and residents. High Density riding situations could prove hazardous and will definitely alter the enjoyment of the outdoor experience.

Response
The range of alternatives explores the means of meeting the purpose of and need for the action (BLM NEPA Handbook H-1790-1, p. 49). The BLM is directed by the NEPA to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resource." The alternatives respond to identified issues and concerns, resolve problems with management, and explore opportunities for enhancing or expanding resource or resource uses that meets the purpose of and need for the RMP. The range of alternatives includes Alternative A, which would implement no change to the open intensive-use area. The range of alternatives considers 0 to 100 percent of the intensive-use area as open to cross-country use. In addition, the designations in this area are driven by the minimization criteria in 43 CFR 8342.1.

Recreational opportunities are one criterion for route designations, and hunting is a recreational opportunity. The alternatives seek to balance protection of resources with providing recreational opportunities. The BLM proposes to open certain routes during the rifle hunting season that are closed during other parts of the year. The alternatives consider SRMAs or ERMAs in the Grand Valley area that have OHV use as a recreational opportunity in the following areas: Grand Valley, 34 & C Road, Bangs Canyon, and North Fruita Desert. Under the alternatives, most of the GJFO would remain open to travel by foot and horse.

Analysis in Section 4.4.3 of the Draft RMP/EIS discloses impacts under the various alternatives. The analysis considers adjusting boundaries for recreation management areas to resolve safety conflicts with target shooters and OHV riders, how SRMA or ERMA management would affect recreational opportunities, and also how various proposed management actions would enable the BLM to provide recreational opportunities at a certain level of use.

6.2.5.11 Socioeconomics

Cost of Air Resources Management

Summary
The Draft RMP/EIS inadequately analyzes the socioeconomic impact of implementing actions related to air quality.

Comments
Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Given the overall federal deficit and BLM's current budget constraints, along with BLM's limited staffing levels, it is unreasonable for BLM to attempt to extend its oversight in areas that are already appropriately and effectively regulated by other agencies. BLM has proposed additional controls and programs which are intended to further protect the air quality of the planning area. However, the RMP/DEIS failed to address the costs associated with each proposed program in the alternatives. Specifically, the final RMP/EIS must disclose the cost associated with each alternative to implement the plan and the extent of additional manpower required to manage the proposed additional standards, monitoring, stipulations, modeling, closures, construction, reclamation, etc. BLM has also failed to address the loss of both jobs and federal, state and local tax revenue and royalties among the various losses to industries that will occur with each alternative. The significant economic impact of additional

restrictions, regulation, oversight, and enforcement of an air quality program that is already addressed by other agencies was not considered in the RMP/DEIS.

Response

The BLM is not proposing to extend its oversight in an attempt to manage air quality. However, FLPMA does require the BLM to protect air resources such that, if actions the BLM analyzes and authorizes through NEPA are shown to have significant impacts on the resource, appropriate and reasonable mitigation should be applied to address those resource concerns. The Draft RMP/EIS did not propose standards, stipulations, and restrictions; it analyzed a range of management alternatives and assumptions to qualitatively assess changes from the current management practices or no action alternative. The Air Resources Management Plan in Appendix G has been updated with the CARPP (Comprehensive Air Resource Protection Protocol), which describes the processes the BLM will utilize to address air resource concerns on a case-by-case basis. The processes described in the CARPP are not additional or new programs, nor do they prescribe new or additional controls for the decision area. Appropriate and reasonable mitigation for any proposed action with the potential to significantly impact air resources, either at the project or cumulative scales, will still need to be analyzed within an authorizing NEPA document. The BLM has the authority to manage activities on BLM-administered lands, including the location and pace of oil and gas development consistent with the leaseholder's rights, with reasonable protections for resources when an appropriate analysis to support such protections exists. The CARPP, along with the West-CARMMS regional photo-chemical air quality model are tools that provide the BLM with enhanced capacity to meet its mandates under FLPMA and NEPA. The processes described in the CARPP contain the appropriate funding caveats where applicable, but the BLM is not required to do a cost/benefit analysis as part of the planning analysis. The CARPP is provided to disclose to the public how the BLM intends to accomplish its air resource protection mission in the context of the NEPA process. The processes should gain efficiencies and capacities such that the BLM will provide faster and much more defensible NEPA analysis for air quality. Therefore, the costs should be in the form of a benefit as a result of full implementation.

Spending Profiles

Summary

The Draft RMP/EIS uses faulty spending profiles to estimate the amount of money spent by various users.

Comments

Submission No: emc0756

Commenter: Beau Colligan

Comment: I believe that your figure of $10.16/day spent by the average recreational user is grossly inaccurate. They would spend more than that in a day on food and beverages alone, and then there is fuel, lodging and possible purchase/renting of recreational equipment.

My friends and I travel to Grand Junction several times a year to ride dirt bikes by the airport and GMNF OHV trails. We buy gas and food in Grand Junction, and we eat at the local restaurants.

The RMP's figure of only 90 jobs resulting from recreation on the GJFO planning area seems completely underestimated. How does only 90 jobs account for CPW employees, Cabelas employees, ATV dealership employees and individuals employed in the local tourism industry.

From what I've researched, the analysis in the RMP is wildly inconsistent with USFS NVUM research, and I believe that consistency between those two data sets is mandated by 2 executive orders and the BLM national office.

Submission No: rmc0091
Commenter: Scott Lindsay
Comment: The GJFO RMP Economic study was seriously undervalued compared to economic studies conducted by other government agencies. CO Parks and Wildlife, CO dept of tourism, COVCO to name a few studies that support a much higher recreational spending impact to our community. These other entities conclude that daily spending in our region is $61.92 or more dollars per day. The BLM findings are $10.16 per day. This gross error by the BLM undervaluing the economic impact will cost a struggling economy more jobs and force struggling families to leave Mesa County. The very reason the BLM conducts such impact studies is to base their outcome on factual findings. Without a proper economic impact study that comes up with conclusions similar to other government agencies the BLM would be doing everyone an unjust service!

Submission No: emc0828
Commenter: Ned Suesse
Comment: As an economist, the economic analysis in your report is so flawed as to be laughable. The recreationists that spend $10.16 per day are rare today, but they are the only ones you will have left if you implement this plan, because they are the only ones that will be allowed to access any of the great opportunities your area has to offer. There are 90 people working in offroad motorcycle shops alone- to imply these are the only ones who might be impacted by this plan would be laughable if it weren't so serious.

Submission No: emc0863
Commenter: Shaun Ryan
Comment: I would like you to look at the revenue created by users like myself visiting the town of Grand Junction. Typically coming out for a long weekend, 4-5 days, I would estimate that each member of my group is spending $100-$200/ day locally. Our ride group consists of 8-15 individuals depending on the year.

Submission No: emc0896
Commenter: Zach Harsh
Comment: Each time we are out there, we all get gas in GJ or Fruita and spend about $100 there. We often stay in one of the hotels in Fruita so there is another $125. We also eat out at the restaurants for breakfast and dinner, another $40 per day. We grab a drink or two, and go to the grocery store sometimes too. The $10/day estimate is not even in the right ballpark. Honestly, $150 is probably closer. And there are a lot of us; there are always off-road vehicles in the parking lots of the hotels in the spring and fall in the area. There would be an enormous impact to the economy in the GJ area if we stopped coming because the trails we closed.

Submission No: emc0896 and emc0696 and emc0971
Commenter: Zach Harsh; Bradley Schluter; and Travis Lindsey
Comment: The Plan concludes that the average recreational user spends $10.16 per day. This is simply inaccurate. The USFS NVUM research and analysis concludes that the daily recreational spending total in Region 2 is $61.92 per day. Basic consistency of BLM analysis, and USFS NVUM research is mandated by the BLM national office and

two executive orders. Many users, such as the motorized community, spend 2-3 times this amount per day. The NVUM conclusions are supported by a wide range of regional, state and user group analysis. Only the BLM analysis is inconsistent.

Submission No: emc0685
Commenter: Brad Carey
Comment: The economic benefit from these lands is paramount though the analysis shows flawed findings. Where does one get $10.16 per day? I alone spend thousands of dollars annually on OHV recreation. Just a recent 2 night stay with food, lodging and fuel cost approximately $450.

Submission No: emc0881
Commenter: Terry Tucker
Comment: I know for a fact that I will be spending way more then $10.16 a day in the area. I estimate that for the full week between lodging, food, gas for 5 days in the area that I will spend about $1000.00.

Submission No: emc0694
Commenter: Bonnie Petersen
Comment: The GJFO average recreational spending per day for recreational users is represented to be $10.16 which is less than the cost of three (3) gallons of gasoline. Nearly anyone seeking recreation opportunities on the lands managed by the GJFO will use that amount of fuel simply traveling to and from the recreation area rendering this "average spending" number irrelevant and incorrect. When compared to other recreation based analysis for other organizations like the US Forest Service and the Colorado Parks and Wildlife the BLM average daily spending calculation is completely inconsistent. In fact, there was little data collected by the BLM regarding per trip spending and the data collected does not support the conclusion made by the BLM regarding the average daily spending of those using the area.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: BLM's economics uses all BLM-data and it is uncited, that is we don't know where BLM obtained it. This is not lawful. According to CEQ, all referenced material must be available to any reviewer. In fact, BLM's data is in serious conflict with a very reliable and well respected source, the Western Governors Association. This group published their findings about the economic values of outdoor recreation, and of all the forms of outdoor recreation, motorized always generates the highest revenue for the areas that motorized recreationists use.

The WGA study has found that the average daily trip spending for motorcycle recreation in the WGA region (which includes Colorado) is, for day trip motorcyclists is $180.27. For day trip general motorized off-road recreationists it is $292.83. Overnight spending for motorcyclists is $338.35 and for general motorized off-road recreationists it is $316.41.

This study also highlights a major omission in BLM's calculations. If we apply the motorized visitor's per trip expenditures for a day trip to the existing North Desert Open Area using the Western Governor's per day trip expenditures, we have 250,000 visitors annually multiplied by $180.27, equaling $45,067,500.00 spent annually. Significant? Definitely. Yet all of BLM's economic estimates are tiny by comparison, and not only does BLM does not reveal where its "data" comes from nor its methodology, BLM's data is in gross conflict with a highly reputable source (the Western Governors Association) which does reveal its source and methodology. BLM's opaque, uncited data makes it appear that BLM is purposefully minimizing the negative effects of its proposals. Uncited data

or information cannot be used in an EIS, because CEQ 1502.21 clearly prohibits the use of any referenced material that is not available to the public for review.

Submission No: rmc0036
Commenter: Bridgette Target
Comment: In the "Outdoor Recreation Economy 2012 Report," a study conducted by the Outdoor Industry Association (01A) for the Western Governors Association Conference (WGAC) in that same year, general motorized off-road recreationists spend nearly three hundred dollars per day and overnight recreationists spend closer to three hundred and twenty dollars per day. Multiply those numbers to even a conservative estimate of the BLM's numbers of motorized users and it is obvious that the economic impact to the region is in the tens of millions of dollars.

Submission No: rmc0063
Commenter: Lonnie Knob
Comment: The BLM reports that over 415,000 visitors come to the GJFO area to recreate via motorized transportation and in a report provided to the Western Governors Association Conference those same users spend anywhere from $2904316 per day. Even if the most conservative estimates are to be considered those visitors contribute over $100,000,000 to the surrounding economy, yet these numbers do not seem to be appropriately considered in the BLM's RMP.

Submission No: emc0722
Commenter: David Lykke
Comment: I noticed in the report that it concludes that the average user spends approximately $10 a day. This is grossly different than much other research concludes including I am appalled that such a grave inaccuracy is included in a large, detailed report. I know when my family goes to the area, we spend much more than that. So a hotel night runs about $100, we spend easily $60 a day on food. Just those two items is far more than concluded.

Submission No: emc0737
Commenter: Eddie Shelton
Comment: The info on average daily spend must is incorrect. I personally spend between $35 & $100 in the RMP area for gas and food and this is before any lodging or vehicle maintenance cost.

Submission No: emc0772
Commenter: Jeff Siegfried
Comment: I would like you to know what the economic impact will be from choosing to take away the best riding spot in Colorado. Here are my typical expenses that contribute to your economy.

This is based on our typical 3 day stay, Friday, Saturday, and Sunday.

$150 Hotel two nights ($75 per night)
$80. Gas fill up to return to denver
$50. At the dirt bike shop - we always end up there for some reason.
$70. Meals ($10 x 2 for breakfast and $25 x 2 for dinner and beers)
$25 at the liquor store next to Safeway, 29 1/2 road
$25. Lunch, snacks, ice at Safeway
$20. Gas for bikes and extra tanks.

$420 per trip or $130 per day spent in Grand Junction. We always come at least once per year if not twice. Also, on our trips out we usually have at least 6 guys and sometimes upwards of 15 guys. Some spend more some spend less but the above expenses are what I spend.

Submission No: emc0804
Commenter: Larry Hall
Comment: I would like to comment on my usage of the areas in question and the use of inaccurate information regarding time and money spent by families and individuals on a daily basis. Our family uses the areas in question on a regular basis and I would guess our daily monetary spending to be well over $100 and we spend anywhere from 10-25 days per year enjoying the recreational activities afforded by open roads and non-wilderness areas. Please revise your rmp as needed to get accurate and consistent data.

Submission No: emc0864
Commenter: Scott Seibold
Comment: The plan is mistaken on the economic and environmental impact. The economic impact numbers do not coincide with previous numbers as calculated by the USFS NVUM.

Submission No: cfc0138
Commenter: Jerry Smith
Comment: Table 5. National Forest Visitor Spending Profiles by Trip Type Segment and Spending Category, $ per party per trip

http://www.fs.fed.us/recreation/programs/nvum/NVUM4YrSpending.pdf

At the above URL, the USFS in 2003 found that "Non-Local Segments" spent $51.60/day not including an overnight; $161.25 if staying overnight on the forest; and $245.25 if staying overnight not on the forest.

For "Local Segments", day users spent $32.85/day; $124.49 if spending the night on the forest; and $116.14 if overnighting not on the forest. Considering that gasoline is over double the number used in 2003, it is quite obvious that numbers used in the GJFO RMP/TMP are seriously undervaluing recreation. We believe that the GJFO has made an error of major proportions in their economic efforts in the GJFO RMP/TMP.

Submission No: emc0886
Commenter: Walt Blackburn
Comment: During the drafting process my concern center on the fact that economic information should lead to consistency of analysis between BLM and USFS. Planning unit analysis conclusions should be roughly consistent regardless of managing agency. Presently there is inconsistency between the two agencies. I feel it is critical & necessary component of balancing multiple uses on public lands in the planning process. I realize that the economic calculations for recreation are far more complex than calculations for other resources. I encourage the ID team to review the comparative spending issues and resolve them prior to the development and implementation of the final FEIS or ROD analysis product. Not doing so would impact both the recreational opportunities in Colorado and the State economy for a long period of time moving forward as recreational usage of public lands has been identified as the largest economic booster of all user groups. By not correcting the economic calculations the OHV community will be directly affected.

Submission No: cfc0016
Commenter: Paul Woodward
Comment: At any one time during spring and fall there might be 100 riders out their daily. If each on spends 30-50 dollars each as I do myself, then the income revenue for community is pretty high.

Submission No: emc0673
Commenter: Aaron Holton
Comment: Economic impacts aside, the proposed closure is a slap in the face to any multiple-use principles the BLM is obligated to manage public lands by. Closing nearly half a million acres of land. However, as an individual who regularly participated in OHV activities in the area when I was a resident of Utah and after becoming a resident of CO, I can say I have spent at least $2,000 in the pat 7 years in this area. Between model rooms, local business and gasoline, that is a fair estimate.

I find it interesting that "economic impacts" are listed as a priority in this review yet no real analysis is given on how the $10 figure was obtained. I find this very difficult to believe. It costs that much just to fill a single gas tank up, not including anything else.

Submission No: emc0849
Commenter: Ron Palm
Comment: I am amazed that the GJ field office is trying to close so many trails and areas at all, let alone for the COMPLETELY INACCURATE basis of money spent per user. I currently live in Minnesota, and typically make at least one trip out there every year. Last year my wife and I spent the entire month of June in Grand Junction, primarily to use the OHV trails and areas. I estimate we spent about $4000 during that time, and had an amazing time.

Response
Many comments questioned the use of an average spending value of $10.16/visitor. Two spending profiles were used in the analysis: $27.13/visitor day for motorized use and $24.95/visitor day for non-motorized use. Those values are in 2009 dollars. Spending can be higher in different years because more was purchased or because prices are higher for the things purchased. By converting all dollar values to a common year, the BLM can determine if there is actually more purchasing taking place, rather than just higher prices. In 2014 dollars, the $27.13 would translate to approximately $29.53, and $24.95 would translate to approximately $27.16. The $10.16 figure appears to come from dividing total spending by total visitors. This gives a much lower number for average spending because economic impact analysis counts only spending by out-of-area visitors who bring "new" money into the economy. The spending numbers in the tables are only for spending by out-of area visitors. Dividing those spending numbers by the total number of visitors would give a low average per visitor.

The explanation for what spending is counted is found in the assumptions and methodologies section of Section 4.6.3, Socioeconomics, in the Draft RMP/EIS. In summary, the analysis uses the IMPLAN model, which was developed by the Minnesota IMPLAN Group and is a standard model used estimate spending and economic impacts. The input-output analysis performed by IMPLAN, in essence, measures the cumulative impact from an initial dollar of spending that makes its way through the economy. Three types of impacts are measured. Direct impacts are income and employment directly affected by activity on BLM-administered land (e.g., a rancher spends money with a local veterinarian). Indirect impacts occur when related industries gain from purchases by the directly impacted businesses, e.g., the

veterinarian buys supplies from local firms. Induced impacts are the results of spending by employees hired due to the business activity just described. Together, these are reported as the total impact of the different management alternatives.

NVUM. Some comments refer to the US Forest Service's National Visitor Use Monitoring (NVUM) survey data report as an example of spending profiles. NVUM includes, among other things, national level estimates of spending by visitors to national forests. Surveys are conducted every year in a variety of forests. Every few years a summary of the results for the preceding years is released.

There are two NVUM documents that are mentioned in the comments. One is *NVUM Four Year Report Updated Spending Profiles for National Forest Recreation Visitors by Activity*, which was released in 2005 and is based on data from 2000-2003. The more recent version is *Spending Profiles of National Forest Visitors*, which was released in 2010 and uses data for 2005-2009. Some commenters refer specifically to one or the other. Some refer to both. Others just refer to NVUM in general. The 2010 document would be the most appropriate one to consult for comparison to Chapter 4 figures. A third NVUM report, *Spending Profiles of National Forest Visitors, NVUM Round 2 Update* (also released in 2010), is helpful for understanding how NVUM spending reports can be compared to those used in Chapter 4. It was not mentioned by any of the commenters.

NVUM spending profiles must be adjusted downward to be compared with the spending profiles used in Chapter 4. All of the dollar values cited by the commenters will be lower. First, entrance and camping fees paid to use US Forest Service facilities should be subtracted from the NVUM spending profiles since those fees are not applicable to BLM-administered lands analyzed in Chapter 4. Second, NVUM spending profiles must be adjusted for party size. The NVUM spending figures are reported on a per party basis rather than a per visitor basis. It is necessary to convert per group spending to per visitor spending. Finally, NVUM spending figures for overnight visitors must be adjusted for length of visit (how many days and nights). NVUM figures report spending for the entire trip no matter how long it is. This must be converted to spending per day.

For NVUM 2010 data, the average group size will be 2.4 or 2.5 for visits similar to those included in Chapter 4. The average nonlocal overnight stay will be roughly 3 or 4 nights. These adjustments will lower the relatively large NVUM figures to values that are much closer to the estimates used in Chapter 4.

A Snapshot of the Economic Impact of Outdoor Recreation (Prepared for the Western Governors' Association). This report is mentioned as an example of higher spending profiles for motorized users. Direct use of numbers from this report presents the same problems described above for NVUM numbers as well as two additional problems. First, some of the larger numbers reported include spending for vehicles and other purchases that economic impact analysis does not count. Second, the trip spending numbers are not adjusted to be per person. Third, the trip spending numbers are not adjusted for length of stay. Finally, it is not clear whether or not the trip spending figures record spending only in the recreational area. If the figures record spending anywhere on the trip, their use would overstate the impact on the local economy. Each of these considerations means that the spending numbers in the report would need to be adjusted downward to be compared to the figures used in Chapter 4.

These limitations are not clear from the report itself, but they can be found in an additional report titled *The Outdoor Recreation Economy: Technical Report on Methods and Findings*, which can be found on the Outdoor Industry Association website, outdoorindustry.org. The technical report does not contain the information needed to make the adjustments to report visitor spending per day.

COHVCO Report: *Economic Contribution of Off-Highway Vehicle Recreation in Colorado* (released 2009). Some commenters referred to spending numbers from this source. Other commenters list figures attributed to COHVCO that do not seem to appear in this report but are apparently related to it.

The BLM was unable to find a technical description of the methods used in the COHVCO report. However, from reading the report itself, it seems clear that the numbers as reported cannot be compared to the numbers used in Chapter 4. At least some of the following are features of the report that would require adjustments before the data could be compared with Chapter 4. They would all adjust the numbers downward.

The spending values per trip appear to be group spending rather than individual spending. The spending values per trip appear to be for trips of various lengths, rather than per day. At least some of the numbers reported appear to combine both local and out of area visitor spending. At least some of the numbers appear to include spending that took place outside the area. At least some of the numbers appear to include spending on some items, such as vehicle purchases, storage, and licenses that are not included as spending for economic impact analysis.

Several commenters list a variety of purchases as evidence that the spending profile is too low. However, many of those purchases are not counted in an economic impact assessment. The spending that gets counted is for things specific to a visit to BLM-administered lands. Food, gasoline, lodging, and rental of equipment are examples of purchases that are counted. Equipment and maintenance are examples of purchases that are not counted. An OHV, for example, can be used in places other than BLM-administered lands. This does not imply that those other types of spending do not take place, but they are not counted in economic impact analysis. The spending categories for NVUM, mentioned above, include lodging, restaurants, groceries, gasoline and oil, recreation, sporting goods, souvenirs, and other spending.

Some commenters list the purchases that they make as evidence that the average should be higher. The average, however, can include people who come from places close enough that they do not stay overnight and have no lodging expenses, for example. Even visitors who come from farther away sometimes camp or stay with friends and do not incur lodging expenses. The spending profile is an average of the lower and higher spenders.

One comment refers to the variability of gasoline prices. In general, prices of most things increase over time due to inflation. To compare dollar values from different years, the BLM has adjusted for inflation. All of the dollar values in Chapter 4 are converted to 2009 dollars.

Visitation Numbers and Patterns

Summary

The Draft RMP/EIS relies on faulty visitation data.

Comments
Submission No: emc0665
Commenter: Sherry Schenk
Comment: I don't have any way to actually count people using the BLM lands, but my experience on the land leads me to ask how you arrived at the figures you have for different users groups. On page 4-423 there is a Table 4-62 (which I tried to copy, but things didn't line up correctly). Table 4-62 is about Total Recreation Use (visitor days). It indicated for the year 2010 that Motorized count was 253,628, Mechanized 104,969 and Non-Mechanized (I believe that would be hikers, horseback riders, runners, etc.) was 72,330. Those numbers are incredibly skewed from what I observe when I'm outside and while I can think of some reasons that might be so I really can't seem to come up with a totally plausible explanation. I walk daily, but do so early in the morning (5:30 to 6:00 a.m. at this time of year) and many people do not chose that as their time to be outside. The activity I do is quiet --- walking------ and unless someone sees me out there, they may not know that I'm there. Because I don't need additional equipment, my travel on a road to reach the place I'm going to recreate is not noticeable - I drive a car. Because hikers are not as visible as other user groups I believe their numbers are not counted accurately.

I don't know how you arrived at these figures, do know that they disagree with figures I've seen for the number of people in different user/recreation groups across the state, and believe having accurate figures about how many visitor days there are for each group in a year is critical information. That information would guide your decisions about ways the public lands are being used and how you should plan for future use. I would ask that you check these figures.

Submission No: rmc0033
Commenter: Bill Hamann
Comment: I am writing to comment on the trail use data presented in the DRMP regarding number of annual visitor day users for the various activity groups (Table 4-62) It is assumed that BLM determines the number of trail miles to develop and allocate for each user group (activity type), in part, on the use of and demand for trails. Demand is expressed in the number of people that use the trail, both on an annual basis and possibly peak day basis, now and in the future. . It is important to have accurate data on trail usage so BLM does not over build facilities for one user group and provide insufficient trails for other groups. It is also assumed that BLM will try to separate the various user groups as much as possible, since activities of one group can have adverse impacts on the experiences sought by other type or user. There are also significant safety issues in mixing activity types.
It would seem to be important to have data on total (local and visitor) trail use by different activity groups in the GJRA. Table 4-62 only provides data on visitor days by activity group, (which is useful for estimating economic value of trails). A visitor was defined as a trail user from outside the Grand Valley region. The table shows 254,000 motorized visitors(59% of total). 105,000 mechanized visitors (23% of total) and 72,000 non-mechanized visitors (16% of total.) I question the accuracy of this table. The percentage use data (by activity group) differs significantly from several other trail surveys I have seen over the past 10-15 years, for public lands in Colorado, in Mesa County and in nearby states. In fact, the percentage of users by activity type for motorized and non-mechanized groups (from the other surveys) are almost the inverse of this table. (Mountain bike percentages are similar to the data I have seen). Some of the surveys I have seen are based on total trail users and some are visitor use only; I do not see any reason why the relative percentages should differ greatly (and the data I've seen elsewhere does not).

Because BLM is using inaccurate data for projection of trail use, it attributes a much greater economic contribution by motorized users than will actually occur; all other surveys that I have seen show hikers in the majority and contributing the most to the economy. The purpose of this letter is to provide comparative data from my other

sources, and request that BLM provide a full explanation for the differences with their data. BLM should describe the extent and format of their survey and how much was extrapolated from the data collected.

The data I have is from several different sources. I am attaching data sheets from each survey, A summary of results follows:

1. 2007 Study of Trail users on BLM land in Grand County (Moab), Utah. .Hikers comprised 31% of trail users; motor vehicle users only 8%.Hiking supported 772 jobs, motor vehicle users 269 jobs. Study was by Headwater Economics
2. 2012 Conservation in theWest Study by Colorado College (Statewide). Hiking was the choice of 65% of trail users; OHV and snowmobile riders was chosen by 16% of users. (No economic data)
3. BLM data from CCNCA (GJRA) in 2003. Hiking represented 75% of the sample. Four wheel driving and ATV use was only 31% of the sample.
4. US Forest Service/Rocky Mtn Region, 2002. Backpacking and hiking-7 million participants; Off-road riding-3 million
5. Forest Service Research, Athens Georgia., 2000. Nation Wide Estimate. Hiking-69.9 million Off Road Driving-35 million
6. Univ of Denver, Norwest Public Opinion Research Program, 1999 Coloradoan Preferred Trail Activities. Hiking-70%; Motorcycle/ATV-13%
7. BLM, Moab Field Office, 2007 , Activity Participation. Hiking/Walking-49.3%; Riding a dirt bike or ATV-3.8%

We recognize that the results from other trail user surveys are only partially applicable to Mesa County. It is probable that there is a higher percentage of ATV/dirt bike riders in this area. However all of the 7 studies show similar results (which are the inverse of the BLM data)-with an overwhelming percentage participating in hiking as compared to trail motorized activities. Mesa County can't be that different! (Note: There is one aspect of OHV use in the GJRA that could skew the results on motorized use data and that is the open OHV area near the airport. Because of its proximity to a large metropolitan area, it does attract a large number of day users, certainly more than any trail system in the area. The description of the data collection survey did not explain haw that data was handled) If it hasn't been done so, data from the day use at the open OHV area and day use on other trails should be separated and presented in separate tables. BLM simply cannot plan for new trail construction unless data is available for trail use only. Table 4-62 presents an inaccurate picture of trail use the GJRA.

Using correct data for activity use and economic +contribution is particularly important in preparing a travel plan for the GJRA , since the local motorized groups have been particularly outspoken in claiming that their activity is a primary economic driver to the area. This may tend to influence BLM's decision on closing trails and building new ones.

The Grand Junction, Montrose, Delta etc Visitor Bureaus and Chambers of Commerce put out brochures designed to attract a target audience; ie the groups that will bring the most money in. They all emphasize quiet use activities, there is not an ATV in a single brochure. This says a lot! Quiet users are the target visitor; they apparently bring in the most money.

The survey data must be reevaluated by an independent source. The table should be removed from the draft RMP. A much more accurate survey of actual trail use is needed; if not available, results from surveys in similar areas could be extrapolated to the Grand Junction area.

Response

The GJFO uses a variety of tools and techniques to estimate visitor use, including electronic traffic counters, field observations and surveys. See Section 3.3.4 and the use figures on page 3-189. Estimation of visitor use for an area the size of the GJFO is an inexact process, however for the purposes of conducting an economic impact analysis, it is necessary to agree on a baseline estimate of visitor numbers. Since the purpose is to compare the economic impacts of the different alternatives, a less than perfect estimate can still illustrate the differences between the alternatives. In this case, the estimates are for socioeconomic comparisons rather than for guiding specific recreation planning decisions. The visitor use estimates used in the DRMP were based on a compilation of traffic counter data from representative locations throughout the field office. The table referenced by the commenters has been revised in the Proposed RMP/Final EIS to reflect a more comprehensive representation and assessment of visitor use throughout the field office. See Table 4-91 on page 4-475. BLM recreation specialists evaluated available data and estimated use numbers and types of use for individual recreation areas throughout the field office, then averaged those estimates for a composite estimate of the field office-wide ratio of use types – motorized, mechanized, non-mechanized. The revised data still indicates a ratio of uses (i.e., motorized, mechanized, non-mechanized) that varies significantly from many other areas. One of the primary factors identified for this difference is the fact that a large portion of the non-mechanized recreation opportunities (i.e., foot and/or equestrian) in the Grand Valley area lie within McInnis Canyons NCA, Dominguez-Escalante NCA and Colorado National Monument which are outside of the GJFO planning area. As noted in Section 3.3.4, the GJFO is regionally and internationally known for its mountain biking and OHV opportunities, and includes large areas specifically designated for those uses (e.g., North Fruita Desert mountain bike emphasis area and Grand Valley OHV Open Area).

Jobs

Summary

The analysis underestimates the number of jobs in certain industries that would be affected by implementation of the alternatives.

Comments

Submission No: emc0748

Commenter: Jody Kliska, Interpretive Association of Western Colorado

Comment: The preservation and interpretation of these resources along the Byway offer real economic benefits, as well, particularly for heritage tourism and recreation. As noted in The Economic Power of Heritage and Place: How Historic Preservation is Building a Sustainable Future in Colorado (prepared for the Colorado Historical Foundation by Clarion Associates of Colorado, LLC; October 2011; available at www.historycolorado.org) "Longwoods International's Colorado Travel Year 2008 Visitor Study reports that Colorado's heritage tourists spent approximately $244 million on cultural and historic activities ($190 million on cultural activities and $54 million on historic activities) (page 19). Surveys consistently show that visitors to Colorado are especially drawn to destinations with historic character and attractions that are interesting and authentic. Visitors with these types of interests generally stay longer and spend more money in the state than other tourists. As a result, heritage tourism has become a major economic generator, providing significant income and thousands of jobs across the state (page 6). Heritage tourists spent an average of $447 in total expenditures, whereas all overnight leisure visitors spent on average $333 in total expenditures, a difference of $114. Heritage tourists are also more likely than other visitors

to come from out of state, and their trips generally last longer in duration than typical overnight leisure trips (an average of 5.8 nights away from home compared to 5.2 nights) (page 19)."

The economic benefits to Colorado of outdoor recreation are dramatic. The Outdoor Industry association reports that in Colorado, outdoor recreation generated $13.2 billion in consumer spending, 125,000 direct Colorado jobs and $994 million in state and local tax revenue. (The Outdoor Recreation Economy, Colorado Report; Outdoor Industry Association, 2013, available at outdoorindustry.org/recreationeconomy).

Submission No: emc0896 and emc0696 and emc0971
Commenter: Zach Harsh; Bradley Schluter; and Travis Lindsey
Comment: Employment in recreation is tragically underestimated. The GJFO RMP asserts 90 jobs as a result of recreation on the GJFO planning area, which is entirely inconsistent with research from federal, state and local government research in addition to user group research. This research concluded: COHVCO - 2,147 persons are employed in motorized recreation in the GJFO area; CPW - 1,392 persons are employed in Garfield and Mesa County areas in positions that are directly related to hunting and fishing activities; Colorado Tourism - 4,310 persons are employed in tourism and travel in the GJFO area; Grand Junction Chamber of Commerce identifies Cabela's in Grand Junction as an employer of over 200 people; and Numerous motorcycle and OHV shops in the Grand Junction area and the Field Office itself individually employ 50 people all year long.

Submission No: rmc0091
Commenter: Scott Lindsay
Comment: The GJFO RMP has undervalued jobs that are a result of recreation on the GJFO planning area. The GJFO RMP claims that 90 jobs are a result of recreation on the GJFO planning area. Yet my dealership employees close to 50 full time employees. This validates the findings that other government agencies have concluded. CPW 1,392 jobs, Co Tourism 4,310, COVCO 2,147. The GJFO RMP relating the impact of local employment is horribly undervalued.

Submission No: emc0685
Commenter: Brad Carey
Comment: Employment in recreation appears to be vastly underestimated. Other research disputes the RMPs findings of 90 jobs. COHVCO finds that 2,147 persons are employed in the area with 1,392 persons in Garfield and Mesa Counties.

Submission No: cfc0021
Commenter: David MAlehorn
Comment: GJFO Plan says all recreation generate $7.2 million in total spending 90 fulltime equivalent jobs by 2029.
Comparative research for recreation: COHVCO- motorized recreational provides over 141 million in spending to the GJFO planning area and 214 jobs directly related to motorized rec. Every year as follows:
Colorado Parks and Wildlife found hunting and fishing in Mesa and Garfield Counties resulted in $130,520,000 annually and accounts for 1392 jobs
Paiute Trail system in Utah provides over 38 Million to local economies and directly created 150 jobs
Hatfield & McCoy trail system contributed over 10 million dollars and 150 jobs to communities adjacent to the trail system.

Submission No: cfc0074
Commenter: Brandon Siegfried
Comment: 2012, COHVCO motorized recreational provides over 141 million in spending to the GJFO planning area and 214 jobs directly related to motorized rec. every year. 2012, Colorado Parks and Wildlife found hunting and fishing in Mesa and Garfield Counties resulted in $130,520,000 annually and accounts for 1392 jobs. Reduced access would result in overcrowding from bottlenecked access points

Submission No: rmc0063
Commenter: Lonnie Knob
Comment: I am concerned that the preferred alternative that the BLM has selected will be the cause of severe unintended economic hardships to many of the businesses and communities that are surrounded by the BLM's Grand Junction Field Office.

The plan to close 68% of the motorized recreational trails in the management area may seem to be justified when using some of the criteria in the BLM's assessment policies, but they do not seem to adequately take in to consideration the impact those trails and the individuals that access them have on the economic environment of the region and considering the fact that this decision will affect the next several decades it is crucial that all relevant data be evaluated and considered.

With the information that BLM is considering and with what seems to be an unintentional oversight on economic impacts of motorized users to the GJFO area I would request that the BLM abandon its current preferred alternative and adopt one more resembling the "NO ACTION" alternative that is presented as one of BLM's options.

Submission No: rmc0069
Commenter: Roger Granat, Mayor, Town of Palisade
Comment: The Town understands the difficulties faced by the GJFO in determining specific socioeconomic benefits through recreation, especially when an emphasis on recreation closes off activities that have specific socioeconomic benefit under Section 4.6.3. The development of a robust tourism-based economy in Palisade is of critical importance to the Town's Board of Trustees. A vibrant recreational component is key to the expansion of visitor-days and the dollars spent directly on food, lodging and merchandise. Outdoor recreation enthusiasts precisely fit the demographic that supports other key elements of the Palisade economy; roadbiking, river-rafting, fruit and agri-tourism and winery visits. Your analysis as shown in Table 4-65 differentiates very little by alternative, but the Town feels strongly that the long term benefit of recreational development and the maintenance of unspoiled natural settings will be visible in the Palisade economy. Under Alternative B, the Town endorses the application of the listed administrative, management, information and monitoring support actions.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The DRMP attempts to provide solid information about the beneficial contributions of hunters and anglers and TU appreciates the discussion. In Table 2-5 (page 2-247) the information in Alternative C states that there will be less recreation opportunities under Alternative C than other alternatives. TU is flummoxed by that statement, as Alternative C provides more backcountry areas, more areas that will not have leases on them, and thus providing a much more enhanced outdoor experience for recreationists, hunters, and anglers. Increased protection would have benefits of increased access to areas where, under Alternative B or D, areas would be

covered with well pads, new roads, and oil and gas infrastructure facilities. We request the BLM to provide a better explanation for why Alternative C would provide less recreation opportunities.

According to USFWS 2011 survey results for Colorado, 2.3 million Colorado residents and nonresidents 16 years and older fished, hunted, and/or wildlife watched. This amounted to a significant economic contribution of $3.0 billion to both the local economies and the state economy spent on wildlife recreation in Colorado. It is estimated that 767,000 anglers participated in fishing activities, spending an estimated $648 million. For hunters, more than 250,000 hunters spent over 2 million days of hunting and spent $460 million.

Recreational visits in Colorado to Department of Interior lands, of which BLM is part of, resulted in supporting an estimated 9,000 jobs (Department of Interior's Economic Contributions. 2010). Our public lands provide a broad economic impact from the diversity of outdoor recreation use. This includes local businesses that provide direct outdoor recreation experiences, to product-oriented manufacturing. And the ripple effect is huge from jobs, tax revenues, and other benefits created as these varied contributors expand and provide direct benefits for Colorado's public lands.

BLM lands are more than just resources containing oil and gas deposits, and while we appreciate that the DRMP attempts to define other uses that contribute in an economic and social sense, we feel that there is a lack of the significant recognition and economic contribution from these lands. New research illustrates the importance of recreation lands and protected lands and the economic benefits of healthy growth in communities where landscapes are protected at various levels from oil and gas development. We request a more robust analysis be completed that provides a more thorough review of economic contributions from outdoor recreation opportunities and associated benefits.

Submission No: emc0869
Commenter: Terry Burnett
Comment: The RMP further provides little to no analysis of economic issues, or the impact of particular alternatives on the economic benefits flowing to local communities from the GJFO. The economic conclusions that are presented and relied on for balancing of multiple uses are simply fatally flawed.

Submission No: emc0694
Commenter: Bonnie Petersen
Comment: Further, the BLM Proposed RMP fails to accurately reflect the economic impact to the communities affected by the RMP with regard to employment statistics related to recreation in the GJFO planning area. The RMP asserts that 90 jobs are directly attributable to recreation on the GJFO planning area. Indeed, the GJFO planning area encompasses some 50% of Mesa County and the total economic impact of tourism in Mesa County has been projected to be approximately 37%. With more than 57,000 employees working in Mesa County, the number of employees directly employed by tourism necessarily has to be significantly larger than the 90 jobs reflected in the BLM Proposed RMP.

Submission No: rmc0036
Commenter: Bridgette Target
Comment: My second concern is that I feel that the BLM has not done a thorough enough job in considering the economic contributions that motorized recreation make to the state and surrounding communities. Use of accurate recreational spending information is critical and the BLM appears to have inaccurately assessed many of

the commonly used measures for recreational spending, including; monetary totals for recreational spending and the numbers of persons employed in jobs related to motorized recreation in the management area.

Response

The employment numbers generated for Chapter 4 are for employment from spending by out-of-area visitors. In general, most of the direct spending will be at convenience stores, restaurants, motels and hotels, grocery stores, and miscellaneous retail operations. These are the sectors in which most jobs related to visitation will be created. There will be additional jobs supported in other sectors of the economy as a result of indirect and induced spending when the business owners and employees spend money in the local economy. One factor that limits the number of jobs created is that some of the money spent leaves the local economy. That money will be working as spending in some other economy outside the planning area, not the local economy. A substantial amount of money spent at convenience stores and other retail establishments leaves the area because many of the goods sold at those businesses are brought in from outside of the area. Many jobs listed in the comments, such as jobs at RV dealerships, are not going to be the result of spending that is counted for economic impact analysis.

The following section is a version of material from the beginning of the socioeconomic section of Chapter 4 (page 4-400 of the Draft RMP/EIS). It explains the IMPLAN process:

> For those activities that generate measurable spending (market values), the analysis will estimate economic impact in terms of output (total spending), value added (income), and employment in the regional economy. Spending to produce natural gas, to raise cattle, and to recreate on BLM-administered land fits this type of analysis. The analysis uses the IMPLAN model, which was developed by the Minnesota IMPLAN Group. The input-output analysis performed by IMPLAN, in essence, measures the cumulative impact from an initial dollar of spending that makes its way through the economy. Three types of impacts are measured. Direct impacts are income and employment directly affected by activity on BLM-administered land, e.g., a visitor spends money at a local restaurant. Indirect impacts occur when related industries gain from purchases by the directly impacted businesses, e.g., the restaurant owner buys supplies from local firms. Induced impacts are the results of spending by employees hired due to the business activity just described. Together, these will be reported as the total impact of the different management alternatives.

The socioeconomics analysis includes information from CPW on the economic impacts from fishing and hunting. While it is not included in the IMPLAN analysis, it is included in the larger socioeeconomics analysis. Information from CPW used in the analysis includes data specific to the planning area.

The COHVCO report mentioned in these comments has been addressed in an earlier response.

Non-Market Values

Summary

The socioeconomic analysis should be updated to quantify non-market values using a Total Economic Valuation Framework instead of using IMPLAN.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The socioeconomic analysis should be updated to quantify non-market values using a Total Economic Valuation Framework. BLM should abandon use of the IMPLAN model in favor of a more accurate and dynamic model such as EPS. If the BLM continues to use IMPLAN, the RMP shall fully discuss the assumptions, the shortcomings, and the poor track record of the model in planning efforts.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: Recall please that an EIS is a disclosure document. We are contending that a cost-benefit analysis must accompany this RMP in the Appendices, and the true relationship between the costs and the benefits of this massive job be disclosed so that the Deciding Officer can gain the proper perspective on whether this could be considered "well reasoned," or "reasonable," or even practical. CEQ's guidance on what is reasonable includes the feasibility of accomplishing the work. It is certainly lawful for BLM to propose things that are impractical, but this must be disclosed in the Final RMP and in the ROD. And, BLM must disclose the likelihood of completion, so that the Deciding Officer can determine the practicality of selecting the proposal and, again, whether the proposal is well-reasoned. We need to know what will be gained by such a significant outlay of financial and staff resources.

Response
Total economic value analysis (and the cost-benefit analysis that would be performed for such analysis) does provide more complete information than economic impact analysis. However, the BLM does not have the data or the resources to acquire the data for that more comprehensive type of analysis. Economic impact analysis does provide useful information for comparing the impact of the different alternatives on the local economy at the RMP planning level. No change has been made to the Proposed RMP/Final EIS.

Economic Impact of Recreation and Route Designations

Summary
The economic impact of recreation is underestimated. As a result the analysis contains inaccurate conclusions about the economic impact on recreation and travel of implementing the alternatives.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: Recreation is not a "land health consideration." Recreation is one of the Congressionally mandated uses of public lands. When considering recreation, the disclosure and analysis of the socioeconomic implications of your decisions, including your decision to close roads and areas to recreational uses, is required in this DEIS.

Submission No: emc0965
Commenter: Edward Arnett, Theodore Roosevelt Conservation Partnership
Comment: The TRCP FACTS recommendations (see attached document) and recent economic studies on the impacts of hunting, fishing and the outdoor industry on the economy (Southwick Associates 20012 a, b) should be incorporated in the analysis and decision making process.

Submission No: cfc0228
Commenter: William Cliff Conley
Comment: I have personally introduced this area to many, many friends and family over the decades who now come to Grand Junction to specifically use these areas L and M for 4-Wheeling, ATVs, Dirt Biking and Target Shooting. These people who come to town to play in the Bookcliffs stay in our local hotels, shop at our local stores, eat at our local restaurants and enjoy all the other great amenities that Grand Junction has to offer.

Submission No: cfc0174
Commenter: Daniel Gillilan
Comment: As the owner of a meat processing facility for wild game and beef our livelihood is being threatened by the limited use proposed for our outdoorsmen and the grazing permits that are being eliminated or lessened for our cattle producers here. As a hunter and cattle owner myself, my own use is being threatened.

Submission No: cfc0138
Commenter: Jerry Smith
Comment: Near the end of this same paragraph it states: "finally, spending profiles were calculated for motorized and nonmotorized users from the 2009 surveys and from similar surveys conducted on BLM land in Routt and Moffat counties (Loomis, et al.).
A. The Grand Junction Field Office managed area is in so many ways completely different from Routt and Moffat counties, it is completely unbelievable that any comparison would, or could be made. The GJFO is known nationally as a very unique BLM field office. The GJFO must deal with much more diversity of user groups than any other field office. Therefore, comparisons to Routt and Moffat counties are ridiculous. Routt and Moffat counties have no cities with populations remotely comparing to Grand Junction. For that reason alone, recreational uses and socio-economic numbers would be very different. The number of available hotel rooms and other amenities in Grand Junction compared to that of Routt and Moffat counties makes these comparisons irrelevant. With access to sporting goods stores such as Cabela's, Sportsman Warehouse, and several other smaller sporting goods stores in Grand Junction, the GJFO area would draw considerably more outside OHV and other user groups just for the shopping opportunities alone. The proximity of BLM lands and the number of current trails available close to Grand Junction with all its amenities, make it a hub for "outside" recreationists of all user groups. Taking all of this it into account, the gross amount of road and trail closures so close to Grand Junction will have a very detrimental effect to the local economy.
B. The failure of the GJFO RMP/TMP to properly value recreational activity has altered the basic direction of the entire document as many decisions regarding routes are purely a balance of the economic benefit of the route against the competing interests that would benefit from closure.

Submission No: emc0819
Commenter: Mark Krey
Comment: I did a little research and found an economic study done by Colorado State University titled "ESTIMATED ECONOMIC IMPACTS OF BLM LAND USE CHANGE ON LOCAL RECREATION AND TOURISM: THE LITTLE SNAKE RESOURCE AREA MANAGEMENT PLAN." http://dare.colostate.edu/pubs/EDR/EDR07-09.pdf).
Included is a table (shown below) on the economic impact of that RMP. The alternatives shown are A) continue with the current plan; B) managed to allow greatest resource use; C) BLM's "preferred alternative"; and D) managed to allow greatest resource protection.

It's pretty clear the impact on the economy of these alternatives. I also found a study conducted by NOAA Fisheries, USDA Forest Service and Colorado State University titled "Determining Economic Contributions and Impacts" and can be found at www.jrap-journal.org/pastvolumes/2000/v37/F37-2-6.pdf. It explains why diversified recreation will always have a greater economic benefit than any extreme conservation policy.

Submission No: emc0866
Commenter: Scott Williams
Comment: BLM statistics are not consistent with public record statistics. This proposal would look significantly different if accurate economic impact data on recreation was used for the balancing of multiple uses.

Submission No: cfc0041
Commenter: Joe Aaeng
Comment: Riders come from many places to this area just to enjoy this mostly single-track trail system which has loop opportunities. Loops enhance quality riding as well as safety. This also benefits the local economy.

Submission No: emc0896 and emc0696
Commenter: Zach Harsh and Bradley Schluter
Comment: Levels of closures are completely inappropriate and lack a rational basis and will hugely impact all recreational usage of the Grand Junction area. Economic impact is the primary method for balancing recreational usage of public lands with other uses of the of the same areas. Despite a plan that is thousands of pages in length, no meaningful analysis of economic is provided other than identifying it as a priority issue.

Submission No: emc0896 and emc0696 and emc0971
Commenter: Zach Harsh; Bradley Schluter; and Travis Lindsey
Comment: The Plan concludes total recreational spending will be $7.2 million in the field office by 2029.
Colorado Parks and Wildlife concluded hunting and fishing in the GJFO planning area results in over $131 million in annual spending;
Colorado Department of Tourism recently concluded that travel to Garfield and Mesa Counties resulted in over $384 million in spending in 2011; and
The Colorado Off-Highway Vehicle Coalition has concluded that over $141 million is spent in the GJFO planning area on OHV recreation.

Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: The loss of 66% of the general motorized access and some 58% of the Open Areas will have grave financial consequences. The DRMP's data is un-cited and is in serious conflict with very reliable and well respected sources, including the Western Governors Association.

Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Wildlife provides a significant economic benefit to the state of Colorado. According to The Economic Benefits to Hunting, Fishing and Wildlife Watching (BBC Research and Consulting 2008), hunting, fishing. and wildlife viewing contributed an estimated $3 billion annually toward Colorado's economy. CPW recognizes that each RMP Alternative will have an influence on CPW wildlife management opportunities (license sales, recruitment and retention of sportsmen and provision of wildlife recreation). The proposed alternatives will have various significant direct and indirect impacts on wildlife.

Our estimation of the economic impacts resultant from wildlife, hunting and fishing opportunity, and recreation and tourism on state agencies and local communities suggests that, as of 2008, Mesa County received a direct economic expenditure of approximately $43.9 million from hunting and fishing activities; these activities support an estimated 813 jobs. Similarly, Garfield County receives approximately $31.7 million expenditure and 579 jobs, according to BBC Research and Consulting 2008.

Submission No: emc0805
Commenter: Lydia Herron
Comment: The reduction in active riders could negatively effect the socioeconomics of the Grand Valley. At first, losing a few riders doesn't seem significant, but if one is to consider our contribution to this area's economy, due to our passion for riding ATVs, it proves to be substantial. We ride every chance we get, about 9 months out of the year. Collectively we ride approximately 8000 miles per year. We own two trucks, five (5) ATVs, a toyhauler and an open trailer. All of these require a fee of some kind for registration or license plate annually. They also require new tires on a regular basis. We purchased 2 new ATVs 5 years ago from local dealers at the cost of $17000 (plus tax), and plan on replacing those in the next year or two. We have owned at least six (6) other ATVs in the past. Again, all requiring tires, and annual registration fees.

Other significant expenditures include fuel, batteries, repair and maintenance. Fuel costs - just for ATV trips - average $4500 a year. In addition, there is the safety gear that we regularly wear including riding pants ($125), shirts, goggles, helmets ($100-$250), gloves, boots ($150), chest protectors, etc. There are also other accessories including spare gas cans (we ride, on average 75 miles each per day), racks, gear bags, etc. There are also groceries and drinks purchased for day trips, and especially for long weekend trips.

Submission No: cfc0138
Commenter: Jerry Smith
Comment: Alternative C in table 4 - 63 shows having the fewest visitors of the four alternatives. This alternative has the most closures of roads and trails and therefore demonstrates that these overwhelming closures will have a significant impact on the local economy and employment. If our assumptions regarding the numbers used by the BLM in this draft RMP/TMP are correct, a much more significant negative impact would be demonstrated in Table 4 - 63 in all four alternatives.
d. To quote the Colorado Office of Economic Development and International Trade; "In addition to tour winter recreation offerings, the state offers numerous opportunities for hiking, backpacking, camping, visiting state and national parks, biking, rafting, boating, mountain climbing and hunting."
"Outdoor overnight trips equate to 22 percent of the total overnight visitor spending, ranking Colorado 8th in the country for outdoor overnight trips. Colorado is an international hub of outdoor recreation, with a concentration of outdoor industry companies estimated to be about 12% of the national total. The Outdoor Industry Association found that the outdoor industry accounted for over 107,000 jobs and $10 billion annual economic output in Colorado alone." Source: http://www.advancecolorado.com/key-industries/tourism-outdoorrecreation

e. COHVCO has identified that OHV recreation provides over $1 billion in annual economic contributions to Colorado. Source: 2008 Colorado Off Highway Vehicle Coalition report entitled Economic contributions of Off Highway Vehicle recreation in Colorado prepared by the Louis Berger Group.

Http://www.fs.fed.us/recreation/programs/nvum/nvum_national_summary_fy2009.pdf

At the above URL, the USFS in: Table 15. Spending data associated with National Forest land recreation, by Spending Segment, for FY2005 -FY2009.

[commenter provided a table attachment in their submission]

Considering that gasoline prices are nearly double 2009 prices, these numbers are low by today's standards. Comparatively, this makes most of the GJFO 2013 RMP/TMP economic data clearly useless. A typical day in the Colorado Back Country costs between $40 and $65 (minimum), if one doesn't travel far from home. This doesn't take into account any expenditures for food, drink, vehicle maintenance and upkeep, replacement of worn or broken parts, maps, new or replacement clothes, photo development, ice, and other associated costs. No research we have seen on the internet even comes close to the low economic numbers in the 2013 GJFO RMP/TMP.

Submission No: emc0041
Commenter: John Crosby
Comment: Please consider the economic effects as well. The local economy has taken significant hits with oil/gas jobs leaving the area. We need every economic lift we can get and ATV riding around the GJ area brings in riders from all over the state. The area north of GJ is one of the best known open riding areas in western U.S. The people who come here to ride the great open areas we have stay in motels, eat at restaurants, buy gas, and hopefully stop by our local business in town such as Cabela's to shop. That's local revenue and taxes that are being paid. We lose that when we block off the area and send the message that ATV rides are not welcome.

Submission No: rmc0007
Commenter: Lori Buck, City of Fruita
Comment: The City of Fruita and the surrounding area has been developed into an international destination for outdoor recreation, particularly mountain biking. The NFD is a major piece of mountain biking inventory that visitors utilize. Reducing the size or the potential growth of outdoor recreation resources of the NFD Special Resource Management Area (SRMA) would potentially diminish the usefulness of this area and have a negative impact on the City of Fruita. Therefore, we are recommending against the proposed reduction in size of the NFD SRMA.

Submission No: cfc0064
Commenter: Brian Bond
Comment: Closing existing roads will deny access to public lands for tens of thousands of tourists, bikers, hunters and fisherman, as well as, to the elderly and handicapped. This will cause the loss of millions of dollars in tax revenues and licensing fees. It will also cost taxpayers the money which will be required to close the roads. Local businesses will also lose revenue and pay less taxes, as a result.

Submission No: cfc0074
Commenter: Brandon Siegfried
Comment: We currently have 3,632 miles of motorized routes/roads on BLM lands in the Grand Junction Travel Management District (does not include state highways or county roads). Alternative B and C propose closing 2,180 to 2,998 miles of motorized access routes for the general public. This represents a closure rate of 60% to 83% of our current motorized access that is open to the public. This will devastate our local economy and negatively impact my family's future and our quality of life.

Submission No: emc0457
Commenter: Monica McEylea
Comment: The government has once again failed to consider the fiscal impacts of closing the land. Many people come from all over the U.S. and even within Colorado come to Mesa County to ride the Grand Junction trails. They spend money in Mesa County and surrounding counties on everything from gas, groceries, restaurants, and even t-shirt shops. By closing this vast area , you are crippling an already struggling economy. Moreover, please remember that we PAY to ride! We buy tags for bikes that are both street and dirt legal, and we purchase state stickers to ride. By closing this area, you are sacrificing the county and state's economy.

Submission No: emc0615
Commenter: James Solomon
Comment: Economic contribution of Motorized Recreation and Results portrayed in the RMP: The economic contribution as portrayed in the analysis is extremely flawed as shown by Scott Jones CHOVCO, and the work that he has done in researching economic data. We propose that the BLM go back and redo this area of the plan because of the importance of these numbers in the decision making process.

Submission No: emc0623
Commenter: Walt Blackburn, Thunder Mountain Wheelers
Comment: TMW's feel there is a major flaw in the socio-economic figure used in the calculations of the impact of motorized recreation in the TMP. Such impact is not limited to just the Grand Junction Area but entire bedroom communities in the surrounding areas that the RMP/TMP is close to or associated with. The figure used in substantially less than calculations used in like agency Travel Plan computations and does not reflect the relevant fact that motorized recreations is a substantially much larger contributor to the socio-economic engine of the community than non-motorized recreations users.

Submission No: emc0886
Commenter: Walt Blackburn
Comment: TMW's organization and I feel there is a major flaw in the socio-economic figure used in the calculations of the impact of motorized recreation in the draft. Such impact is not limited to just the Grand Junction Area but entire bedroom communities in the surrounding areas that the RMP/TMP is close to or associated with. The figure used in substantially less than calculations used in like agency Travel Plan computations and does not reflect the relevant fact that motorized recreations is a substantially much larger contributor to the socio-economic engine of the community than non-motorized recreations users. We are very troubled that the basis and scope of the economics put forth in the draft plan is in error as far as comparative importance of particular activities represented regarding economics as a tool for balancing multiple uses. Apparently there was no draft economic contribution report prepared as part of the planning process and a full report was only going to be produced for the FEIS and ROD. The lack of a draft report for use in the planning process is highly frustrating and will clearly impair the responding public responders the ability to undertake meaningful review of the process and calculations as part of the public comment process.

Submission No: rmc0013
Commenter: Steve Chapel, Western Slope ATV Association
Comment: Gross errors have been made in terms of economic impact of motorized recreation in the Grand Junction area and should be corrected before the plan moves forward. All other sources and studies involving the economic impact of motorized recreation show it to be approximately ten times greater than non motorized recreation for the area.

Submission No: emc0694
Commenter: Bonnie Petersen
Comment: The economic analysis included in the Proposed RMP does not adequately reflect the impact of the significant reduction in access to trails in the Alternatives B, C & D. These economic analyses do not consistently reflect commonly used measures in terms of average daily spending, number of persons employed in tourism and travel related industries and total recreational spending. Draft economic contribution analyses have not been prepared even though economics are specified as a priority management issue.

Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; Steve Acquafresca, Mesa County Board of County Commissioners
Comment: The DRMP does not include a cost-benefit analysis for the mileage of routes proposed to be "closed and rehabilitated."

Submission No: emc0065
Commenter: George Cunningham
Comment: The Snakebite Enduro brought in over 250 riders with families, many of which stayed in hotels and ate out. If you close the land purposed in Alternative B this biannual income will vanish. Another thing to consider is the loss of revenue from the off-road permits, if you close the area families might decide to go elsewhere for their weekend fun and you will be out the $25.25.

Submission No: fla0001
Commenter: American Motorcycle Association Form Letter
Comment: OHV recreation is a driving force for state and local economies. However, restrictions to access these public lands, including new Wilderness or land with wilderness characteristics designations, will be deleterious to OHV use and positive economic activity.

The federal BLM's GJFO RMP woefully undervalues economic contributions of recreation. For example, the GJFO RMP asserts a total recreational value would generate nearly $7.2 million in total spending, $4.4 million in total value added and 90 full-time equivalent jobs by 2029.

Response
The economic impact of trail closures is addressed in Section 4.6.3. As the analysis states, if a trail closure results in fewer visitors, that closure will lower the economic impact. Other management changes in the same alternative might be either increasing or decreasing visitors and economic impact. Regarding a cost-benefit analysis in economic terms, the BLM is not aware of any study that estimates the benefits of such a trail closure in the context of land management. No change has been made to the Proposed RMP/Final EIS.

The impacts of route designations on recreational opportunities are discussed in Section 4.4.3. The socioeconomic impacts on grazing are discussed in Section 4.4.2.

Information on economic impacts of hunting and fishing are found in Section 4.63. The discussion is based on information in CPW's 2008 report on the economic impacts of hunting, fishing, and wildlife viewing (CPW 2008b).

Comments on spending levels, on NVUM, and on the COHVCO report have been addressed in Section 6.2.5.11 (see subheadings for Spending Profiles and for Visitation Numbers and Patterns).

The BLM agrees with the commenter who found the Colorado State University report helpful. It is cited as a source for Chapter 4 and that methodology is the basis for the analysis in Chapter 4.

The commenter who points out that the communities surrounding BLM-administered lands in Routt and Moffat Counties (Little Snake Field Office) have different characteristics than the communities in the Grand Junction Field Office is certainly correct. It is important to note that visitor numbers in Chapter 4 are based only on Grand Junction Field Office numbers. There is no connection to any other field office. For spending profile numbers, the BLM looked at spending on some items such as gasoline and groceries to compare or supplement spending numbers from surveys taken in the Grand Junction Field Office lands. The BLM consulted with the authors of the Little Snake report on what information might be reasonable for use in comparisons. The commenter correctly identified overnight accommodations as an area of difference between the Little Snake Field Office and Grand Junction Field Office. In fact, the Little Snake report had no spending numbers for that category of spending. The Proposed RMP/EIS reports on some other estimates for spending that can be compared with the numbers used in Chapter 4 of the DRMP. See Section 4.6.3 of the Proposed RMP/Final EIS.

Economic Impacts on the Energy and Minerals Sector

Summary

The Draft RMP/EIS inadequately describes the socioeconomic impact of restrictions on the energy and minerals sector.

Comments

Submission No: emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: The BLM should also use development assumptions closer to those in the RFD to estimate the socio-economic impact of oil and gas development in the area. The BLM's RFD Scenario indicates that 2,108 horizontal shale wells and up to 1,831 conventional/directional wells can be drilled on BLMadministered mineral estate within the Planning Area during the next 20 years. GJ DRMP/EIS, pg. 4-3. BLM also estimates that up to 9,116 wells may be drilled in the study area in the next twenty years, which equates to 456 wells/year. RFD, pg. 29. The BLM, however, uses three much smaller development scenarios when calculating the socio-economic impact - 11 federal wells/year, 39 federal wells/year, and 197 federal wells/year. These assumptions underestimate the potential range of economic impacts associated with oil and natural gas development in the planning area.

Submission No: emc0917

Commenter: Juli Slivka, The Wilderness Society

Comment: The socioeconomic analysis of oil and gas management in the RMP must include meaningful, quantitative analysis of the costs of oil and gas development. Purported economic benefits should be represented in net benefits and net jobs to allow for informed decision-making. BLM's management of oil and gas in the Grand Junction Field Office should minimize costs associated with development and promote diversification of the economy in the planning area by ensuring oil and gas decisions do not foreclose economic opportunities provided by recreation-based tourism.

Submission No: emc0930
Commenter: Ray Moores
Comment: Table 4-50-No comparison of economic analysis is performed for mining activity. In the event the price of Uranium returns to 2007 levels, mining would once again become viable. Most economic forecasts predict that Uranium demand and prices will increase significantly in the next ten years. Since the resource management plan extends to 2029, there is a very real possibility that mining could once again become a major contributor to the economy. Table 4-50 does not appropriately account for potential mining dollars.

Uranium Page 4-16 2nd paragraph from the end states that mining is expected to be a major contributor to particulate matter emissions. But economic benefits are not considered in table 4-50. If the impacts are estimated shouldn't the economic benefits be included in the analyses as well??? This analysis seems to be biased against mining.

Page 4-26, Starting with Table 4.4 through page 4-39 Estimates are given regarding negative environmental impacts of coal and uranium/vanadium mining. However the potential economic benefits are not assessed in Table 4-50. If the negative is analyzed why isn't the positive???

Submission No: emc0739
Commenter: Eddie Shelton
Comment: We note that the BLM assumed the operation of up to 20 small uranium mines in the area when assessing environmental impacts for all four alternatives. Realistically, that probably represents an upper bound to the number of uranium mines that could operate within the Project Planning Area. However, we note that the economic benefits of uranium mining are not quantified in Chapter 4. Although those benefits would be the same for each alternative, it still implies that there are environmental impacts but no measurable benefits to uranium mining. We suggest that you add the economic and environmental benefits (low carbon dioxide emissions for power generation) of uranium mining to the analysis.

Submission No: emc0930
Commenter: Ray Moores
Comment: Uranium Page 4-417-The last paragraph under the uranium section is out of date and incorrect. The paragraph states that there is a lack of a local processing facility for Uranium Ore. Please note that Energy Fuels now controls the White Mesa Mill near Blanding, UT. The White Mesa Mill is currently in operation and could serve as a repository for uranium mined in the Grand Junction Resource area, especially if Uranium prices rise to 2007 levels. In addition, since the draft plan was written, Energy Fuels has successfully obtained a radioactive materials license from the Colorado Department of Public Health and Environment for the Pinion Ridge Mill. Given those developments it is highly likely that if Uranium prices rise there would be a resurgence of uranium mining in the Gateway Area.

Uranium Page 4-417- The last paragraph under the uranium section states that uranium prices would have to rise to unprecedented levels to justify transportation. This may not be the case due to new technologies. Black Range Minerals a junior mining company http://www.blackrangeminerals.com/content/ablation-joint-venture/ is currently in the process of developing a new mining process called ablation that would make it viable to haul Uranium Ore much further distances for processing. They are currently working on commercial scale ablation units in Casper, Wyoming. Additional analysis is needed to fully address the possibility that Uranium may become viable once again.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Under the Preferred Alternative, BLM is imposing numerous new requirements that are not required by State or Federal regulations. Imposition of these new requirements is unnecessary and will increase costs to operators which will in turn impact the timing and cost of proposed projects, which could result in wells not being drilled and projects delayed. These new requirements will likely have a direct negative impact on the economies of the State of Colorado and its counties.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: BLM has failed to disclose the impacts the limited future leasing under Alternatives B and C may have upon future production activities. The GJFO must recognize, study, and report the economic impact of its decision to close significant portions of the Planning Area to leasing, or to make significant portions only available with major constraints, will have upon future exploration and development in the area. It is not enough for the BLM to simply assert that existing lease rights will be protected. Rather, the BLM must analyze how existing lease rights will be impacted by future limitations on future additional leasing and development and identify the protections it will afford to existing leases.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: It is concerning that extensive controls are suggested for a future management plan without any scientific studies justifying the need for extra controls in an area that is already being developed by multiple oil and gas operators. In addition, the BLM has not included any cost/benefit analysis that informs the public of its losses in tax revenues and jobs on account of such a drastic change in the direction of land management. This information needs to be developed and provided before the public can make an informed decision about future leasing in these areas.

Submission No: emc0923
Commenter: Larry Moyer
Comment: The tables in Section 3.6.3 looks to be incomplete and I would ask why there are no figures for oil and gas workers. This looks to be an important piece of missing data. Wage rates for Oil and Gas Workers should be collected and presented. Ideally, this would include a differentiation of several different categories in the oil and gas industry.

Response
The RFD scenario assumptions of 2,108 Mancos horizontal wells and 1,831 conventional wells equates to the highest estimated drilling rate used in the analysis: 197 wells per year (3,939 wells in total) for the 20-year life of the plan. There are three differing well development rates of 11, 39, and 197 wells per year are used in the socioeconomic analysis. The commenter asked about a 9,116 total well count and the resulting 456 wells per year: this number equates to the total number of potential wells regardless of mineral ownership.

Due to the exploratory nature of the horizontal Mancos play, the limited drilling and production history and the current short term gas price forecast, a decision was made to forecast the development of 3,600 Mancos horizontal wells for the plan lifespan of 20 years. With an assumption of 15 rigs being

available, the BLM mineral estate well count for the Mancos horizontal play for the next 20 years would be 2,108 wells.

Potential for uranium mining has changed since Chapter 4 was first written. The discussion in Chapter 4 has been modified to reflect that nothing in the management plan affects the potential for uranium mining on BLM-administered lands. Price will be the determining factor.

The economic impacts of changes in acres available for leasing and of changes in NSO stipulations are included in the analysis in Chapter 4.

The question of performing cost-benefit analysis is addressed by the earlier comment on the Total Economic Valuation method (see Section 6.2.5.11 under the subheading "Non-Market Values"). Cost-benefit analysis would be a part of such analysis.

Chapter 3 includes information on the relative size of a variety of sectors of the regional economy. It does not include data on wage levels for any of those sectors, but it does indicate how large a part of the economy various industries represent. The contribution of the various industries is reported both in terms of number of jobs and in terms of earnings. Because of the way the data are reported, the figures for natural gas drilling and production are found under the heading Mining. The text in Chapter 3 has been revised to make this clearer.

Social Impacts

Summary
The Draft RMP/EIS inadequately describes the social impacts of implementing each of the alternatives.

Comments
Submission No: emc0694
Commenter: Bonnie Petersen
Comment: The valuation of partnerships and user groups that have provided funding for multiple use trails is never addressed in the RMP and the RMP does not discuss how proposed management changes will impact social factors like unemployment rates and community tax revenues which will be negatively and significantly impacted.

Submission No: emc0679
Commenter: Michael Burke, Grand Junction Area Chamber of Commerce
Comment: The social impact is one that cannot be dismissed, and must clearly be addressed in the alternatives. The social impact of the federal lands may be more difficult to measure, yet they must be considered when making management decisions, and have really not been addressed in the alternatives. For many families who live in or visit the PRMP-EIS area this land helps define their recreational identities. Observe any Sunday on BLM land and families are recreating together. Many are hiking, biking, using off-road vehicles, rafting, picnicking, etc. This is multi-generational use of the land and develops strong family and community bonds and ties that must be considered. To limit the use of roads, trails and access will place more people on a smaller area and can cause unintended consequences that could lead to accidents, more negative encounters, and more impact on the land. This ultimately creates nightmares for enforcement officials and more resources will have to be funneled to mitigate these issues.

Submission No: emc0923
Commenter: Larry Moyer
Comment: Using the visitor numbers supplied in the DRMP, Table 4-51, page 4-405, BLM states that 291,335 visitors pursued non-motorized or mechanized activities, and 416,758 pursued motorized activities. This means that just about 70 percent (69.9) of the visitors to the BLM lands surrounding the communities under discussion are using motor vehicles for their recreation. This could be the most significant statistic in this analysis, yet it has been ignored in the social structure discussion. In fact there is nothing in the discussion about "social structure." The discussion in the DRMP is simply demographics and some history, and quite a bit of general discussion about the segments of the community that do not rely on BLM lands (agriculture, wineries, and so forth). There is no discussion of the social structure that has developed in the Grand Valley because of the vast and vehicle-accessible BLM lands.

Response
The BLM recognizes the importance of partnerships and has added a section to Chapter 3 explaining their role. This analysis is based on a community assessment study summarized on pages 3-258-260. Additionally, Chapter 5 documents the BLM's effort to reach out to stakeholder groups and cooperating agencies to ensure that the social impacts of decisions were included in the planning process. Further research on the interaction between public lands in the area and individuals quality of life is warranted and discussions have begun to develop such an in-depth study which was not part of the RMP process.

Impacts on Multiple Industries

Summary
The Draft RMP/EIS inadequately describes the socioeconomic impact of the alternatives on various industries.

Comments
Commenter:
Comment: I am concerned that the preferred alternative that the BLM has selected will be the cause of severe unintended economic hardships to many of the businesses and communities that are surrounded by the BLM's Grand Junction Field Office.

Submission No: emc0930
Commenter: Ray Moores
Comment: Table 4-50-No evaluation is made regarding the potential for timber/firewood extraction. Given the large tracts of forested areas managed by BLM there should be some consideration given to timber/firewood harvesting.

Chapter 4-No economic consideration is provided to address how the lack of grazing and timber harvesting will increase the incidence of wildfires. Millions of taxpayer dollars are wasted every year fighting fires. Grazing and timber harvesting will reduce the risk and intensity of fires. The aftermaths of most fires mean increased erosion and sediment runoff into the rivers and streams. The true economic costs of wildfires are not appropriately covered in this section.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners (attachment from the Mesa County Cattlemen's Association)
Comment: We do not find in the proposed RMP any economic analysis of the contribution of the livestock industry to the economy of the area, or any analysis of the effect on federal, state, and/or local revenues of the alternatives, particularly those which diminish the federal lands available for responsible grazing.

Submission No: cfc0064
Commenter: Brian Bond
Comment: Industries, such as: ranching, mining, oil, gas, utilities and timbering will also lose access to these public lands, resulting in lost tax revenue and higher prices to consumers.

Submission No: cfc0032
Commenter: Warren Gore
Comment: Considering drought management: Please remember that BLM allotments are a critical part of private ranch operations, and we cannot be shut off completely, as it will ruin us economically, as well as do irreparable harm to resources on our private range. We must work together as "partners", for the benefit of both ranching, and the BLM.

Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Accurate portrayal and analysis of the social and economic impacts of multiple use of BLM lands is lacking in the DRMP. Parts of the DRMP rely on old, outdated, or non-applicable and inconsistent socio-economic data and analyses. Our primary concern is with the methodology, and cited and non-cited studies resulting in underestimated impacts of multiple uses of the BLM to the local and regional economy.

Submission No: emc0679
Commenter: Michael Burke, Grand Junction Area Chamber of Commerce
Comment: We are concerned about the lack of information that has been prepared and presented in all four alternatives concerning the socioeconomic impact in the region, and find alternatives B, C and D particularly unacceptable in the lack of data that has been presented in the socioeconomic section of these alternatives. There is an extreme lack of data, lack of understanding of the full economic picture, and the social impact is barely considered.

Mesa County consists largely of federal lands with BLM lands making up a majority. These lands truly are an economic engine in this area and have potential impact on a population of approximately 250,000 people. Many individuals, industries and stakeholders will be impacted for over twenty years by the management decisions that come from the proposed RMP. We ask that the BLM do another study on the socioeconomic impact. Attention must be given to the myriad industries, recreational opportunities and development on BLM lands. We further ask that you include and analyze the individual contributions of the following industries: oil and gas development, coal development, grazing and agriculture uses, off road recreational uses including but not limited to; motorcycles, dirt bikes, ATV's, UTV's, dune buggies and four wheel drive vehicles. Hiking, mountain biking, backpacking, camping, guiding, outfitting and other recreational uses need to be analyzed as well as potential uses of BLM land which could include renewable energy development, as well as currently undeveloped uses of the land. As these and other land uses are analyzed individually on their economic and social impacts an aggregate will come together that

is much more inclusive than what has been offered thus far. This aggregate can then be used to make more sound management decisions and help provide for a base in the guiding RMP document.

Response
The data used in both Chapters 3 and 4 were up-to-date at the time the chapters were written. The data used for Chapter 4 in the PRMP has been updated as well. The data used in Chapter 3, which is supposed to represent conditions at the time it was written, will not be updated.

See Section 6.2.3.20 for a discussion of the limited amount of commercially desirable forest products in the decision area.

Drought management and the effect of reducing grazing on BLM-administered lands is discussed on pages 4,-308, 4-309, 4-315, and 4-452.

The analysis in Chapter 4 provides numerical analyses for grazing, natural gas drilling and production, and recreation. Other uses such as renewable energy development, coal mining, and uranium mining are addressed in a narrative fashion.

6.2.6 Cumulative Impacts

6.2.6.1 Recreation

OHV Recreation Opportunities

Summary
The Draft RMP/EIS did not analyze the cumulative loss of OHV recreation opportunities.

Comments
Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: No Cumulative Impacts Route Reduction Concentration. The DRMP has not conducted a thorough cumulative impacts analysis. CEQ emphasizes what is reasonable, and the courts have determined that Decisions must be rational.

Submission No: cfc0138
Commenter: Jerry Smith
Comment: The cumulative loss of OHV related recreational opportunity is a significant issue that should be incorporated into the analysis and into the decision making process.

Submission No: cfc0138
Commenter: Jerry Smith
Comment: Discussion: BRC emphasizes the need to provide sustainable travel routes for motorized recreation. This need has resulted from both an increase in the popularity of OHV use and the elimination of OHV opportunities in the area. It is necessary to develop an Alternative that will focus on the designation and development of motorized trails in the GJFO.

Motorized recreational opportunity has been and will be drastically reduced throughout the region. Travel management plans on adjacent BLM and National Forest lands have reduced opportunity for motorized recreationists, while at the same time provided additional opportunity for those who prefer a nonmotorized experience. Future restrictions, including road and trail closures pursuant to the recently finalized Moab District Office RMP and Travel Plan, as well as adjacent BLM field offices in Colorado, will amplify this situation.

Submission No: emc0789; rmc0076; and emc0693
Commenter: Keith Fife, Mesa County; Steve Acquafresca, Mesa County Board of County Commissioners; and Thomas Hundtroft, Bookcliff Rattlers
Comment: Real Cumulative Effect: The DRMP fails to disclose the most basic and obvious cumulative effect of closing and rehabilitating over 1,000 miles of routes in the Planning Area.

Response
Section 4.4.3 describes how OHV closures on nearby National Forest System lands have drawn users to BLM-administered lands within the planning area. This section also discusses the effects of increasing motorized use in the planning area. It has been augmented for the Proposed RMP/Final EIS with a more complete discussion of cumulative impacts on OHV recreation opportunities (see Section 4.4.3).

6.2.7 Mitigation

6.2.7.1 Stipulations

Stipulations outlined in Appendix B apply, where appropriate, to all surface-disturbing activities (and occupancy) associated with land use authorizations, permits, and leases issued on BLM-administered lands. For this reason, responses to comments regarding specific stipulations are provided in this section. Comments regarding other types of resource-specific mitigation measures (e.g., SOPs, COAs, and BMPs) are addressed in the sections for those particular resources.

General

Summary
The BLM must use the least restrictive option for stipulations. The BLM has failed to recognize the requirements of the Energy Policy and Conservation Act of 2005, which directs the BLM to use consistent lease stipulations and to ensure that the least restrictive stipulations are utilized. The BLM does not demonstrate the need for the proposed stipulations or provide scientific support for them. Any new stipulations developed during the ongoing statewide oil and gas stipulation consistency review should be analyzed and made available for public review. The BLM cannot apply new restrictions to valid and existing lease rights. The proposed stipulations need to recognize valid and existing lease rights and provide for flexibility for development through exceptions, waivers, and modifications.

Comments
Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Under the Energy Policy Act of 2005 (EPAct), BLM must only implement and least restrictive stipulations on oil and gas leases. The GJFO DRMP/DEIS proposes stipulations-proposed to also be applied as conditions of approval (COA)- that are more restrictive than what is actually necessary, and more restrictive than

those applied by other federal and state agencies. BLM must reassess its proposed stipulations to ensure they are meeting the standard for least restrictive means.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: As detailed below, the GJFO DRMP/DEIS fails to utilize scientifically valid and supportable information to justify and substantiate the onerous restrictions it attempts to place on oil and gas development, including valid existing federal oil and gas leases. BLM's use of restrictions to protect big game, threatened and endangered plants and animals (specifically the Colorado hookless cactus and the DeBeque phacelia), BLM sensitive species, air quality and other resources is not supported by peer reviewed scientific studies or documented sources. BLM attempts to use policy and other mechanisms to promote a strategy of restricting oil and gas where science is not available to provide the requisite support.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: It is TU's understanding that Colorado BLM is in the process of conducting a Consistency Review of oil and gas leasing stipulations and that those stipulations could be adopted in the Record of Decision (ROD). This does not alter the fact that since these lease stipulations are not yet available for public review, it prevents the public from evaluating the current DRMP with any confidence. For instance, it is unclear whether the stipulations offered would be included in the final RMP and the ROD. Accordingly, TU is not able to assess the adequacy of these stipulations as applied to the DRMP Alternatives, and the BLM should issue a Supplement to the Draft RMP which has the new leasing stipulations available for public review.

For the foregoing reasons, we have sincere concerns about the unavailability and analysis of stipulations for use in the evaluation of alternatives in the DRMP, and we formally request that the BLM issue a Supplemental RMP to address these concerns.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The restrictions proposed by BLM as COAs through NSO, CSU, and timing limitation (TL) stipulations in Section 4.3.6 and Appendix B are unnecessary and unsupported by science. The proposed stipulations protecting special status plant species habitat must recognize valid existing lease rights, and thereby afford sufficient flexibility through exception, waiver, and modification criteria to allow for activities needed for exploration and development of those valid lease rights. If the stipulations are too inflexible or regimented with respect to operational and technical issues, BLM will not be able to address such issues appropriately on a per-project basis. Further, BLM cannot apply such restrictions to existing oil and gas leases that do not contain lease stipulations to protect these BLM "sensitive species."

Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: The DRMA does not adequately discuss potential new technologies which may alter the determination of high to low occurrence of oil and gas resources and the ability to discover and extract the resources. The amount of acreage where no surface occupancy (NSO) stipulations would be applied to future leased lands in the DRMP needs to be reduced significantly to meet FLPMA guidelines where the least restrictive measures available should be applied to protect other resources such as special status species, WSAs, ACECs, sensitive soils, riparian areas and recreation sites before applying NSO stipulations as a last resort.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: BLM ignores the fundamental requirements of the Energy Policy Act of 2005 (EPAct) and the Energy Policy and Conservation Act of 2000 (EPCA). Section 363 of the EPAct obligates federal land management agencies to ensure that lease stipulations are applied consistently and to ensure that the least restrictive stipulations are utilized to protect many of the resource values to be addressed. Under EPCA BLM is required to identify impediments to oil and gas development. Upon passage of these Acts, It was the intent of Congress that access to energy resources be improved. BLM recognized the intent of the both Phases I and II of the EPCA review when it issued Instruction Memorandum 2003-233, Integration of the EPCA Inventory Results, into the Land Use Planning Process. Consequently, BLM Field Offices are now required to review all current oil and gas lease stipulations to make sure their intent is clearly stated and that stipulations utilized are the least restrictive necessary to accomplish the desired protection. Moreover, the IM directs that stipulations not necessary to accomplish the desired resource protection be modified or dropped using the planning process.

BLM fails to comply with these laws and agency policy by proposing huge new impediments to domestic energy development, under all the action alternatives. We urge BLM to reconsider Alternatives B and C, in particular, in light of these policies as they pointedly require the BLM to decrease rather than increase impediments to domestic energy production.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: The DEIS fully discloses the significant reduction of leasable acreage and the dramatic increase in the use of restrictive stipulations; however, it fails to justify the need for these increases and fails to demonstrate that it considered the use of the least restrictive stipulation needed to protect the resources. The DEIS also fails to adequately quantify the direct impacts these decisions would have on energy production, not to mention state, local and national revenue streams.

The DEIS contains no evidence that BLM complied with the requirements of EPCA by demonstrating that less restrictive measures were considered but found insufficient to protect the resources identified. A statement that there are resource values or uses that deserve protection does not justify the application of any or all restrictions. Discussion of the specific requirements of a resource to be safeguarded, along with a discussion of the perceived conflicts between it and oil and gas activities must also be clearly articulated. An examination of less restrictive measures must be a fundamental element of a balanced analysis and documented accordingly in the FEIS.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: BLM proposes to dramatically increase the use of restrictive stipulations on lands available for lease by over 300 percent, from 307,210 acres under Alternative A to 967,100 acres under Preferred Alternative B. However, the DEIS fails to justify the need for these increases and fails to demonstrate that it considered the use of the least restrictive stipulation needed to protect the resources. The DEIS also fails to adequately quantify the direct impacts these decisions would have energy production, not to mention state, local and national revenue streams.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: BLM is proposing to designate each inventoried cultural resource site into one of the following categories: Scientific Use, Conservation for Future Use, Traditional Use, Public Use, Experimental Use, and Discharge from Management. Under all the action alternatives, BLM proposes an almost uniform and unnecessary stipulation of no surface disturbance varying between 100 meters of the site to 200 meters of the site. Visual impacts are also identified as a concern for which stipulations might be enacted in the Public Use and Traditional Use categories, though these potential stipulations are not afforded any level of prescriptive specificity. Of great concern is that BLM would arbitrarily require project redesign or relocation. Moreover, the DEIS contains no provision for accelerated and prioritized surveys of sites or necessary excavation projects.

The potential visual impact mitigation measures associated with the Public Use and Traditional Use categories are vague and fail to provide regulatory certainty, nor do they acknowledge the temporary nature of the visual impacts associated with oil and gas development.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: The proposed TL's for South Shale Ridge are not supported by any documentation that explains the reasoning behind the proposed increase in TL's. Oxy suggests that the BLM revise the TL's for South Shale Ridge for the final RMP/EIS in a manner that all proposed TL's are scientifically justified.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Appendix B: BLM has imposed significant stipulation increases for timing, no surface occupancy, controlled surface use and areas of critical environmental concern. The BLM is obligated to comply with Section 363 of the 2005 Energy Policy Act. This act requires federal agencies to ensure lease stipulations are applied consistently, and requires the BLM to adhere by ensuring "that lease stipulations are ... Only as restrictive as necessary to protect the resource for which the stipulations are applied." Because a tremendous amount of acreage is either closed or subject to highly restrictive stipulations, the BLM has failed to comply with Section 363 of the 2005 Energy Policy Act. Therefore, it is necessary for the BLM to clearly demonstrate that less restrictive measures were considered but found insufficient to protect the resources identified. Providing a statement saying there are conflicting resource values or uses does not justify the application of restrictions. Discussion of the specific requirements of a resource to be safeguarded, along with a discussion of the perceived conflicts between it and oil and gas activities must be provided. Clearly, an examination of less restrictive measures must be a fundamental element of a balanced analysis and documented accordingly in the RMP/DEIS.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM Must Utilize the Least Restrictive Lease Stipulations for Oil and Gas Leases and COAs on Permits for Oil and Gas Development.
BLM's attempt to implement new lease stipulations on new oil and gas leases as well as restrictions disguised as COAs on existing oil and gas leases are not justified by the DEIS, scientific studies, or any other justification. In Appendix B, BLM makes clear that it intends to employ these new restrictions on existing oil and gas leases in violation of federal law and BLM's own planning guidance.

Under the Energy Policy Act of 2005, Section 363 provides that lease stipulations are "only as restrictive as necessary to protect the resource for which the stipulations are provided." 42 U.S.C. 15922(b)(3)(c).

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: With respect to oil and gas resources, BLM's Manual 1601 on Land Use Planning and Manual 1624 on Planning for Fluid Minerals specifically directed BLM not only to identify which areas would be subject to different categories of restrictions as included in the GJFO DRMP/DEIS, but also to show that the least restrictive lease stipulation that would offer adequate protection of a resource has been selected. See BLM Handbook H-1601-1, App. C. II. F. at 16. The GJFO DRMP/DEIS must be revised to include the least restrictive lease stipulation and/or COAs for oil and gas development. The DRMP/DEIS does not include the required analysis.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The GJFO DRMP/DEIS must be revised to include a least restrictive lease stipulation analysis pursuant to BLM's Land Use Planning Handbook, H-1601-1, and the statutory requirement of Section 363 of the Energy Policy Act of 2005. This omission is cause for great concern because it demonstrates that BLM has not carefully considered the effect of restrictive lease stipulations or permit conditions of approval upon current and projected future oil and gas activities in the area. Given the fact that the plan will ostensibly be used to make future decisions on activities, this lack of analysis significantly flaws the GJFO DRMP/DEIS.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM must be mindful of its mandate to manage lands for multiple use. The GJFO DRMP/DEIS proposes to expand protections of special status species through NSO, CSU, and other stipulations and restrictions. However, through these proposed protections, BLM fails to provide adequate scientific data and studies to support its methods, and attempts to usurp authority from other federal agencies as well as the State of Colorado through buffer zones, water and air regulations. BLM must also provide analysis regarding the effect its proposed stipulations will have on the federal, state, and local economies.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The GJFO DRMP/DEIS does not analyze or substantiate the imposition of virtually all of the proposed stipulations for oil and gas. BLM provides no basis for these expanded restrictions. Nor does BLM even attempt to analyze the detrimental and significant negative impacts that these restrictions would have on development of oil and gas resources, either individually or cumulatively.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM must amend the GJFO DRMP/DEIS to include an analysis of the impacts from each lease stipulation, including an analysis of the least restrictive stipulation to protect each resource. In this analysis, BLM must include an explanation on how and why the particular lease stipulation was selected based on the analysis of the least restrictive stipulation; and why a less restrictive stipulation was not selected. BLM must include the scientific data, studies, and information that formed the basis for these decisions.

Response
Per BLM Handbook I624-1, Planning for Fluid Minerals Resources, if a closure or operating constraint is discretionary, evidence that a less restrictive mitigation measure was considered should be reflected in the range of alternatives analyzed in detail. The Draft RMP/EIS contains alternatives and associated stipulations that strike an appropriate balance between environmental protection and development on our public lands consistent with the requirements of FLPMA. The Proposed RMP/Final EIS offers the BLM the flexibility to protect resource values and uses while allowing for acceptable levels of development. In accordance with the Energy Policy Conservation Act, the least-restrictive stipulations will be applied in the Proposed RMP to protect important natural resources.

The justification for each stipulation is provided in Appendix B. Stipulations are analyzed individually and collectively throughout Chapter 4. Analysis is located in the section relating to the resource that the stipulation is designed to protect. For example, stipulations designed to protect cultural resources are discussed in Section 4.3.8, Cultural Resources. The combined impact of all stipulations on energy and mineral leasing and development is discussed in Section 4.4.5, Energy and Minerals.

Any new stipulations developed during the ongoing statewide consistency effort would standardize the language of the common stipulations and not change the intent. Field offices would maintain RMP stipulations that are not included in the statewide stipulations and would not adopt new stipulations that were not analyzed in the Draft RMP/EIS.

See Section 6.2.7.8, Energy and Minerals, for a response to comments regarding restrictions on valid and existing lease rights.

Water Resources

Summary
The RMP/EIS should include stronger protections for hydrology and water resources (e.g., perennial, intermittent, and ephemeral water bodies; municipal watersheds; groundwater resources; and public drinking water supply sources). In addition, the NSO stipulation buffer for major river corridors should be changed.

The RMP/EIS should include a list of specific restrictions for oil and gas operations near domestic water supplies and it should include a description of the special protective measures required in Lease Notice 1.

The BLM needs to complete a groundwater vulnerability assessment to fully understand the impacts of oil and gas development on water resources.

Comments
Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Pages 2-24; 2-46; 2-66; B-I8. In previous comments, CPW recommended replacing 0.25 mile with 0.5 mile NSO-1 for the major river corridors. CPW believes this will provide the best protection for aquatic resources in the major rivers, and requests the BLM apply a 0.5 mile NSO.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Stipulation NSO-1. CPW has previously recommended (January 2010) that stream channels, stream banks, and the area 0.25-mile either side of the ordinary high-water mark (bank-full stage) he changed to be a 0.5 mile setback either side of the OHWM. CPW continues to recommend this change to afford riparian areas the highest protection against disturbance impacts. CPW recommends BLM make this change throughout the document where the reference is made.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: No Surface Occupancy NSO-1 Major River Corridors, a 1/4 mile buffer along the Colorado River is proposed in the RMP and will prohibit drilling within ¼ mile of the Colorado River. In the recent past, drilling has been approved within ¼ mile after considering special mitigation plans and wildlife enhancement practices that may offset any adverse impact from such development. Is this NSO necessary? Drilling has occurred in the past within ¼ mile of the river; is there evidence that this has had an adverse impact that haven't been offset by wildlife enhancement practices?

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Under the Preferred Alternative, BLM proposes several NSO and CSU stipulations on activities near hydrologic features. These restrictions will significantly limit oil and gas development while providing no flexibility for project specific proposals that provide environmental benefits or minimize environmental impacts. For example, construction of pipelines within these areas may reduce truck traffic, but would not be allowed under BLM's preferred alternative.

Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: NSO-2, "Prohibit surface occupancy and surface disturbing activities within a minimum of 100 meters of streams/springs possessing lotic riparian characteristics". Distance seems excessive, what is the federal law requiring a 100 meter buffer zone? Typically, we see a requirement for a 100-foot buffer zone. CSU-2 "Apply CSU (site specific relocation) restrictions within 500 feet from the edge of any hydrologic feature including perennial and intermittent streams, wetlands, lakes, springs, seeps and riparian areas. Where does 500 feet buffer zone come from? The current stream buffer zone rule according to 30 CFR 816.57 is 100 feet and is for perennial or intermittent streams, (not ephemeral streams). Further, if you look at the definition of intermittent streams on page 14, there is confusion as to what type of stream is being referenced in CSU-2.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Water depletions from groundwater and surface waters can only exacerbate an already tenuous atmosphere when it comes to water quantities in Colorado. The BLM, within the scope of its authority to do so, may go beyond simple regulatory requirements in order to prevent unnecessary or undue degradation of the public lands and their associated resources. We specifically request that the BLM strengthen the stipulations for any activities near perennial, intermittent and ephemeral water bodies. By doing so, the BLM decreases incidents of erosion, sedimentation, contamination, or other hazards associated with oil and gas development. By implementing stronger water management guidelines, sensitive species management and protection should not have to escalate to management of endangered and threatened species status.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: The Draft EIS provides an NSO stipulation for municipal watersheds in the planning area, and provides Controlled Surface Use (CSU) stipulations for the Mesa/Powderhorn source water protection areas (SWPAs) and the Jerry Creek watershed. Two other designated drinking water supply sources, the Collbran groundwater protection area and Vega groundwater protection area, are not provided protections through stipulations. Both of these drinking water supply sources are identified in the Draft EIS as "notable municipal water supply areas" (p. 3-58). In keeping with the Draft EIS water resource objective regarding protection of sources of drinking water, we recommend that the Final EIS include at a minimum the CSU stipulation for these resources. Alternatively, we suggest including an explanation of why protective measures are not provided.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: Finally, the Draft EIS states that there will be "restriction of wells near domestic supplies." The EPA recommends that the Final EIS clarify what this restriction will entail. Similarly, Lease Notice 1 included in the Preferred Alternative requires "special protective measures" if there is drilling within a source water protection zone. The EPA recommends a description in the Final EIS of these special protective measures.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: RFD Analysis and Water Use. The BLM's Reasonably Foreseeable Development (RFD) Scenario for Oil and Gas, Grand Junction Field Office, Colorado (2012) predicts from 2009-2028 that 3,938 conventional, shale and coal bed methane wells could be drilled on BLM lands. This does not factor in development that most likely will take place on other lands within the planning area. Given this scenario every effort must be made to include actions that protect the planning areas' watersheds, especially since more than 60% of runoff occurs from BLM lands. In order to reduce the risk of groundwater contamination incidents, the final RMP must include the requirement for the BLM to complete a groundwater vulnerability assessment in order to understand the impacts of oil and gas development to the planning resources watershed. Such an investment should determine the risk factors associated with chemicals of concern which are released during oil and gas operations and which impact groundwater within the GJFO planning area. Once groundwater is contaminated, it is difficult, if not impossible, to completely restore groundwater quality. Such an assessment would increase the ability to provide protection measures which benefit everyone in the resource community including agricultural producers, livestock operators, local municipal communities, homeowners, recreationalists, tourists, and businesses.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: What is BLM's scientific justification for the proposed CSU and NSO stipulations around major river corridors? We are concerned that they are excessive and will unnecessarily preclude oil and natural gas development in the planning area and do not provide the needed flexibility for oil and gas activities to take place. While BLM declares that "stipulations around wetland and riparian areas and major river corridors would reduce the likelihood of erosion and sedimentation of waterways" (Page 4- 146), BLM has omitted any scientific evidence which justifies the actual size of those buffers. In addition, why are the proposed buffers around major river corridors dramatically larger than those for hydrologic features and riparian areas, where BLM would apply CSU restrictions within 152 meters (500 feet) from the edge of any hydrologic feature including perennial and intermittent streams, wetlands (including fens), lakes, springs, seeps, and riparian areas? Historic buffers have been limited to 300 to 500 feet, which has been proven a reliable mitigation measure. Without scientific evidence

proving its need, this new restriction is unwarranted and should be eliminated from the FEIS. We are also concerned that the requirements for major river corridors are inconsistent with existing state and federal regulations.

Response

To minimize risk to municipal water supplies (both surface and groundwater), streams, wetlands, seeps, springs, and aquatic habitat, strict adherence to BMPs, project design features, and buffers are necessary. The soils, water, and aquatic stipulations were crafted as part of the ongoing BLM-wide oil and gas leasing reform policy. Part of BLM leasing reform is to enact minimum stipulations (for the various programs) that could be applied across the state and to significantly reduce the number of stipulations the operators have to implement. The water/aquatic group reduced the number of stipulations from approximately 70 to approximately 12 in Colorado.

To accomplish the objective of minimizing risk to water/aquatic resources, the BLM decided NSO and CSU stipulations were necessary to minimize risk to the various types of water resources on-the-ground, and reduce the number of stipulations. The use of setbacks, buffers or streamside management zones, have been used for decades to minimize risk to water quality, water quantity (e.g. dewatering), and fish and riparian habitat, as it relates to various management activities. There may be other ancillary benefits (of stream buffers) to other resources, such as migratory birds and other wildlife habitat - both terrestrial and aquatic species.

Buffers have been used for agriculture, range, timber harvest, pesticide/herbicide use, road construction, and in more urban areas to protect water and aquatic resources. Over the years, studies have found greater impacts to these resources when buffers were not implemented (COGCC 2014). For example, water quality and fish populations had declined in the Pacific Northwest, due to increases in peak flows, sedimentation of streams/wetlands, loss of spawning gravel and rearing habitat, and increases in stream temperature due to activities associated with timber harvest and lack of buffers (COGCC 2014). Potential salinity impacts are of concern to the GJFO per the Colorado River Salinity Control Act and the associated Forum.

The 1,000-foot NSO buffer proposed for municipal watersheds (developed by the BLM's statewide water/fish group in February 2011) was rooted in a Statewide Source Water Risk Assessment for the various uses throughout the state, such as oil and gas development and agriculture. This source water risk assessment was directed by EPA to the states, as part of new regulations under the Safe Drinking Water Act. Moreover, the group reviewed several documented instances of surface and groundwater contamination, due to oil and gas development, and found that these occurred between 1,000 to 1,800 feet from the drilling (COGCC 2014). NSO and CSU restrictions would also likely minimize the risk of hazardous waste and chemical spills. Colorado experienced approximately 400 documented chemical spills (i.e., spills reported by the operator) (COGCC 2014). Anecdotal reports suggest that a number of spills do not get reported. Since the water lease stipulation development was completed over two years ago, the State has gone from a 50-foot to a proposed 1,000-foot buffer for schools.

The major river corridor NSO stipulation is proposed on a 0.5-mile buffer in the adjacent Colorado River Valley RMP based on site conditions in that planning area. For the Draft RMP/ EIS, based on select resources to be protected by the NSO, it was determined that a 0.25-mile buffer would suffice given the topography and river channel type in this planning area. Where the 100-year floodplain for the listed fish

is greater than 0.25-mile the buffer would extend to 100 meters beyond the 100-year floodplain boundary as determined by existing mapping or site specific delineation.

30 CFR 816.57 are regulations for the Office of Surface Mining, not the BLM, and do not apply to BLM policy or guidance. No change has been made to the Proposed RMP/Final EIS.

Restrictions on oil and gas operations near domestic water supplies would be developed and analyzed at the project-specific level. Chapter 2 states that these restrictions "may include conditions of approval, mitigation and design features developed in the NEPA analysis, and the regulations at 43 CFR 3101.1-2." The BLM believes that the appropriate restrictions can only be applied once the location and nature of the proposed project is known; therefore no change has been made to the Proposed RMP/Final EIS.

As stated in Appendix B, a lease notice (LN) "provides more-detailed information concerning limitations that already exist in law, lease terms, regulations, or operational orders. An LN also addresses special items that lessees should consider when planning operations but does not impose additional restrictions." Lease Notice 1 is intended to notify the lessee that special restrictive measures are required. In addition to this LN, the Proposed RMP/Final EIS includes stipulations (e.g., CSU-4 and NSO-5) designed to protect municipal watersheds and other source water protection areas. Specific protections would arise from law, lease terms, regulations, or operational orders. They may also be identified during project-level analysis on a site-specific basis. No change has been made to the Proposed RMP/Final EIS.

A groundwater vulnerability assessment would not provide meaningful results at the land use plan level. Similar to other attempts to quantify impacts on water resources, site-specific data is needed that includes information on the exact type, nature, and location of proposed disturbances. Because the RMP can only allocate areas as open or closed to leasing, it would be speculative to input exact information about projects and developments before they are proposed. This analysis would be more appropriate at a project-specific level. No change has been made to the Proposed RMP/Final EIS.

For a discussion of domestic water supplies, see **Section 6.2.3.3**, Water Resources.

Wildlife

Summary

The Draft RMP/EIS applies stipulations for wildlife over too broad an area, for too many months during each year, and in a manner inconsistent with protections outlined by other agencies.

Some lease notices are similarly flawed. Regarding LN-5, the BLM has failed to provide any justification for an additional set of operating procedures for employees and contractors working in important wildlife habitats. Moreover, this proposed lease notice is extremely vague and fails to define the items that would be required in such a plan. LN-1 requires "special protective measures" for drilling within a source water protection zone; there should be a description in the Final EIS of these special protective measures.

Comments
Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: Page 2-84, Alternative B - STIPULATION CSU-24: Deer and Elk Migration and Movement Corridors.

"Apply CSU (site-specific relocation) restrictions to surface-disturbing activities within migration and movement corridors for deer and elk."

COMMENT: BLM has failed to map these migration and movement corridors, specify their size and width, and define the conditions that constitute them. As a result, it is impossible to fully determine the impact these designations will have on future oil and gas operations in the planning area. BLM must identify, map, and define the resource values that must be present before designating migration and movement corridors prior to imposing CSU stipulations in those areas.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: Page 2-80, Alternative B -Stipulation LN-5: Working in Wildlife Habitat. "Require operators to establish and submit to the GJFO a set of operating procedures for employees and contractors working in important wildlife habitats. Design such procedures to inform employees and contractors of ways to minimize the effect of their presence on wildlife and wildlife habitats. Procedures may address items such as working in bear or snake country, controlling dogs, not feeding wildlife, and understanding and abiding by hunting and firearms regulations."

COMMENT: BLM has failed to provide any justification for an additional set of operating procedures for employees and contractors working in important wildlife habitats. Moreover, this proposed lease notice is extremely vague and fails to define the items that would be required in such a plan. Absent the required parameters, it is likely that operators may not submit sufficient information in their plan, causing delays in the planning process, or contrarily, spend undue time and resources developing a plan that goes beyond the scope of BLM's requested information. We recommend that not only must BLM fully explain it rationale for this lease notice, it must also fully describe the scope of the items to be included in such a plan.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: The restrictions on oil and gas development fail to correspond to the current status of big game populations in the planning area, particularly the health of elk and mule deer populations. Based upon the most recent Colorado Division of Parks and Wildlife (CPW) population estimates, an estimated 93,000 elk inhabit the planning area, roughly thirteen times the 1987 RMP goal of providing habitat for 2,950 elk in winter. Further, CPW estimates that there are 37,500 mule deer in the planning area which exceeds the 1987 RMP goal of providing habitat for 34,400 mule deer in winter. Nevertheless, BLM proposed to apply a number of clearly unwarranted restrictions in big game habitat, including production areas, winter range, and migration and movement corridors. Most notably, the Preferred Alternative prohibits surface occupancy on 474,500 acres of big game winter range for six months each year, from December 1 to May 1. Accordingly, the timing limitations, thresholds, and other restrictions on oil and gas development within big game habitats appear unnecessary, unreasonable, and unjustifiable. Therefore, we request BLM to explain and justify its proposed timing limitations for big game species before the final EIS is released.

Further, we object to the proposed timing stipulations under the Preferred Alternative, which would force operators to cease oil and gas operations during significant portions of the year and potentially shut-in production. Such a management strategy would create a boom-bust scenario, jeopardize stable employment opportunities provided by oil and gas production, and negatively impact the economies of local communities. Accordingly, we urge BLM to eliminate this proposed restriction in the final EIS.

BLM must also recognize that it cannot impose new timing restrictions on existing leases simply because a plan amendment has been prepared. As discussed previously in these comments, restrictions on surface-disturbing and disruptive activities cannot be enforced if they are inconsistent with the original terms of the lease and its associated valid existing rights.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Volume I, Table 2-2, page 2-85: NSO-1 & TL-4 appears to have omitted mule deer. CPW requests that the BLM include mule deer in these two stipulations.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW requests that BLM make the following change to the NSO-35 stipulation throughout the document for all stipulations. NSO-35 (ROWA) STIPULATION: Prohibit surface occupancy and surface-disturbing activities in the following wildlife emphasis areas: Sunnyside (wintering and migratory habitat for bighorn sheep, mule deer, elk, and Greater sage-grouse) (14,500 acres); and Timber Ridge (habitat for mule deer, elk, and Gunnison sage-grouse) (11,800 acres).

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Based on the most recent Colorado Division of Parks and Wildlife (CPW) population estimates, an estimated 93,000 elk inhabit the planning area, roughly thirteen times the 1987 RMP goal of providing habitat for 2,950 elk in winter. The Preferred Alternative prohibits surface occupancy on 474,500 acres of big game winter range for six months per year, from December 1 to May 1. BLM's proposed timing limitations for big game species are excessive, have not been explained and require clear justification.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM needs to explain how TL-1, TL-2, TL-3, TL-4, TL-5, TL-6, TL-7, TL-8, TL-9, TL-10, TL-11, TL-12, TL-13, TL-14, TL-15, TL-16, TL-17, TL-18, TL-19, and TL-20 will be applied to oil and gas production operations. See, generally, Id. at Table B-7. Although timing limitations modifying the times drilling and completion operations can take place have become relatively routine, prohibitions on production operations are significantly different. To the extent the BLM intends to limit or prevent production operations during certain portions of the year, the BLM will have a devastating impact on oil and gas development and the regional economy. Operators will be unable and unwilling to invest the millions of dollars necessary to develop oil and gas resources if they are unable to produce from wells year round. Further, limiting production operations during portions of the year will create annual boombust cycles that will have devastating negative consequences to the regional economy. The BLM must significantly clarify its intention to apply timing limitations. As far as Encana can tell, the only timing limitations the BLM has clarified where timing limitations on production operations will not apply are TL-21 and TL-22. The BLM must clarify how production operations will be impacted under each proposed timing limitation.

Response

There are exception, modification, and waiver criteria that allow the BLM to work with proponents on a case-by-case basis. Stipulations TL-20 and TL-21 are very similar to current timing limitations (see TL-12). Generally, production areas and critical winter range do not overlap, so these two TL stipulations (TL-20 and TL-21) would rarely be applied to the same parcel (see Figure 3-9). Further, TL-20 applies to a five-month period, which is the same time period covered under the 1987 RMP (see TL-12). No change has been made to the Proposed RMP/Final EIS.

TL-20 and TL-21 are not intended to limit oil and gas ongoing operations; instead, they would limit construction, drilling, and other intensive activities, including intensive surface occupancy. The exception criteria have been modified in the Proposed RMP/Final EIS to clarify that the limitation does not apply to maintenance and operation of producing wells and range improvements. See Appendix B, Table B-7.

Migration corridors described in CSU-24 were not included on a figure in the Draft RMP/EIS. Migration corridors are mapped by CPW, and there are two in the planning area (see the description on page 3-92), both near the town of Mesa. On pages 3-91 to 3-93 various definitions are given. The Proposed RMP/Final EIS Glossary has been updated to provide a definition of "migration corridors" that includes clarification that these corridors are mapped by CPW (see page Glossary-18). The data for these corridors has been updated to be consistent with CPW's 2012 data update.

TL stipulations for big game are not intended to limit existing oil and gas leases; they limit construction, drilling, and other intensive activities including intensive surface occupancy. For example, under the Pronghorn winter habitat exception it states, "this limitation does not apply to maintenance and operation of producing wells and range improvements." Exception criteria for all stipulations help the BLM and applicants understand the best protections on a site-specific basis. The standard exception criteria for fluid mineral leases has been updated to clarify that exceptions may be granted if proposed operations would not cause unacceptable impacts. See Appendix B, Section B.2.

Stipulations to protect wildlife habitat are in most cases similar to CPW direction. The BLM is additionally mandated to protect migratory birds, sensitive and listed species. The RMP provides a summary of the science in Sections 3.2.7, 3.2.8, 4.3.5, and 4.3.6. No change has been made to the Proposed RMP/Final EIS.

NSO-1 and TL-4 are from the existing RMP and cannot be changed. No change has been made to the Proposed RMP/Final EIS.

NSO-35 has been changed as follows: "NSO-35 (ROWA) STIPULATION: Prohibit surface occupancy and surface-disturbing activities in the following wildlife emphasis areas: Sunnyside (wintering and migratory habitat for bighorn sheep, mule deer, elk, and Greater Sage-Grouse) (11,300 acres); and Timber Ridge (habitat for mule deer, elk, and Gunnison Sage-Grouse) (11,800 acres)." See Table B-8.

As stated in Appendix B of the Draft RMP/EIS (page B-4), TL stipulations do not apply to operation and basic maintenance activities, including associated vehicle travel, unless otherwise specified. In addition, the wildlife stipulations identified by the commenter are subject to standard exception criteria and could be excepted by the Authorized Officer on a case-by-case basis. No change has been made to the Proposed RMP/Final EIS.

Lease notices are intended to give the operator or proponent advanced notice that the area may require additional mitigation or minimization techniques that will need to be agreed upon by the proponent and the BLM before development can proceed. Though they may seem vague, such techniques are intended to allow flexibility in management to adapt to site-specific concerns. It is in the best interest of the BLM and the proponents that proponents be informed that they are operating in a sensitive area prior to the receipt of a proposal by the BLM so that proposals are not delayed (see 43 CFR 3161.2). No change has been made to the Proposed RMP/Final EIS.

Special Status Species

Summary

Several proposed stipulations are unnecessary, too restrictive, and unsupported by science. Others should be strengthened or updated to provide adequate species protection. Several proposed stipulations also lack supporting map data necessary to provide adequate feedback.

Lease Notice 3 should be expanded to include specific examples of acceptable biological inventories.

Lease Notice 4 should be expanded to include additional species that are threatened by energy development.

Comments

Submission No: emc0847

Commenter: Bo Meulengracht, Trout Unlimited

Comment: The DRMP imposes setback stipulations for streams and riparian areas that are not adequate, are inconsistent among other Colorado BLM field offices, and do not differentiate between waters containing sensitive fish and wildlife species and those waters that do not contain such species. TU believes the stipulations are not effective for water quality protection and are an extremely narrow measure of protection for streams. The State's Oil and Gas Leasing Reform Implementation Strategy (or "SIS") specifically addresses the requirement to review statewide stipulations for consistency in current RMP revisions. The SIS also states (as does the IM-2010-117) that an edge-matching exercise across field or district office boundaries and state boundaries will be completed. However, we find the BLM has not implemented the edge-matching consistency for this DRMP.

In October of 2011, the Little Snake Field Office (LSFO) implemented new stipulations in their revised RMP/ROD. Of particular interest are the new quarter-mile buffer stipulations for all perennial waters. Because the IM allows for the field offices, district offices, and state office to revise and implement new stipulations based on adequacy and edge-matching reviews, TU requests that the GJFO implement the same buffer setback stipulations as those implemented by LSFO.

Both the IM2010-117 and the SIS address opportunities and challenges to the standardizing of lease stipulations between Field Offices. We agree with the BLM that the benefits to applying standardized stipulations will provide a more unified vision for management considerations, mitigation opportunities and industry expectations, but will require considerable more up-front work for all involved. This was the original intent of the 1989 Uniform Format. In the SIS, a Committee for Stipulation Consistency was referenced, yet as of 2013, BLM has not been able to provide any product from this Committee. If adaptive management practices is as important to the GJFO as the

DRMP implies, we suggest it be implemented first and forement at the beginning of any oil and gas process -the leasing stage.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The GJFO DRMP/DEIS further proposes CSU stipulations for lands surrounding BLM sensitive plant species, including protections up to 200 meters from the edge of occupied habitat. GJFO DRMP/DEIS Section 4.3.6 at 4-171. Without appropriate scientific support, BLM makes a blanket statement that the CSU stipulations will "reduce dust transport, weed invasion, chemical and produced-water spills and . . . Impacts to import pollinators and their habitat." Appendix B at B-63. BLM here attempts to apply specific scientific studies relevant to distinct plant species to all 25 plant species on the BLM Colorado sensitive species list. See GJFO DRMP/DEIS Section 3.2.8 at 3-98.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: What is BLM's scientific justification for these management restrictions in white-tailed prairie dog towns, particularly the NSO stipulation within occupied prairie dog towns? This stipulation does not correspond with the FWS' recent listing determination for the species and its conclusions about the impact of oil and gas development on black-tailed prairie dog habitat. In 2010 the FWS determined that the listing of the white-tailed prairie dog under the ESA was not warranted and that "due to its widespread distribution and extent of development, oil and gas activities will have the greatest potential to impact the white-tailed prairie dog. However, large populations persist in many of these areas." Accordingly, the proposed NSO stipulation for oil and gas leasing within occupied prairie dog towns is not justified and does not correspond to the FWS' findings. We recommend that this stipulation be eliminated from the final planning documents. Given the persistence of prairie dog towns in areas with oil and gas development, we recommend that BLM use a CSU stipulation in these areas.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Map data was not available on the following habitats which are associated with NSOs, CSUs, and TLs: special status bat species' hibernacula or roost sites, kit fox dens, sage grouse wintering habitat, big game migration or movement corridors, and canyon treefrog, northern leopard frog, midget faded rattlesnake, Great Basin spadefoot toad, and boreal toad breeding and denning sites. Encana, thus, does not have enough information to understand how proposed mitigation measures associated with these species may impact future operations. Given the fact public opportunities to comment on a proposed RMP and final EIS are limited, see 43 C.F.R. §§ 1610.5-1, 1610.5-2, the BLM's failure to include this information deprives the public and Encana to review and provide feedback on this proposal. Encana requests the BLM delete the stipulations or provide more information so that there is adequate opportunity to participate in the public process.

To the extent possible, the BLM needs to specifically identify the areas subject to CSU-9 necessary to protect sensitive plant species. GJ DRMP/EIS, Table 2.2. pgs. 2-49 - 2-50. Absent an accurate map, Encana cannot determine how its leases will be impacted by this proposed stipulation. Encana understands such surveys are not always accurate or up-to-date, but the BLM should provide the most accurate information available.

Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy
Comment: Change the CSU stipulation of 200 meters for significant plant communities (STIPULATION CSU-11: Significant Plant Communities) to a No Surface Occupancy stipulation of the same distance (200 m.). This distance is supported by Best Management Practices for Rare Plants of Concern (http://www.blm.gov/pgdata/etc/medialib/blm/ut/lands_and_minerals/oil_and_gas/november_2011.Par.55870.File.dat/Attachment%202.pdf) The change from CSU to NSO will provide much greater assurance that any rare plants and rare plant communities located outside of ACECs will be protected. Recommended edits to the current stipulation language are shown in strikethrough and italics here: "For those plant communities that meet BLM's criteria for significant plant communities, special design, construction, and implementation measures, *No Surface Occupancy of 200 meters is required*, and ~~including~~ relocation of operations by more than 200 meters (656 feet), may *also* be required. Habitat areas include occupied habitat and habitat necessary for the maintenance or recovery of the species or communitie (Refer to Appendix B). See Figures 2-47 (Alternative B) and 2-48 (Alternative C) in Appendix A."

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Special Status Species – Plants. BLM may require "special design, construction, and implementation measures within a 100-meter buffer from the edge of occupied habitat" of BLM sensitive plant species in its proposed Controlled Surface Use stipulation for BLM Sensitive Plant Species Occupied Habitat (CSU-9). BLM may also require the relocation of activities "by more than 200 meters" from occupied habitat. BLM uses the same criteria for its CSU stipulation for Significant Plant Communities (CSU-11). The language regarding the relocation of activities in both of these stipulations is nebulous and gives BLM the discretion to relocate activities to any distance it pleases, which would result in unreasonable constraints and prove to be geologically or financially unfeasible for oil and gas operators.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM must also revise the proposed CSU-11 that imposes additional restrictions on oil and gas operations near significant plant communities. GJ DRMP/EIS, Table 2.2, pg. 2-59. The BLM does not identify, list or map the potential habitat for the significant plant communities. As such, proposed Alternatives B and C must be significantly revised.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana is strenuously opposed to NSO-25 that would impose NSO within four miles of an active sage-grouse lek and early brood-rearing habitat. GH DRMP/EIS, Appd. B, pg. B-37. The BLM has not justified this significant increase in stipulations related to sage-grouse, nor has it considered topography. It is also important to recognize that there could be a significant acreage within 4 miles of a sage grouse lek that is not sage grouse habitat. The four mile stipulation could effectively eliminate resource development within significant portions of the GJ Planning Area. Encana urges the BLM to adopt an alternative management approach for sage-grouse.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: For Lease Notice LN-3 (Biological Inventories; p. 2-50), CPW recommends that the BLM GJFO incorporate language that allows for 'biological inventories' to include soil sampling or other testing of potential

Phacelia subniutica (DeBeque phacelia) habitat to indicate the presence or absence of this ephemeral annual plant species. There is currently research underway by Utah State University (funded by CPW/CNAP and USFWS) that may provide a sampling method by which this listed species may be surveyed for in ways that would complement standard biological surveys. For DeBeque phacelia, surveys that do not result in above-ground observations in a given year may not necessarily indicate that the species is not present. Before leases are approved and operations are allowed to commence, further assurance of the absence of this listed species using recently developed methods would both reduce the potential impacts from a lease, it may allow for recovery of this species and result in less conflict in the long run.

CPW recognizes BLM's inclusion of Lease Notice LN-4 (p. 2-57 for the Colorado Hookless Cactus. However, CPW questions why only this species is included in this Lease Notice, and would like to point out that DeBeque phacelia is also threatened by energy development and would benefit from inclusion under this allowable use. As mentioned above, the implementation of botanical inventories (including soil sampling, if possible) would greatly benefit this species.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW requests that BLM clarify that NSO-25 is applicable to both Gunnison Sage-grouse and Greater Sage-grouse in Table B-I, page B-8 and on page B37 in the stipulation description. The stipulation should specifically identify both species and applicability.

Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: CPW recommends that NSO-15 in Table B-1 be changed to include sensitive wildlife species. The NSO should read: BLM Sensitive Plant and Animal Species' Occupied Habitat.

No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Pages 2-45; 2-66; B-86. Table 2-2 Special Status Species-Fish; Fisheries and Aquatic Wildlife; Table B-7 TL-1. CPW reaffirms our comments from February 2012 and requests BLM include the recommendation as follows. CPW supports the concept included within stipulation TL-1, and recommend this be rephrased to include additional species (speckled dace and mountain whitefish) as follows: "STIPULATION TL-I: Salmonid and Native, Non-Salmonid Fishes. Prohibit in-channel stream work in all occupied streams during fish spawning, egg incubation, and fry emerging seasons. Fish spawning, egg incubation, and fry emerging seasons vary by elevation and temperatures, but in general, the following intervals apply in Colorado:
• Cutthroat trout (various subspecies): May 1-September 1
• Rainbow trout: March 1-June 30
• Brown trout: October 1-May 1
• Brook trout: August 1-May 1
• Sculpin: May 1-July 31
• Bluehead sucker: May 1-July 31
• Flannelmouth sucker: April 1-July 1
• Roundtail chub: May 1-July 31
• Speckled dace: May 1-August 31
• Mountain whitefish: October 1-November 30

Response
Baseline information for any special status species discussed in Appendix B (Stipulations) is provided in Section 3.2.8. The justification for each stipulation can be found in Appendix B under the specific stipulation. In addition, the Draft RMP/EIS analyzed the impact of these stipulations on special status species in Section 4.3.6.

Stipulations are based on the best available science and applicable laws, policies, and regulations. The justification for a 200-meter buffer for sensitive plant communities comes from Onshore Oil and Gas Order No. 1 (43 CFR 3160). The 200 meters is consistent with NSO stipulations in adjacent BLM field offices, and is supported by the 2009 "Recommended Best Management Practices for Plants of Concern, Practices Developed to Reduce the Impacts of Oil and Gas Development Activities to Plants of Concern." In addition, the USFWS has recently issued the "Draft Guidance for Section 7 Consultation that Include Plants within the State of Colorado" (March 6, 2013). This document contains approximately 70 references covering dust impacts, pollination, habitat/population fragmentation, and weed impacts. Pollinator studies support a 200-meter buffer to avoid impacts to rare plants. Like all other stipulations, NSO-13 and CSU-9 include exception language. While the NSO and CSU stipulations would not apply to valid and existing lease rights, the NSO stipulations would apply to new leases. Compliance with the Endangered Species Act is required regardless of lease date. No change has been made to the Proposed RMP/Final EIS.

The stream buffers proposed in NSO-1 and NSO-2 are adequate to protect their intended resources. For example, steep slope stipulations adjacent to many streams would help protect streams for a greater distance from the water's edge. Where slopes are gentler, activity could occur closer to streams with limited potential for increased erosion or sedimentation impacts from surface-disturbing activities. In addition, numerous BMPs would help reduce or eliminate off-site soil movement and sedimentation from surface-disturbing activities. Other complimentary stipulations include riparian, water resources, and select wildlife and special status species stipulations that overlap or are adjacent to stream habitats. In addition, because stipulations would apply to all surface-disturbing activities, they would not only mitigate impacts from spills and accidents associated with new fluid minerals development, but also sedimentation and turbidity impacts from surface-disturbing activities. The impact analysis (Chapter 4) did not show that larger buffers were warranted. No change has been made to the Proposed RMP/Final EIS.

NSO-13 no longer includes "suitable habitat." The Chapter 4 discussion was in error when it said this stipulation would apply to suitable habitat. As such, the mention of suitable habitat on page 4-175, under the discussion of Alternative B, has been deleted.

Map data for several special status species were not provided because if maps were provided for every instance that could be mapped, the quantity of maps would be too numerous. Many of these species have dynamic habitat or there is currently little data; therefore, the habitat was not mapped because the likelihood of occurrence is likely to be determined through site-specific surveys as projects are proposed. This is particularly true for special status bat species' hibernacula or roost sites, kit fox dens, canyon treefrog, northern leopard frog, midget faded rattlesnake, Great Basin spadefoot toad, and boreal toad breeding and denning sites. Sage-grouse winter range would be within the mapped sage-grouse habitat map, Figure 3-11. The sage-grouse habitat is not currently split into winter and summer

range because that is typically done as a site assessment when a project is proposed. No change has been made to the Proposed RMP/Final EIS.

CSU-11, Significant Plant Communities, does not include federally listed species. As such, a CSU is appropriate. No change has been made to the Proposed RMP/Final EIS.

NSO-25, Sage-grouse Leks, Nesting, and Early Brood-rearing Habitat (4 miles), does consider topography. The exception criteria state that "the NSO area may be altered depending upon the active status of the lek or the geographical relationship of topographical barriers and vegetation to the lek site." No change has been made to the Proposed RMP/Final EIS.

NSO-15, BLM Sensitive Plant Species' Occupied Habitat, is intended to be specific to plants. Special status wildlife species stipulations are specific to each species. No change has been made to the Proposed RMP/Final EIS.

Disturbance and habitat fragmentation are listed as primary threats for many listed species, and are described under the section discussing trends in Section 3.2.8, Special Status Species (see *Trends* subsection).

The BLM presented several options within the range of alternatives for protecting white-tailed prairie dog towns. These include applying a CSU stipulation, an NSO stipulation, or continuing to apply no stipulation for occupied prairie dog towns. Although USFWS determined that Endangered Species Act protection for the white-tailed prairie dog is not warranted, the listing determination cited oil and gas development as likely the largest threat to this species and stated that oil and gas surface restrictions will likely help mitigate the impacts of development on prairie dog populations (USFWS 2010b). Because the range of alternatives is sufficiently broad and because proposed protections would guard against the largest threat to this species, no change has been made to the Proposed RMP/Final EIS.

A brief literature review that includes reference to the 4-mile distance is provided in Section 4.3.6, Special Status Species, of the Draft RMP/EIS. Specifically, the Draft RMP/EIS states, "Impacts occur in lekking, nesting, brood rearing, and winter habitat (Crompton 2005; Doherty et al. 2008), and negative effects have been shown to occur from 0.5 mile to 4 miles away from oil and gas development (Walker et al. 2007; Naugle et al. 2009)" (Draft RMP/EIS at 4-165). Buffers are scientifically supported and supported by BLM direction. No change has been made to the Proposed RMP/Final EIS. Additional discussion of management actions for Greater Sage-Grouse can be found in **Section 6.2.4.6**, Special Status Species. Stipulation TL-1 has been rephrased to include additional species (i.e., speckled dace and mountain whitefish) as follows: "STIPULATION TL-I: Salmonid and Native, Non-Salmonid Fishes. Prohibit in-channel stream work in all occupied streams during fish spawning, egg incubation, and fry emerging seasons. Fish spawning, egg incubation, and fry emerging seasons vary by elevation and temperatures, but in general, the following intervals apply in Colorado:

- Cutthroat trout (various subspecies): May 1 through September 1
- Rainbow trout: March 1 through June 30
- Brown trout: October 1 through May 1
- Brook trout: August 1 through May 1

- Sculpin: May 1 through July 31
- Bluehead sucker: May 1 through July 31
- Flannelmouth sucker: April 1 through July 1
- Roundtail chub: May 1 through July 31
- Speckled dace: May 1 through August 31
- Mountain whitefish: October 1 through November 30

The exception criteria for TL-1 have been updated to state, "if competing species are involved BLM may select to implement species specific dates for native fish vs. nonnative species." See Appendix B, Table B-7.

If soil sampling becomes a viable technique to survey for the presence of DeBeque phacelia, it would be done as part of the biological survey. No change is needed for the Proposed RMP/Final EIS because the wording "conduct a biological inventory" in LN-3 is broad enough to include soil sampling.

LN-4 predated the listing of Parachute penstemon and DeBeque phacelia. It has been updated to state, "this lease contains habitat for a listed plant species" to capture all currently listed plant species and those that may become listed over the life of the plan. See Appendix B, Table B-8.

Cultural Resources

Summary
The alternatives should contain modifications for cultural resource stipulations.

Comments
Submission No: rmc0076
Commenter: Steve AcquaFresca, Mesa County Board of County Commissioners
Comment: Cultural Resource, NSO-37- expanded buffer zones prohibit surface occupancy and surfacedisturbing activities and further constrain ROW locations. There should be an allowance for the reduction of the 100 meter buffer if adverse impacts can be mitigated or topography or other geotechnical constraints prohibit location of the surface disturbance in any other location.

Response
The proposed NSO-37 stipulation contains a modification that allows for the site-protection boundary to be modified on a case-by-case basis, taking into account topographical barriers, the design of the proposed action, and the characteristics of the cultural resource site and/or area (see Table B-5). No change has been made to the Proposed RMP/Final EIS.

Coal

Summary
Coal should not be the only program subject to special exemptions. The location and timing (i.e., seasons) of stipulations would make coal mining too difficult.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM should explain why the exceptions contained in NSO-10 apply only to coal leasing and development but not oil and gas. GJ DRMP/EIS, Appd. B, pg. B-24. Both oil and coal are leased under the same statutory mechanism and it is inappropriate for the BLM to treat the two resources differently.

Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: There is an explanation on page 4-338 that states, "in areas with moderate constraints, such as CSU and TL stipulations, coal could still be developed. However, activities would need to be modified to minimize impacts on the resource or value being protected by the stipulation; alternately, the activity could be shifted more than 200 meters (656 feet) to protect specified resource or value". It would be very difficult to move a portal location 600 feet in a narrow canyon. An exception should be added for further review and sites-specific delineation of the timing limitations in the coal development region of the Bookcliffs.

Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: TL-20, Prohibit surface occupancy and surface disturbing activities from December 1 to May 1 to protect big game as mapped by CPW. Broad and sweeping winter range delineations as shown on Figures 3-9 and 3-10 may be inappropriate. There are flat areas of Mancos shale with little to no vegetation that are considered severe winter range. This timing limitation alone would prohibit development of coal resources in the Bookcliffs area, it would be a de facto denial of any development project. If you combine timing limitations from Migratory birds, if you have a hawk next, and if your project is in big game winter range, you are left with a window to work of August 15-November 30. By definition shown on page B-2, Timing limitations would prohibit Construction during the 'timing limited' period. If Rhino was trying to construct the Red Cliff Mine, they would potentially only have four months out of each year to work in the timing limited area. These types of limitations are unattainable and should be revised to include more site-specific analysis and delineation, or include a variance for site-specific delineation and site-specific mitigation.

Response
The exceptions for coal only apply to Alternative D. Note that NSO-10 is not being carried forward in the Proposed RMP; NSO-3 is being carried forward instead.

There are exception, modification, and waiver criteria in every stipulation that allow for site-specific analysis and delineation (see Appendix B). This could include exceptions, modifications, or waivers for coal development or other types of development. As such, no change has been made to the Proposed RMP/Final EIS.

Recreational Gold Mining

Summary
The proposed width of the NSO stipulation for major rivers would eliminate recreational placer mining opportunities. The BLM should consider alternate means of managing recreational placer mining.

Comments
Submission No: emc0399
Commenter: Patrick Wehling
Comment: Appendices B-16 NSO Colorado, Gunnison and Dolores rivers within channel, bank or 1/4 mile. In many areas of the narrow Dolores River Valley, this would protect about 1000 feet into the rock walls on both sides of the canyon. In these areas (narrow canyon) the highway along with the river takes up the full bottom or the box canyon. To make this Dolores River Valley into another highly restricted environmental area is not a good idea.

Appendices B-27 NSO major rivers stream bed, banks, 1/4 mile This document could end our club recreational mining. From the standpoint of a BLM land manager, it would make more sense, in a river valley that changes width with each mile, to manage by hands on assessment of desired land, plant and animal health at any given point along the river and make adjustments by signs, patrols, messages to principal users, and work parties. The BLM already has authority to do this. No further government land restriction documents are required.

Response
An NSO stipulation for major river corridors would only prohibit surface disturbing activities associated with recreational gold prospecting and mining if those activities are not associated with active mining claims. Mining and prospecting could still occur on valid and active mining claims because mineral rights provided by the Mining Law of 1872 do not allow for application of NSO stipulations. The Proposed RMP/Final EIS has been updated to clarify that the Dolores River Riparian ACEC is closed to recreational placer mining *outside of active mining claims* (see page 2-421).

6.2.7.2 Air Quality

Summary
An expanded air quality monitoring network and the use of all regulatory monitors in the planning area (e.g., not just SLAMS monitors) to identify and evaluate exceedances regardless of the attainment status of the area is needed to reduce impacts on air quality.

The Proposed RMP/Final EIS should be updated to better explain several topics, including the following: the evaluation process triggered by a monitored exceedance of the NAAQS; the approach the BLM intends to use following the initial West-CARMMS modeling; contingency planning measures will be triggered by monitored exceedances of the NAAQS, rather than a violation of the NAAQS; and a better explanation of the adaptive management strategy for assessing air quality information.

Comments
Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: As a result of the proposed increase in oil and gas development identified in this Draft RMP as well as in other Resource Management Plans and Environmental Impact Statements submitted by other BLM Field Offices within the region, the Division strongly suggests that the BLM implement a more vigorous air quality monitoring network based on the current state regulatory regime. This increased level of measuring is needed in affected areas of the Western Slope to improve year-round characterization of existing air quality levels, to improve modeling accuracy, and to enhance the Division's ability to issue air quality advisories to the public if warranted by monitored conditions. It is recommended that the BLM work with the State of Colorado to establish an air quality

monitoring network in the area identified in this Draft RMP in order to more effectively achieve air quality goals proposed within. The Division further recommends that improvements be made to the existing monitoring network in the resource management area as a way to gather meteorological and air quality data on both a local and regional scale. As identified in Section 4.1.1 of the Draft RMP, funding levels should be sufficient to expand the existing air quality network for criteria pollutants and their precursors- including AQRV/visibility monitoring sited at potentially affected mandatory federal Class I areas. This monitoring should also be dynamic enough to allow for future monitoring scenarios where the inclusion of HAPS (such as carbonyl compounds), associated VOCs (especially BTEX) and greenhouse gasses (such as methane) may be warranted or necessary.

Given the current potential for the Grand Junction PM2.5 monitor to exceed NAAQS standards, the violation of the ozone NAAQS at Rangely, Colorado's monitoring station, and elevated ozone levels at other sites such as Rifle, Colorado and Palisade, Colorado, the Division recommends that a comprehensive air quality monitoring analysis be conducted prior to signing of the Record Of Decision (ROD). This analysis should determine the amount of emissions controls needed for the proposed alternatives in order to preserve air quality and act as the basis for acceptable alternatives.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Issues with winter ozone were referenced for Rangley and Western Uinta Basin in Utah. Since many oil and gas sources are in mountainous areas, and are in upper elevations typically located above valley inversions, contributions from these sources are typically unaffected by persistent valley inversion. Therefore, BMP's need to be selectively applied and should only be enforced in non-attainment areas (in the same manner that EPA implements its regulations). The BLM needs to modify the new rules so that they are specific to the area that is in non-attainment. As the rule is written now, the top of the Mesa would be subjected to the same level of enforcement as the valley, and as such is inappropriate. Additionally, evaluation of these inversion conditions should be completed as part of the Regional models proposed in the ARMP.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: We recommend including in the Final EIS a discussion of the consultation and evaluation process that the BLM intends to conduct in response to a monitored exceedance of the NAAQS in the planning area. We suggest identifying the following steps for determining if any BLM-authorized activity caused or contributed to the exceedance:
• Determine validity of the monitored data (i.e., review Quality Assurance/Quality Control (QNQC) and consult with the EPA and CDPHE regarding possible exceptional events);
• Conduct screening analysis to determine likely cause of exceedance;
• Respond to exceedances caused or contributed to by BLM-authorized sources by requiring enhanced mitigation.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: The ARMP (Section G.4.1) creates new State obligations and alters well-established processes by requiring CDPHE to determine whether a monitored exceedance of the NAAQS was not caused by an exceptional event and to establish whether BLM-authorized operations are responsible for the monitored exceedance. We cannot support this approach. Instead, we recommend using the collaborative interagency approach described in Section G.4.2.c of the ARMP whereby the BLM would conduct annual reviews in consultation with CDPHE, EPA, and other local, state, federal, and tribal agencies to address monitored

exceedances of the NAAQS. We recommend clarifying in the Final EIS that the BLM, after such consultation, will be responsible for determining whether or not a BLM-authorized source or sources caused or contributed to a monitored exceedance.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: The EPA and the States use regulatory monitors to evaluate attainment/nonattainment status under the Clean Air Act. State & Local Air Monitoring System (SLAMS) monitors are a subset of regulatory monitors. The ARMP (Section 4.1) and the Draft EIS (Chapter 3, Table 3-2) specify the use of SLAMS monitors to identify monitored exceedances of the NAAQS in the planning area. As you know, "monitored exceedances" play key role in this RMP in determining if air quality is being degraded by BLM-authorized sources within the planning area and, if necessary, in any BLM determination of whether mitigation is needed. Also, the Grand Junction planning area contains oil and gas development scattered in separate areas across this large planning area. Multiple sites afforded by utilizing all regulatory monitors would provide more complete spatial monitoring coverage. In view of this and given that current ozone air quality in the area is at 88% of the NAAQS, the EPA recommends using all regulatory monitors in the planning area (not just SLAMS monitors) to identify and evaluate exceedances regardless of the attainment status of the area. We also recommend that the Final EIS clarify how many SLAMS and regulatory monitors are located within the planning area and that will therefore be considered for identifying exceedances of the NAAQS.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: The Draft EIS identifies that the West-CARMMS model will evaluate potential impacts using projections of oil and gas development up to a maximum of 10 years from when the ROD is signed, and again thereafter after considering actual development rates and technology advancement that may benefit air quality. The EPA supports the BLM's adopted approach, provided that the BLM reserves the right to require mitigation on all operations approved under this RMP if future modeling shows a significant impact. We believe the BLM's approach facilitates a more realistic method for estimating emissions associated with development authorized by the RMP and leaves room to ensure a level playing field if significant impacts are projected with future modeling.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: Again, due to existing air quality and planned development in the region, the EPA recommends that the Final EIS, at a minimum, identify potential responses and mitigation measures that the BLM could implement for BLM-authorized sources that may be causing or contributing to a modeled or monitored NAAQS exceedance, such as the following:
• Employing more stringent mitigation measures, such as those listed in Attachment I, to reduce projected future emissions and performing additional modeling and analysis to determine the overall effectiveness of such mitigations measures;
• Implementing temporary measures that would be included within a project-specific authorization as conditionals of approval, which could limit drilling operations, completions or well stimulations, blowdowns, or other non-essential operations during specified time periods (i.e. a timing limitation); and
• Limiting the number of annual APD approvals issued for the affected area until such time that updated regional modeling can be conducted to provide an appropriate basis upon which to continue with a reasonable level of development.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: The BLM Must Provide for Appropriate Public Input Prior to Adopting Future Air Quality Mitigation Requirements. The ARMP states that: "The BLM will facilitate an interagency process to ensure that a comprehensive strategy is developed to manage air quality impacts from future oil and gas development in the region." Draft RMP/EIS at G-13. The ARMP does not provide for a role for the public to participate in the development of this strategy. That is a critical omission. Development of future air quality regulations and mitigation requirements would constitute a "rule" within the meaning of the Administrative Procedure Act, and may only be adopted by the BLM after providing notice to the public and an opportunity for public input. 5 U.S.C. § 553. Adoption of additional mitigation measures may also require the BLM to amend the RMP. The BLM should explain that it will provide notice of any proposed air quality mitigation measures, and an opportunity for the public to participate in the development of such measures before they are adopted.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: The BLM May Not Place a Moratorium on Oil and Gas Development to Protect Air Quality.

The ARMP states that, during the period between the signing of the ROD for the RMP and the completion of additional air resources modeling, the BLM commits that "authorized oil and gas development activities within the planning area will not exceed development rates as averaged over a 5 year period immediately prior to signing of the ROD." ARMP at G-4. This may effectively impose a moratorium on oil and gas development if development rates go up. The BLM does not have the authority to prohibit all oil and gas development in the planning area, especially from existing oil and gas leases.

As explained above, Piceance Energy holds certain valid existing oil and gas leases. Those leases give Piceance Energy the legal right to explore for and develop oil and gas, subject only to reasonable regulation by the BLM. 43 C.F.R. § 3101.1-2. The BLM does not have the authority to completely preclude Piceance Energy from developing its oil and gas leases if the overall oil and gas activity in the planning area increases, yet that is what the BLM proposes to do in the ARMP.
A moratorium on development activities when historical development levels is exceeded is also bad policy. If operators begin to fear that overall development may exceed historical development levels, the likely result will be a "race" to get proposals submitted before a moratorium is imposed. This will lead to proposals that are less well developed, that fail to take into consideration other circumstances, and that may be submitted before they are necessary in order to be approved before a moratorium is imposed. That is in nobody's interest. The BLM should delete this requirement from the ARMP.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: Because the EPA generally supports the adaptive management approach that the BLM is taking, the EPA recommends revising the contingency planning process included in the ARMP to confirm that the trigger for contingency planning measures will be monitored exceedances of the NAAQS, rather than a violation of the NAAQS.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: In short, we support the BLM's approach for using shorter term projections for modeling, provided that there is a commitment in the Final EIS to continue this iterative approach to air quality analysis during the estimated 20 year life of the RMP. To this end, we recommend that the Final EIS explain the approach the BLM intends to use following the initial West-CARMMS modeling. For example, we understand the BLM will annually evaluate the upcoming three to five year period and compare this projected level of development to the level of predicted future development analyzed in the WestCARMMS. We also recommend including a commitment to updating the air quality modeling platform on a regular basis with new information/data, including oil and gas development rates and practices, and updated emission inventories (including EPA National Emissions Inventories every three years). We also suggest including a provision that in the event that the annual emissions from the BLM authorized activities exceed the West-CARMMS modeling emissions, new modeling using updated emissions and RFD forecasts be conducted for the planning area.

Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: Due particularly to the high ozone levels in the area (88% of the NAAQS), the EPA also supports and finds necessary the BLM's commitment in the ARMP to evaluate and address monitored exceedances of a NAAQS through annual reviews conducted in consultation with CDPHE, EPA, and other local, state, federal, and tribal agencies. We note and also support the BLM's commitment to respond to monitored exceedances that may include additional modeling and mitigation requirements. To ensure full disclosure, the EPA also recommends that the BLM provide in the Final EIS any additional information in regard to their adaptive management strategy for assessing air quality information. We understand and agree that the BLM's air management strategy includes at a minimum the following important components:
• Annual emissions tracking;
• Annual reviews of data;
• Annual analyses of air resource management strategies;
• Identification and implementation of mitigation measures; and
• Evaluation of the need for modifications to the ARMP.

Submission No: rmc0057
Commenter: Karen Sjoberg, Citizens for Clean Air
Comment: Within and near the Grand Valley Airshed, CCA believes that the BLM Adaptive Management Strategy for protecting air quality is insufficient to protect the 130,000 people now living in the Grand Valley. This strategy [which includes emissions tracking, annual reviews of air resources management data, annual analyses of current air resources management strategies, identification and implementation of mitigation measures, and evaluation of the need for modifications] is slow to implement and reactive, perhaps requiring a NAAQS violation to achieve funding and concerted action. With air pollution already affecting the health of people in the Grand Valley Airshed, oil and gas development over the next 20 years poses such a serious threat that only far greater, more proactive measures at this time can safeguard air quality and public health in the Grand Valley.

Response
Expanding the air quality monitoring network is outside the scope of the RMP planning effort. No change has been made to the Proposed RMP/Final EIS.

Many comments referenced measures presented in the Air Resources Management Plan (Appendix G of the Draft RMP/EIS). That document has been replaced with the Comprehensive Air Resources Protection Protocol (CARPP), which can be found in Appendix G of the Proposed RMP/Final EIS. The CARPP contains a strategy and actions that address most commenters' concerns. Specifically, the CARPP presents a detailed consultation and evaluation process for use in response to monitored exceedances, clarifies that the BLM will be responsible for determining whether or not a BLM-authorized source or sources caused or contributed to a monitored exceedance, proposes use of all regulatory monitors in the planning area (not just SLAMS monitors) to identify and evaluate exceedances, outlines the iterative approach to air quality analysis during the estimated 20-year life of the RMP, confirms that the trigger for contingency planning measures will be monitored exceedances of the NAAQS (rather than a violation of the NAAQS), identifies potential responses and mitigation measures that the BLM could implement for BLM-authorized sources that may be causing or contributing to a modeled or monitored NAAQS exceedance, and outlines the proposed adaptive management strategy.

The statement that the BLM will not allow oil and gas development activities that exceed development rates averaged over the 5 year period prior to signing of the ROD (page G-4 of the Draft RMP/EIS) was in the ARMP and was not carried forward in the CARPP.

BMPs and Pre-Construction Monitoring

Summary

The BLM should not require pre-construction air monitoring, and it should selectively apply BMPs based on site-specific conditions and concerns.

Comments

Submission No: emc0711

Commenter: Claire Moseley, Public Lands Advocacy

Comment: Page G-8, Pre-Construction Air Monitoring - "The BLM may require project proponents of oil and gas development proposals...to submit pre-construction air monitoring data from a site within or adjacent to the proposed development area. . . "

COMMENT: We strenuously object to the proposal to require at least a year of baseline monitoring before new oil and gas projects may be approved. Upon what scientific basis is this excessive and onerous requirement based? Furthermore, it conflicts with the MOU referenced above in these comments and should be eliminated.

Response

The BLM reserves the right to require such monitoring for projects where appropriate (see Appendix G, Section III.A.2). This would typically be for larger projects. No change has been made to the Proposed RMP/Final EIS.

Mitigation Measures

Summary

Mitigation measures in the Air Resources Management Plan should be amended or clarified.

Comments

Submission No: emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: Encana objects to the BLM's statement in section G.2.1 suggesting that the BLM will attempt to modify the air resources management plan without a RMP amendment or revision. The BLM's regulations 43 C.F.R. part 1600 make it clear that the BLM cannot modify or amend a land use plan without complying with NEPA and the FLPMA planning requirements. 43 C.F.R. §§ 1610.5-5, 1610.5- 6. Although BLM can engage in a maintenance activity to a RMP without significant process, maintenance "shall not result in expansion in the scope of resource uses or restrictions or change the terms, conditions, and decisions of the approved plan." 43 C.F.R. § 1610.5-4. Because any change in the proposed air resources management plan will necessarily alter use of the federal lands, the BLM cannot modify the plan without utilizing the appropriate procedures.Encana opposes the language set forth in section G.2.2 - G.2.5 because they are contrary to existing law. BLM simply does not have the authority over air quality to the extent suggested in Appendix G. FLPMA does not authorize the BLM to independently regulate air quality control measures such as those imposed in the GJ DRMP/EIS. The BLM must revise its entire Appendix G to be consistent with its authority. Further, and contrary to the language set forth in section 6.2.6 the provisions of the Air Plan set forth in detail when and how the BLM will conduct air quality modeling for oil and gas operations. The provisions of Appendix G do not comply with the MOU among the United States Department of Agriculture, DOI, and the EPA regarding air quality analysis and mitigation for federal oil and gas decisions through the NEPA process. This MOU executed on June 23, 2011, is the current national management guidance determining when and how air quality modeling for oil and gas projects will be conducted. Appendix G will create unnecessary confusion and even contradicting requirements of when and how air quality modeling and monitoring should be performed. It is inappropriate for a single BLM Field Office to attempt to develop its own procedures for air quality modeling when the DOI has agreed to specific provisions on a national scale. The BLM does not explain how long monitoring will be required. The BLM should be aware that the requirement for additional monitoring may substantially delay oil and gas development within the Grand Junction Field Office. Encana is particularly concerned because the BLM seems to suggest it will require at least a year of baseline monitoring prior to authorizing oil and gas development operations. The BLM should eliminate the vast majority of Appendix G and simply include a copy of the current national policy as exemplified in the MOU between the DOI, Department of Agriculture, and the EPA. Any deviation from this national MOU should be eliminated in the GJ RMP.Encana is also strenuously opposed to the language in section G.4.1 that suggests the BLM will limit oil and gas development to a level similar to that experienced over the last five years. As the BLM is aware, the national economy has contracted significantly over the past five years as the result of the impacts of the recession. Given the significant decline in oil and gas development over the past five years, it is entirely inappropriate for the BLM to utilize that as a benchmark to limit future development. Rather, oil and gas development should not be limited or constrained by the BLM. Instead, the pace of development should be regulated by matters entirely outside of BLM's control such as commodity pricing and the availability of appropriate equipment and crews. Encana urges the BLM to delete the language in section G.4.1 suggesting it will limit future oil and gas development for arbitrary reasons. Given the BLM's lack of authority over air quality measures, Encana is opposed to the rest of the language contained in sections G.4, G.5, G.6, G.7, G.8, G.9, and G.10 because they all exceed the BLM's authority.

Submission No: rmc0068

Commenter: Robert Boswell, Piceance Energy, LLC

Comment: Draft ARMP - state that the public will be given notice of and an opportunity to comment on, any future air quality mitigation requirements.

Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: Appendix G Comments:
Page G·14, Appendix G, Table G· I: The Division recommends revising the 'Feasibility' column for Selective Catalytic Reduction (SCR) for drill rig engines and/or compressors" to include that this technology is not available for rich bum or diesel engines. The feasibility of SCR is subject to equipment demands and site considerations and is not yet widely used in drill rig applications.

Page 0 - 14, Appendix G, Table G- I; The Division recommends revising the 'Potential Environmental Liabilities' column for "Non-selective catalytic reduction (NSCR) for drill rig engines and/or compressors" to include that NSCR elements typically have a life-span of 3-10 years of operation assuming regular operation.

Page G-14, Appendix 0, Table G-I: The Division recommends revising the 'Potential Environmental Benefits' column for "Natural gas fired drill rig engines" to specify that NOx reductions will apply for rich burn applications only. Additionally, the Division recommends revising the 'Feasibility' statement that the option would require onsite processing of natural gas. Based upon the Division's knowledge, companies currently have the capacity to bring processed gas onsite and would not necessarily require onsite processing of natural gas for fuel.

Page G-1 5, Appendix 0, Table G-I: The Division recommends revising the 'Feasibility' column for the "Reduced emission (a.k.a. "green") completions" to specify that federal requirements pertaining to NSPS 0000 are currently applicable and as of January I, 2015, all new fractured or re-fractured wells must employ green completions with a few exceptions. Considerations for implementation, such as down-hole pressure and availability of equipment, should be considered in whether the use of this measure is feasible.

Page G-15, Appendix G, Table G-1: The Division recommends revising the 'Potential Environmental Liabilities' column for the "Flaring of completion emissions" to include NOx and CO emissions from the flare. The Division recommends including these conditions to the 'Feasibility' column as well.

Page 0 -16, Appendix G, Table 0-1: The Division recommends revising the 'Feasibility' column for the "Compressor rod packing system-use monitoring and replacement system" to specify that an hour meter be installed to comply with the monitoring system.

Page G-17, Appendix G, Table G-I: The Division recommends revising the 'Potential Environmental Liabilities' column for the "Capture and control of produced water, crude oil, and condensate tank emissions" to include over pressuration of tanks.

Page G-17, Appendix G, Table G-I: The Division recommends revising the 'Feasibility' column for the "Use of zero emissions dehydrators or use desiccants dehydrators" to include considerations of site constraints and the gas volumes necessary to make use of a desiccant efficient.

Page Q-17, Appendix Q, Table G-1: The Division recommends revising the 'Feasibility' column for the "Install or convert gas operated pneumatic devices to electric, solar, or instrument (or compressed) air driven devices/controllers" to include the caveat that use of this technology is dependent on site conditions, including availability of grid power for instrument air.

Response
Appendix G, Table V-1, displays some emission reduction measures, their potential environmental benefits and liabilities, and feasibility. The table is not meant to be exhaustive in terms of available or acceptable emissions reduction/control technologies or techniques, but provides a baseline or starting point from which to construct design features and mitigation options for project specific or regional analyses. Likewise, the list of SOPs and BMPs proposed in Appendix H is not exhaustive, and the BLM will work with project proponents to identify appropriate measures to reduce impacts on air quality. No change has been made to the Proposed RMP/Final EIS.

For a discussion of valid existing lease rights, please see Section 6.2.7.8, Energy and Minerals.

Dust and High Wind Events

Summary
Commenters suggest speed limits to control vehicle-driven dust and disagree about the need for closing routes to motorized use during high wind events.

Comments
Submission No: cfc0122
Commenter: Edward Brotsky, Mesa County Air Quality Planning Committee
Comment: MCQAPC PM10 comments concerning Volume 1, Section 3.2.1, of the draft RMP include the following.
4. Limitations of Off-Road Vehicle Use During Periods of High Wind. High wind events (Surface wind speeds of >30mph and/or gusts >40mph) have been shown to cause blowing dust in Colorado. The MCAQPC recommends that BLM consider implementing control strategies to limit contribution of PM10 from off-road vehicle use during periods of high winds. BLM should consider closing trails or reducing allowed vehicle speeds when high wind conditions are present. A reduction of vehicle speed on unpaved roads from 40mph to 20mph has been shown to reduce particulate emissions by 65%. Implementation of reduced vehicle speeds would most likely depend on voluntary compliance, and clearly visible signage.

Submission No: rmc0089
Commenter: Janice Shepherd
Comment: Reducing the speed of travel on roads is also known to reduce the amount of dust. "Fast moving vehicles stir up dust. Studies show that PM10, or dust, goes up with vehicle speed. Reducing speed from 40 miles per hour (mph) to 20 mph reduces dust emissions by 65%." - from:
http://www.dec.state.ak.us/air/anpms/Dust/topten_dustctrl2.htm While it is true that only some BLM roads support higher speeds of travel, the BLM should work to limit speeds on all BLM roads to reduce emitted dust.

Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: There is nothing in the DEIS that indicates there is a need for a high wind closure protocol. The Summary of Air Quality Trends (Chapter 3 page 3-18,3-19) states monitored PM10 concentrations have been decreasing over the three to four years and visibility data collected at the White River National Forest site show very good to excellent visibility, even for the 20 percent haziest days. Indeed, the DEIS shows visibility is improving over the period of record. Nothing in Chapter 4's impact disclosure indicates this provision is needed or will have any measurable impact during high wind events.

Response
The Draft RMP/EIS contained a reasonable range of alternatives for mitigating PM_{10} emissions during high wind events (see page 2-28), including the option of closing intensive-use Open areas and designated routes to motorized travel. Requiring reduced vehicle speeds on certain routes can be achieved through issuance of BMPs and implementation planning when the characteristics of the routes in question can be assessed in light of the traffic associated with a specific event or development. This would be determined on a route-by-route basis at the project-planning level after completion of the RMP. No change has been made to the Proposed RMP/Final EIS.

6.2.7.3 Soil Resources

Summary
SOPs and BMPs for soils should be modified, made more explicit, or made more flexible to accommodate site-specific resource conditions.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: S-11, S-12, and S-23 propose Stormwater Control and Spill Prevention requirements that already exist under CDPHE, COGCC, or EPA requirements. Given the fact that CDPHE and COGCC are already developing and enforcing stormwater control measures and EPA and COGCC are already developing and enforcing secondary containment measures, there is no need for BLM to develop goals, obligations, or requirements that may overlap or interfere with regulations developed by other agencies. These problems are exacerbated by the two different expectations for secondary containment proposed by BLM in S-12 and S-23. BLM should eliminate these SOPs/BMPs.

Encana is also concerned by the lack of consistency proposed by BLM in S-2, S-5, S-18, S-19, and S-21. GJ DRMP/EIS, Appendix H. S-5, S-18, and S-19 should provide consistent requirements for growth medium and vegetation clearing. Furthermore, S-5 gives the reader the impression that topsoil management will be determined during the onsite inspection. S-19 dictates that the topsoil will be windrowed. The BLM should be very clear about expectations and create consistent BMPs and SOPs. BLM should provide clarifications for S-8 and S-9. S-8 establishes a SOP for creating slopes "so close" to property. BLM does not define "so close", which could cause subjective and inconsistent implementation. Additionally, in S-9, BLM proposes surface disturbance restrictions "on soils mapped as being saline". The BLM should provide guidance for what qualifies as saline soils and what maps should be used to determine the areas.

Encana opposes the restrictions BLM imposes on activities in frozen or muddy conditions. GJ DRMP/EIS, Appendix H, SOPs S-2, S-3, S-6, and S-7. These restrictions will create significant problems for day-to-day activities. With the soils in the planning area, a small rain event can cause roads to rut deeper than 3 inches. Additionally, winter construction is common for all operators in the area. These proposed SOPs will greatly restrict this construction. BLM should provide greater flexibility in achieving the objectives of these SOPs and provide more information and detail on BLM's proposed Winter Construction Plan, which could help address a few of the concerns raised in this paragraph.

Encana also opposes the restrictions BLM proposes in S-15 and S-20. GJ DRMP/EIS, Appendix H. Regarding S-15, operators are not always able to avoid vertical cuts, long or steep slopes, and side cuts. Sharing ROWs and grouping facilities and structures may not operationally work and may not present the most efficient or environmentally sensitive option. BLM should provide flexibility in meeting these objectives. S-20 assumes having gravel track pads is the only solution for preventing sediment and weed seeds from being tracked in and out of the site. Encana has a very active Weed Management Program. Having track pads on location will not significantly impact weed management. The BLM should eliminate this BMP or provide greater recognition and flexibility for using other methods to achieve similar objectives.

Response

The BLM will work with project applicants to determine appropriate SOPs and BMPs at the project level. Depending on site-specific circumstances, additional SOPs or BMPs could be developed and implemented to support achieving resource objectives. The Authorized Officer may also waive or modify an SOP or BMP based on site-specific resource conditions. No change has been made to the Proposed RMP/Final EIS.

Fragile Soils and Exemptions

Summary

Fragile soils are not mapped, so the impact of stipulations to protect them cannot be accurately anticipated. There should be specific exemptions from stipulations when soil resources could be protected by alternate means.

Comments

Submission No: emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: The BLM indicates that under all action alternatives it intends to manage fragile soils and saline soils as right-of-way avoidance areas. GJ DRMP/EIS, Table 2.2, pg. 2-35. The BLM needs to identify and specifically map these areas so Encana, and other oil and gas operators, understand how their lease rights would be impacted. The same comment applies to the proposed stipulations under both Alternatives B and C that would impose NSO-8, Controlled Surface Use ("CSU") -5, CSU-6 or NSO-10 stipulations on future oil and gas leases. GJ DRMP/EIS, Table 2.2, pgs. 2-35 - 2-36. Unless and until the BLM specifically maps and identifies areas with fragile soils, operators cannot understand how or if their existing leases and operations will be impacted. Furthermore, NSO-10 prohibits surface occupancy and surface-disturbing activities on slopes greater than 40 percent. Pipelines can be effective environmental mitigation tools (i.e., reducing track traffic). BLM should provide flexibility so that this stipulation does not prohibit project options that provide environmental benefits.

Response

Fragile and slumping soils are mapped in Figure 3.2. The dataset used to produce this figure is publically available and project applicants are encouraged to review this and other datasets when developing applications. No change has been made to the Proposed RMP/Final EIS.

As stated in Section B.2, stipulations could be excepted, modified, or waived by the Authorized Officer. In regards to steep slopes greater than 40 percent, a specific exception applies to essential future actions in which implementation of a professionally engineered design, construction, maintenance, and

reclamation plan can mitigate to the fullest extent practicable all potential resource damage associated with the proposed action. No change has been made to the Proposed RMP/Final EIS.

6.2.7.4 Water Resources

Produced Water

Summary
The BLM should consider recycling produced water for use in well drilling and stimulation.

Comments
Submission No: emc0853
Commenter: Suzanne Bohan, US Environmental Protection Agency
Comment: The EPA recommends the BLM encourage operators to consider recycling produced water for use in well drilling and stimulation, thereby alleviating the need for water withdrawals and for produced water management/disposal facilities and minimizing the associated impacts.

Response
Recycling produced water for use in well drilling and stimulation is an implementation-level decision but is included as a BMP. See Appendix H, Page H-36 (FWS-44): "Reuse water whenever possible for drilling and completion activities. Recycle all water used in completion activities to meet water needs for completion of subsequent wells on location; this will reduce fresh water consumption and reduce truck traffic." No change has been made to the Proposed RMP/Final EIS.

Best Management Practices and Standard Operating Procedures

Summary
Some BMPs and SOPs are unnecessary because they duplicate state requirements, contain unclear direction, and have buffers that are inconsistent or arbitrary.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: H-41 includes a requirement for a watershed protection plan that is redundant and unnecessary. Per COGCC rules, operators must collect baseline water quality data. A watershed protection plan is a hydrologic study that would be costly while providing minimal functional data. BLM should eliminate this proposal and instead defer to the State of Colorado's water monitoring program.

Encana opposes BLM's prohibition of any "chemical processes" within 200 feet of any "water bodies." GJ DRMP/EIS, Appendix H, BMP H-45. BLM does not adequately define chemical processes or water bodies. Furthermore, in certain locations where a narrow valley is carved by a creek or stream, there could be significant limitations to operations. BLM should eliminate BMP H-45.

Under Appendix H, the BLM would require "anti-backflow" devices to protect water quality. GJ DRMP/EIS, SOP H-12. Encana recommends BLM clarify this requirement with "anti-siphon or backflow device" to ensure the proper equipment is used. BLM also prohibits "hazardous substances" from being used in drilling, testing, or completion operations. SOP H-15. Without a clear definition, this SOP could significantly limit the ability for industry to operate. Encana also opposes the restrictions BLM proposes in H-15, which is similar to the concerns previously highlighted regarding S- 15. Operators are not always able to avoid vertical cuts, long or steep slopes, and side cuts. Additionally, sharing ROWs and grouping facilities and structures may not operationally work and may not present the most efficient or environmentally sensitive option. BLM should provide flexibility in meeting these objectives.

BLM also proposes requiring BMPs and SOPs related to Stormwater Management that may interfere with existing regulations developed by the COGCC and CDPHE. GJ DRMP/EIS, Appendix H, SOP H-2, SOP H-6, SOP H-10, BMP H-19, BMP H-24. Given the existing rules by the State of Colorado, there is no need for the BLM to develop goals, obligations, or requirements. BLM should eliminate these provisions.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM proposes water testing program as part of its Standard Operating Procedures for Water Resources. GJ DRMP/EIS, Appendix H, SOP H-7. The Colorado Oil and Gas Conservation Commission (COGCC) has already developed and is enforcing water quality data collection measures. Encana opposes BLM efforts to develop its own framework that may interfere with or overlap regulations developed by the COGCC. BLM should defer to the State of Colorado's water monitoring program.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: H-45: No operations using chemical processes (except for vegetation management) or other pollutants in their activities will be allowed to occur within 200 feet of any water bodies. This includes staging equipment for refueling, and equipment maintenance.

Again, the lack of consistency in applying buffers confuses TU and we would like to see a more informed, backed by science, reasoning for applying fluctuating buffers where there are hazards for contamination involved. We also request an explanation for deriving the 200 feet buffer.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: H-15: Hazardous substances will not be used in drilling, testing, or completion operations, nor introduced at any time into the reserve or cuttings pit. Fluids will be confined to pits or tanks and all pits that may contain liquids will be lined to protect groundwater. Liners will be maintained in good condition, with no tears or holes, until they are removed when the reserve pit is closed.

TU strongly and wholeheartedly supports the BMP but wonders whether BLM actually means to say this. We request clarification, and if adopted as is, the final RMP must include examples of the alternatives which the industry can employ.

Response
The list of SOPs and BMPs in Appendix G is not comprehensive. The BLM will work with project applicants to determine appropriate SOPs and BMPs at the project level. H-15 noted in the comment above is addressed in the Gold Book and Onshort Order #7 and has been carried forward in the Proposed RMP/Final EIS.

Green Completions

Summary
Requiring the use of certain chemicals in the completions process greatly limits an operator's ability to most effectively develop oil and gas resources. The requirement also may not be commercially viable.

Comments
Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: In its preferred alternative, the DEIS proposes requiring use of "green fracking fluids" within Water Intake Zone 3. The DEIS also includes a similar proposal for use of green fracking fluids as a Best Management Practice in Appendix H. BLM and the COGCC have rules in place to ensure well integrity and groundwater protection. Requiring the use of certain chemicals in the completions process greatly limits an operator's ability to most effectively develop oil and gas resources. The requirement also may not be commercially viable.

Response
The proposed requirement for reduced emission completion technology is consistent with the definition in COGCC Rule 805 and the New Source Performance Standards for Crude Oil and Natural Gas Production at 40 CFR Part 63 Subpart OOOO. Exemptions may be provided on a case-by-case basis. No change has been made to the Proposed RMP/Final EIS.

6.2.7.5 Vegetation

Summary
SOPs and BMPs for vegetation should be modified, made more explicit, or made more flexible to accommodate site-specific resource conditions.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: BLM states that if a "disturbed area must be left bare of a considerable length of time, cover the area with weed barrier until revegetation is possible." GJ DRMP/EIS, Appendix H, WEED-12. BLM should define "considerable length of time" and provide more information regarding acceptable weed barriers.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Vegetation: Riparian Habitat and Wetlands (VRW)
Encana opposes the proposed SOP prohibiting location of roads or other facilities immediately parallel to streams. GJ DRMP/EIS, Appendix H, SOP VRW-4. Building roads generally makes more sense in flatter areas, often occupied by streams or drainages. The BLM's requirement may cause more damage cutting into steep slopes to avoid running parallel to waterways. Encana recommends deleting this SOP.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Vegetation: Rangeland (VR): The BLM proposes Rangeland Vegetation BMPs that do not provide adequate information for how the requirements would be determined or implemented. GJ DRMP/EIS, Appendix H, BMP VR-3 and VR-4. BLM proposes closing and rehabilitating roads "quickly once they are no longer needed" and closing "selected routes" to protect certain species. The BLM does not provide a methodology for determining what qualifies for roads that "are no longer needed" or the process for closing select routes. Encana also opposes the BMP requiring pipelines to be placed within road corridors, which may unnecessarily restrict options for pipeline placement. BMP VR-6. The BLM should provide greater information regarding these BMPs and allow for greater flexibility for site-specific reviews in meeting their objectives. Finally, VR-8 proposes topsoil management requirements that may create confusion with BLM's other proposed SOPs/BMPs for topsoil management, S-5 and S-19. The BLM should be very clear about its expectations and create consistent BMPs and SOPs.

Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy in Colorado
Comment: • Add to SOP R-1 that BLM will approve the reclamation plan, especially the seed mix, weed plan, and the standards that must be met before reclamation is considered complete.

• Add to SOP R-1 or create a new reclamation SOP to describe reclamation success and the criteria needed for final reclamation approval. See the BLM Little Snake RMP (Appendix C - Surface reclamation performance standard) for a good example. At a minimum, TNC would recommend the following criteria, drawn from the Little Snake RMP:
o A self-sustaining, vigorous, diverse, native (or otherwise approved) plant community is established on the site, with a density sufficient to control erosion and non-native plant invasion and can reestablish wildlife habitat or forage production. At a minimum, the established plant community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation. No single species will account for more than 30 percent total vegetative composition unless it is evident at higher levels in the adjacent landscape. Permanent vegetative cover will be determined successful when the basal cover of desirable perennial species is at least 80 percent of the basal cover of the adjacent undisturbed area. Plants must be resilient as evidenced by well-developed root systems and flowers. Shrubs must be well established and in a "young" age class at a minimum (therefore, not comprised mainly of seedlings that may not survive until the following year).

o The site is free of State- or county-listed noxious weeds, oil field debris and equipment, and contaminated soil. [Example of site-specific requirement: Given that cheatgrass is common in portions of the Project Area, it may not be possible to totally eliminate this invasive species from the reclaimed area. In the case of cheatgrass, interim reclamation will be considered acceptable if cheatgrass and other undesirable vegetation are less than five percent cover, if the adjacent vegetation is less than 50 percent undesirables. Cheatgrass will be less than 50 percent cover if the adjacent vegetation is more than 50 percent undesirable species.]

o The final inspection for final reclamation success and approval for final abandonment will be subject to an interdisciplinary review. An interdisciplinary team consisting of, at a minimum, a wildlife biologist, a rangeland management specialist, and a natural resources specialist will evaluate the reclamation against the performance standards and provide the authorized officer with a recommendation as to whether or not objectives have been met.

Response
The BLM will work with project applicants to determine appropriate SOPs and BMPs at the project level. Depending on site-specific circumstances, additional SOPs or BMPs could be developed and implemented to support achieving resource objectives. The Authorized Officer may also waive or modify an SOP or BMP based on site-specific resource conditions. Note that the Proposed RMP/Final EIS contains similar BMPs/SOPs to the one described in the comment that provide guidance on recamation plans, seeding, weed managment, etc. (see M&E 56, M&E 58, etc. in Appendix H). No change has been made to the Proposed RMP/Final EIS.

6.2.7.6 Fish and Wildlife

Priority Habitat

Summary
The Draft RMP/EIS does not disclose a need for designating intermittent streams and ponds and ephemeral/seasonal water sources as priority habitat. It also fails to disclose potential impacts on recreation resources.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: We object to designating intermittent streams and ponds and ephemeral/seasonal water sources as priority habitat. The DEIS does not disclose a need for this provision and fails to disclose its potential impacts to recreation resources. Program specific management guidance and mitigation required when projects are implemented is a more appropriate way to protect the wildlife dependent on intermittent and ephemeral water sources. We suggest Alternative A may be a better option.

Response
Section 2.7 designates priority habitat to protect habitat for highly valued species such as coldwater sport fishes, including rainbow, brown, and brook trout. Section 3.2.5 describes the many values of intermittent and ephemeral streams and ponds, which constitute 90 percent of the total stream miles in the planning area. Section 3.2.5 highlights their importance in maintaining water quality, overall watershed function, or health, providing wildlife habitat and migration corridors and supporting vegetation communities to help stabilize stream banks. All of these functions support the highly valued species that priority habitat is designed to protect. No change has been made to the Proposed RMP/Final EIS.

Standard Operating Procedures

Summary
It is unclear what specific actions can be taken to satisfy the requirements in SOP FWS-20 regarding closing off ponds containing mining or other waste.

Comments
Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: FWS-20: "Ensure that ponds containing mining or other wastes are closed off to exclude birds, bats or other wildlife attracted to the water". This is a very ambiguous statement. How is the pond water to be closed off, netting? fencing? In addition, who determines what types of water have to be closed off? Sediment ponds associated with coal mining pose no risk to birds, bats or other animals and should not be required to be netted. This stipulation should be revised to be consistent with the discussion on page 4-129 that discusses the impacts of oil field waste pits. Sediment ponds do not have the same impacts to wildlife that oil filed waste pits do, and should be excluded from netting or other ways of 'closing off' a pond.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: BLM specifies that operators will ensure that ponds are "closed off" to prevent entry by birds and wildlife. GJ DRMP/EIS, Appendix H, SOP FWS-20. The term "closed off" is not used in any other state or federal guideline or regulation requiring adequate exclusion measures (i.e. appropriate fencing and netting). Rather, the term "closed" is used to indicate impermeable lids or complete removal of the containment. The BLM should define the term "closed off" used in FWS-20. Without clarification, Encana cannot fully assess and provide feedback on this SOP.

Response
The BLM will work with project applicants to determine appropriate methods of closing off ponds containing mining or other waste. The appropriate method may be determined by the wildlife species in question and recommended federal or state methods of protecting that species from hazards associated with these ponds. The Proposed RMP/Final EIS standard operating procedure FWS-20 has been updated to provide clarification in that ponds containing waste that is potentially hazardous to fish and wildlife would be “enclosed” (see page H-33).

Big Game

Summary
There is insufficient protection for wildlife, especially big game, and the analysis inadequately describes the risks to these species.

Comments
Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: TU appreciates that the DRMP recognizes the impacts to terrestrial wildlife from oil and gas development but we're concerned that the DRMP does not provide strong enough stipulations nor mitigation objectives which will protect these important components into the next 20 years of the BLM planning cycle.

The impacts of oil and gas development on critical winter range to deer and elk are numerous and can have devastating cumulative impacts. The loss of ecological function, recreation opportunity and income to Colorado's economy are significant and the DRMP does not adequately prepare for these potential impacts. Though the BLM has issued several Instruction Memorandums (IM) to help state and field offices implement better wildlife protection policies, we see little reference to them in the DRMP, specifically two more relevant IMs. The first, BLM IM 2012-039, attempts to provide an organized and comprehensive approach to obtaining and implementing wildlife-related data and associated maps., This new directive, effective immediately, is referred to as the Western Wildlife Crucial Habitat Assessment Tool, or CHAT, and has been endorsed by the Western Governor's Association as a method to achieve public land management goals and planning decisions. The IM's importance lies within the ability for the BLM to access priority habitat areas through the use of combined mapping efforts and applied consistently across political and agency jurisdictions. The CHAT has been developed to identify uniform actions in identifying important wildlife corridors and crucial habitat. TU recommends the GJFO include information available through CHAT to supplement the lack of important wildlife and fish data in the DRMP.

The second IM, BLM IM2012-33, was initiated in December 2012 and directed BLM to incorporate new policy which reduces preventable causes of direct wildlife mortality associated with fluid mineral facilities. Impacts to wildlife and wildlife habitat necessitated this IM as more is being researched and understood with regards to unique wildlife needs and the potential hazards of the extractive industry operations.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: TU is concerned that the DRMP does not account for big game migration and transition corridors. In Section 3 (page 3-92), the presence of elk migration corridors is incorrectly dismissed. The document states: "No major migration corridors have been identified within the planning area except for a small corridor on private lands in Glade Park." The same minimizing or dismissal is used on mule deer corridors, where the DRMP states "Two major migration corridors have been identified within the planning area; both are near the town of Mesa." Yet, our research with CPW staff leads us to believe that this information is incorrect and there are many more migration corridors within the planning area. TU recommends that the BLM update their wildlife data and provide adequate protections for these important wildlife corridors in the final RMP.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The BLM fails to account for updated research and management guidelines for big game that could be applied in mitigation opportunities and the final RMP. This includes the most recent multi-state effort in developing guidelines for mule deer. This document ("Energy Development Guidelines for Mule Deer". 2011. Mule Deer Working Group, Western Association of Fish and Wildlife Agencies) focuses on ways to mitigate for energy impacts. Impacts to mule deer from oil and gas development include (1) direct and indirect loss of habitat; (2) physiological stress; (3) disturbance and displacement; (4) habitat fragmentation; and (5) other secondary (offsite) effects (Mule Deer Working Group, 2011). Because of limited abundance and/or unique qualities of critical range

within the GJFO, the irreplaceable and sensitive nature of these critical habitats makes them unsuitable for oil and gas development and NSO stipulations that preclude all surface disturbances should apply.

Response
The RMP/EIS range of alternatives proposes numerous protections for big game species, including management of wildlife emphasis areas where key big game habitat is protected, and a variety of stipulations. Depending on the alternative, stipulations would prohibit or limiting surface-disturbing activities in ACECs with fish and wildlife relevant and important values, state wildlife areas, elk production areas, wildlife emphasis areas, deer and elk migration and movement corridors (corridors may be may be updated as new research becomes available), and high-value or crucial wildlife habitat. See Appendix B, pages B-8 through B-15. There are also actions that allow the BLM to close allotments to grazing or ensure retention of parcels when important big game habitat is impacted.

Regarding IM 2012-039, BLM Colorado does not have a state Crucial Habitat Assessment Tool; the BLM used the most recent data available and mapped from CPW, as is consistent with this IM. IM2013-33 addresses BMPs for reducing the risk of direct wildlife mortality from the following five fluid mineral practices:

- Open pits and tanks containing freestanding liquids
- Chemical tank secondary containment
- Pit, tank, and trench entrapment hazards
- Exhaust stacks
- Wire exclosure fences for well pads or production facilities and associated ROWs

All of these items are addressed in the DRMP (see Appendix H). No change has been made to the Proposed RMP/Final EIS.

The presence or absence of big game migration corridors is based on the newest mapped and available CPW data. The CPW's data was updated in late 2012 as the Draft RMP/EIS was being completed; there is one additional mule deer migration corridor identified in Glade Park, and elk migration corridors have been updated to include areas in the Roan Creek drainage and Unaweep Canyon. These areas have been added to the Proposed RMP/Final EIS; see pages 3-91 and 3-92. The Draft RMP/EIS does contain protective measures for these areas; see CSU-24 (Deer and Elk Migration and Movement Corridors).

Stipulations for Fish Species

Summary
The dates that fish species habitat is subject to TL stipulations should be provided for each individual species.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The timing limitations in Alternative B for in-stream work combines fish species. GJ DRMP/EIS, Page 2-52 and 2-76. It is preferable that species-specific spawning seasons be defined. For example, the combined TL for rainbow and cutthroat trout is proposed for April 1 to August 1. Average cutthroat trout spawning is June to August, while average rainbow spawning is April to June. The BLM's combined restriction is overly broad and creates potential for delays that may not be necessary if only a single species is present. Encana encourages the BLM to apply its TLs to individual fish species.

Response
In the Draft RMP/EIS, stipulation TL-1 lists separate dates for each fish species habitat in Alternative C, but groups some species together under Alternative B. The Proposed RMP/Final EIS has been edited to provide dates for each individual species habitat (see Appendix B, Table B-7).

Mitigation on Private Roads

Summary
The BLM does not have the authority to impose mitigation measures on private roads to protect wildlife.

Comments
Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: FWS-19 "Strategically apply fugitive dust control measures to reduce coating of vegetation and deposition in water sources, including enforcing established speed limits on BLM and private roads" What authority does BLM have over private roads? The reference to private roads should be removed.

Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: FWS-38: "Avoid transportation in severe winter range within two hours before and after sunrise to avoid disturbing wintering wildlife between Dec 1 and May 1". This could be De facto denial of many potential energy development projects and should be revised to be contingent upon site-specific delineation of severe winter range and mitigation recommendations of a wildlife biologist. Furthermore, the BLM does not have authority to place travel restrictions on most public roads.

FWS-39: What authority does BLM have to require carpooling on public or private roads?

FWS-40: "For intensive activities within winter range for wildlife monitor and enforce speed limits". This item should be revised to clarify that monitoring and enforcement shall be on BLM roads only. BLM does not have authority to monitor or enforce speed limits on private roads.

Response
SOPs are established guidelines that are followed by the BLM in carrying out management activities. BMPs are state-of-the-art mitigation measures applied on a site-specific basis to avoid, minimize, reduce,

rectify, or compensate for adverse environmental or social impacts. They are applied to actions that require BLM authorization to aid in achieving desired outcomes for safe, environmentally responsible resource development, by preventing, minimizing, or mitigating adverse impacts and reducing conflicts. These SOPs and BMPs are not unilaterally applied to every project or every action. The BLM would work with project applicants on a case-by-case basis to reduce direct and indirect impacts on local and regional transportation systems.

Regarding the question of applying restrictions on private land, Appendix B, page B-1 provides a desciption of applying restrictions on split-estate. Section 6.2.7.8 also discusses this issue. The BLM may not be able to support a Finding of No Significant Impact on site-specific actions if necessary mitigation is not included on private land.

No change has been made to the Proposed RMP/Final EIS.

6.2.7.7 Visual Resources

Summary
The Proposed RMP/Final EIS should contain mitigation measures for the Old Spanish Trail and remove some measures related to oil and gas development.

Comments
Submission No: emc0514
Commenter: Michael Elliot, National Park Service
Comment: On page 2-133, we wonder if VRM Class III or IV (depending on alternative) will always be sufficient to protect the NHT setting if new portions of trail are identified. Perhaps a provision could be made such that if and when a portion of trail is identified through survey, its visual resources could also be evaluated and its VRM level adjusted if necessary.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Under its Visual Resources BMPs, the BLM proposes the requirement to reclaim unused wells within one year. GJ DRMP/EIS, Appendix H, BMP V-16. There is no need for BLM to develop this BMP since the COGCC has a rule for completing reclamation work (COGCC 1004.a). Furthermore, this BMP would be more appropriate under the Reclamation SOP and BMP section.

The BLM proposes a Visual Resources BMP (V-20) related to project placement that is similar - but still different - from two BMPs (R-4 and R-8) included in the Reclamation section. GJ DRMP/EIS, Appendix H. BLM should be very clear and consistent in crafting its BMPs and SOPs. Furthermore, these BMPs prohibit placement of facilities on hilltops and ridgelines, which unnecessarily limits options for placing a facility in the best location. BLM should provide flexibility so that facilities can be located based on site specific factors and mitigations.

Response
VRM classifications are a planning-level decision and must be identified in the RMP (see BLM Handbook H-1601-1, Land Use Planning Handbook, Appendix C, page 11). The BLM does not have the flexibility to reevaluate and adjust VRM classes through plan maintenance; an RMP-amendment would be required.

As described in the alternatives, newly located sections would be managed according to their visual resource inventory classification. The visual resource inventory classification in the vicinity of the designated trail is Class III north and east of the trail and otherwise Class IV. No change has been made to the Proposed RMP/Final EIS.

Placement of oil and gas facilities can have visual impacts. BMPs to reduce visual impacts can be proposed by project applicants for activities on BLM-administered lands (e.g., for gas drilling). The BLM will work with project applicants to determine appropriate SOPs and BMPs at the project level. No change has been made to the Proposed RMP/Final EIS.

6.2.7.8 Energy and Minerals

Valid Existing Leases and Private Lands

Summary

The BLM cannot apply stipulations, COAs, or otherwise place additional restrictions on existing leases beyond those that were placed on the original lease. Nor can these restrictions be applied to private lands. The Proposed RMP/Final EIS should better explain the BLM's authority to apply stipulations and other conditions to existing leases.

Comments

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The RMP should make clear that BLM does not regulate private or state lands or minerals. BLM has routinely attempted to use "connected actions" analysis under NEPA to regulate and apply COAs that impact operations and uses on public and lands owned and managed by the State of Colorado. BLM should clarify in the ROD for the RMP that it does not have any authority to substantively regulate or restrict private and state lands.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM's proposed imposition of NSO stipulations as COAs on valid existing leases is contrary to congressional mandate and the ESA.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: On page 2-1, BLM incudes a statement that all new oil and gas lease stipulations found in Appendix B will be applied to existing oil and gas permits and authorizations as COAs. However, as BLM is aware, BLM cannot use such lease stipulations or COAs to amend the lease terms of valid existing lease rights. BLM may only apply the more stringent restrictions on permit authorizations based on site-specific scientific analysis which is fully supported in the administrative record and/or corresponding NEPA analysis used to analyze the environmental impacts of the action. Yates Petroleum Corp., 174 IBLA 144, 154 (2008).

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: Draft RMP/EIS at 2-171 - modify management "Action" to state that: BLM has the discretion to modify surface operations to change or add specific mitigation measures when supported by scientific analysis and when consistent with valid existing lease rights. Any such COA, BMP, or other management direction may only be applied to existing lease development if the condition is "reasonable" under 43 C.F.R. § 3101.1-2. The BLM cannot prohibit surface occupancy on a lease that does not contain a "no surface occupancy" stipulation.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: Draft RMP/EIS at 4-104, 4-129, and 4-328 - clarify that the BLM's authority to condition development of existing oil and gas leases is more limited than BLM's authority to place conditions on development of new leases.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: The Draft EIS Appropriately Discloses That RMP Management Direction is Subject to Valid Existing Rights, But Does Not Adequately Explain What This Means for Future Management.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: 1. "All management direction and/or actions developed as part of the BLM planning process are subject to valid existing rights and must meet the objectives of BLM's multiple-use mandate and responsibilities." Draft RMP/EIS at 1-16.
2. "Implementing actions from any of the RMP alternatives would be in compliance with all valid existing rights ...." Draft RMP/EIS at 4-2.

These statements are accurate and Piceance Energy supports their inclusion in the RMP and EIS. But the Final RMP/EIS should better disclose what "subject to valid existing rights" means. For example, where the BLM has already made the policy decision to issue an oil and gas lease, the BLM retains limited authority to condition development or apply new management prescriptions to development of those existing leases.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: As stated, BLM's management strategy could severely compromise industry's ability to
develop energy resources in the Piceance Basin through the imposition of highly restrictive conditions of approval on future permits. BLM must ensure that all conditions of approval placed on permits are consistent with the terms of the lease under which the permit is sought. For example, BLM cannot legally prohibit surface occupancy on a lease that does not contain a "no surface occupancy" stipulation.

Despite the claim above, BLM does not have unilateral discretion to add restrictive mitigation measures simply because it has completed a scientific analysis. In reality, BLM's authority to manage public lands conferred by the FLPMA is predicated upon the protection of valid existing rights. As such, BLM has no authority to impose COAs or other restrictions which deviate from or would alter existing lease agreements. Specifically, BLM cannot deprive operators of their rights to develop their leases in accordance with the terms under which they were issued through the imposition of new COAs or other measures. BLM is limited to negotiating with holders of valid existing rights to comply with newly developed restrictions outlined in the DEIS. It is necessary, therefore, for BLM

to revise the planning documents to ensure consistency with FLPMA, the Mineral Leasing Act and BLM's own Planning Handbook, all which limit the BLM's authority to impose mitigation measures that exceed the terms and conditions of previously issued leases.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Importantly, through the RMP, BLM cannot revise or restrict valid existing lease rights through imposition of COAs for drilling permits or through imposition of lease stipulation provisions from adjacent leases. Colorado Environmental Coalition, 165 IBLA 221, 228 (2005). Section 2.1 and Appendix B must be revised to make clear that the GJFO DRMP/DEIS cannot apply COAs on existing leases and permits in violation of the Mineral Leasing Act (MLA) and FLPMA. This applies to restrictions and COAs that BLM intends to use and protect visual resources, special status plant species including the Colorado hookless cactus and DeBeque phacelia, big game, air quality, potential wild and scenic rivers, sage grouse, wilderness characteristics and other resources as listed in Appendix B

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Further, BLM must provide assurances that it will respect valid existing lease rights, such as those held by Black Hills, as BLM is required to respect under federal law and BLM policy. Imposition of NSOs as COAs on existing leases not containing NSO stipulations will not stand. BLM must clarify that its proposed protective measures are meant for new leases, but that it will continue to provide operational flexibility to existing lessees.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Here, the GJFO DRMP/DEIS does not take valid existing oil and gas lease rights fully into account in its attempts to use new lease stipulations as COAs to further restrict oil and gas exploration and development. BLM must revise the DRMP/DEIS, and all alternatives, to ensure that valid existing oil and gas lease rights are specifically protected. Further, BLM should add additional protections and statements that ensure valid existing lease rights are not restricted or unilaterally amended or modified. In the DEIS, BLM must include an analysis, including an economic analysis, on the potential impacts on oil and gas resources from these new and additional restrictions to ensure that valid existing leases are not imposed upon, and to also ensure protection of the integrity of federal oil and gas resources to avoid waste of these domestic energy sources.

Any attempt in the RMP to modify, restrict or impede valid existing lease rights, or access to them, would constitute a violation of FLPMA, the MLA, and BLM's regulations, and could result in an unlawful taking under the Fifth Amendment of the U.S. Constitution.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM Cannot Add Restrictions for Visual Resource Management to Existing Leases

The GJFO DRMP/DEIS attempts to manage many of the public lands within the Planning Area for visual resources. The draft document specifically proposes visual resource management Class I and Class II areas in locations already leased by the BLM. However, as discussed above, BLM cannot approve management prescriptions that may impair, block access to, render uneconomic, or otherwise cause waste or unduly burden Black Hills' federal oil and gas

leases. Thus, BLM cannot revise or restrict valid existing lease rights through imposition of COAs for visual resources.

Requested Action: the GJFO DRMP/DEIS must be updated and revised to ensure that BLM recognizes and preserves valid existing lease rights with regard to visual resource management.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Protection of lands as lands as areas of critical concern or for wilderness characteristics where there are existing lease rights is unenforceable. BLM must appropriately manage lands with valid existing lease rights for development of oil and gas resources. Attempting to impose special management status on such lands will violate both federal law and BLM policy. Further, there is no basis to manage the South Shale Ridge as an ACEC because of existing management restrictions and the entire proposed ACEC is already leased for oil and gas.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Adding language for Conditions of Approval (COA's) to any lease agreement that ensures development will not cause the exceedance of NAAQS would most likely require emission modeling to be completed by the applicants. Additionally, as mentioned before, the BLM may not unilaterally change requirements on existing leases. The BLM says that they will implement these conditions, "as provided by law and consistent with lease rights and obligations," yet it is unclear how existing leases will be impacted from the language because Conditions of Approval (COA's) are referenced for management and will impact the way these leases are developed. This issue needs clarification in the final RMP/EIS.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Page 15. Chapter 2. Assumptions Common to All Analyses: "Applying COAs, best management practices (BMPs), and other site specific mitigation (e.g., recreation guidelines) to all resource uses; Applying COAs, BMPs, and other site-specific mitigation to minimize erosion, encourage rapid reclamation, retain soils using stormwater mitigation practices, maintain soil stability, and support resources;"

COMMENT: Oxy recommends clarification of this language to recognize the fact that lease stipulations are only subject to change prior to lease issuance. Once a lease has been issued, stipulations may not be legally modified absent voluntary agreement by the lessee. Therefore, in accordance with 43 CFR 3101 and federal case law, Oxy recommends that the BLM clearly disclose its limited authority to add conditions of approval to a drilling permit, i.e., conditions must remain consistent with the terms of the issued lease.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: The BLM's authority to regulate, condition, or limit surface disturbing activities on existing leases is limited. The Final RMP/EIS should expressly recognize that the COAs, BMPs, and new RMP conditions cannot, either individually or cumulatively, be administered in a way that prevents Piceance Energy from developing wells and facilities on its existing leases. A federal oil and gas lease is a real property right. See, e.g., Winkler v. Andrus, 614 F.2d 707, 712 (10th Cir. 1980); Union Oil Co. v. Morton, 512 F.2d 743, 747 (9th Cir. 1975). Piceance Energy has a legal right to occupy the surface to explore for, produce, and develop its leases. Pennaco Energy v. U.S. Department of the Interior, 377 F.3d 1147, 1160 (10th Cir. 2004); 43 C.F.R. § 3101.1-2. Where land is leased

"without a No Surface Occupancy Stipulation, the Department cannot deny the permit to drill; it can only impose 'reasonable' conditions ...." Sierra Club v. Peterson, 717 F.2d 1409, 1411 (D.C. Cir. 1983). Examples of "reasonable" conditions the BLM may impose include those that "do not: require relocation of proposed operations by more than 200 meters; require that operations be sited off the leasehold; or prohibit new surface disturbing operations for a period in excess of 60 days in any lease year." 43 C.F.R. § 3101.1-2. The RMP and EIS should better explain the legal status of valid existing oil and gas leases, and the BLM's limited authority to condition their development.

Draft EIS at 1-16 and 4-2 - after stating that RMP decisions are subject to Valid Existing Rights, the Final EIS should state that this means that the BLM's authority to regulate existing leases is more limited than agency authority in making leasing decisions. The BLM cannot prohibit surface occupancy on a lease that does not contain a "no surface occupancy" stipulation and any conditions imposed on existing leases must be "reasonable."

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: The Draft RMP/EIS includes the following "Action" as proposed management in the RMP:

BLM has the discretion to modify surface operations to change or add specific mitigation measures when supported by scientific analysis. All mitigation/ conservation measures not already required as stipulations would be analyzed in a site specific NEPA document, and be incorporated, as appropriate, into COAs of the permit, plan of development, and/or other use authorizations.

Draft EIS at 2-171. The Draft RMP/EIS reiterates that the BLM has this authority on pages 4- 104 and 4-129. The Draft RMP/EIS contains the following "assumption" for oil and gas development: "Oil and gas operations on existing leases would be subject to COAs by the authorizing officer." Draft EIS at 4-328.

These statements are misleading because they imply that BLM has unfettered discretion to apply new COAs to development proposals on existing leases if those new COAs are merely supported by "scientific analysis." Draft EIS at 4-129. That is not the case. When an oil and gas lease is issued, it constitutes a valid existing right. The BLM cannot unilaterally change the terms and conditions of a lease or prohibit surface occupancy on a lease that does not contain a "no surface occupancy stipulation." The RMP and EIS should expressly disclose that the BLM's authority to regulate development of existing leases is more limited than its authority to regulate the terms under which a new lease is issued.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM suggests on GJ DRMP/EIS page 3-141 that BLM managers have the option of requiring additional mitigation stipulations on proposed actions to bring inactivity into the VRM requirement applicable to the area. GJ DRMP/EIS, pg. 3-141. The BLM should update this language to clarify that the agency only has the authority to impose mitigation measures to the extent they are consistent with existing lease rights. Once the BLM has issued a federal oil and gas lease, it cannot impose mitigation measures that are contrary to the provisions thereof.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The IBLA Decision in Yates Does not support BLM's decision to broadly apply COAs that are more restrictive than the specific lease terms of the existing leases. In Yates, the IBLA held that:
When BLM approves an application for permit to drill and plan of development of oil and natural gas resources under Federal leases subject to a site-specific condition, which limits the timing and location of development, a party challenging the condition of approval as unnecessary must, in order to prevail prove by a preponderance of the evidence that the condition is unreasonable or not supported by the record. Yates, 176 IBLA at 154. In other words, BLM's proposed Best Management Practices (BMP), COAs, and other restrictions must be reasonable and supported by the record, i.e. scientific studies and reports, which is best done through site-specific analysis. Yates does not provide support for BLM to apply BMPs, COAs and other restrictions at the RMP level. In the GJFO DRMP/DEIS, BLM does not provided a reasonable scientific basis to restrict development through creation of no-surface occupancy buffers for sensitive plants and timing limits for big game species.

Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Although areas with existing leases would not be subject to the stipulations in the DRMP, we are not supportive of applying new conditions of approval (COA) based on the new RMP. The unpredictability of changing and unknown COAs will deter the industry from developing the resources to their fullest extent while using best management practices and result in a reduction of economic activity locally and regionally.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Here, the GJFO DRMP/DEIS does not take valid existing oil and gas lease rights fully into account in its attempts to use new lease stipulations as COAs to further restrict oil and gas exploration and development. BLM must revise the DRMP/DEIS, and all alternatives, to ensure that valid existing oil and gas lease rights are specifically protected. Further, BLM should add additional protections and statements that ensure valid existing lease rights are not restricted or unilaterally amended or modified. In the DEIS, BLM must include an analysis, including an economic analysis, on the potential impacts on oil and gas resources from these new and additional restrictions to ensure that valid existing leases are not imposed upon, and to also ensure protection of the integrity of federal oil and gas resources to avoid waste of these domestic energy sources. Any attempt in the RMP to modify, restrict or impede valid existing lease rights, or access to them, would constitute a violation of FLPMA, the MLA, and BLM's regulations, and could result in an unlawful taking under the Fifth Amendment of the U.S. Constitution.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Requested Action: The GJFO DRMP/DEIS must be updated and revised to ensure that BLM recognizes and preserves valid existing lease rights. It should include a paragraph detailing the rights and preservation of valid existing oil and gas leases.

Submission No: emc0907
Commenter: Fred Jarman, Director, Garfield County Community Development Department
Comment: While the BLM does, for certain leases, retain the right to develop appropriate protective measures as part of the NEPA analysis, Garfield County reminds BLM that permit COAs such as are discussed in the RMP EIS as a catchall to bring existing lease terms in line with management objectives of this RMP EIS are only allowed if they are justified in the appropriate NEPA documents. To avoid confusion and more clearly define BLM's intent to

stay within the bounds of its regulatory authority, we request augmentation of the RMP EIS to plainly state this NEPA-justification requirement for COAs that may be attached to permits for existing leases will be followed.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM does not adequately or sufficiently protect valid existing rights in the GJ DRMP/EIS. The BLM should expressly recognize that oil and gas leases are existing rights that cannot be modified. Once the BLM has issued a federal oil and gas lease without NSO stipulations, and in the absence of a nondiscretionary statutory prohibition against development, the BLM cannot completely deny development on the leasehold. See, e.g., National Wildlife Federation, et al., 150 IBLA 385, 403 (1999). Only Congress has the right to completely prohibit development once a lease has been issued. Western Colorado Congress, 130 IBLA 244, 248 (1994).

In the revised GJ RMP and accompanying environmental impact statement ("EIS"), the BLM should state clearly that an oil and gas lease is a contract between the federal government and the lessee, and that the lessee has certain rights thereunder. See Mobil Oil Exploration & Producing Southeast, Inc. v. United States, 530 U.S. 604, 620 (2000) (recognizing that lease contracts under the Outer Continental Shelf Lands Act gives lessees the right to explore for and develop oil and gas); Oxy USA, Inc. v. Babbitt, 268 F.3d 1001, 1006-7 (10th Cir. 2001) (noting that the Tenth Circuit has long held that federal oil and gas leases are contracts) rev'd on other grounds, BP America Production Co. v. Burton, 549 U.S. 84 (2006). Although the BLM may revise the existing RMP for the GJ Planning Area, the BLM - and the public - should be reminded that the BLM cannot unilaterally alter or modify the terms of existing leases.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana is concerned by the BLM statement that it has the option to modify surface operations as necessary on existing leases. GJ DRMP/EIS, Table 2.2, pg. 2-171. The GJ RMP also cannot defeat or materially restrain Encana's valid and existing rights to develop its leases through COAs or other means. See Colorado Environmental Coal, et al., 165 IBLA 221, 228 (2005) (citing Colorado Environmental Coal., 135 IBLA 356, 360 (1996) aff'd, Colorado Environmental Coal. v. Bureau of Land Management, 932 F.Supp. 1247 (D.Colo. 1996). The BLM often cites a relatively recent decision from the IBLA for the proposition that the agency can impose COAs on existing leases. Yates Petroleum Corp., 176 IBLA 144 (2008). The Yates decision does not stand for the proposition that BLM can impose COAs whenever it deems necessary or in broad programmatic documents such as the GJ RMP. Rather, in Yates, the IBLA merely affirmed the imposition of an additional COA based on site-specific information including recent and directly applicable scientific research. Yates, 176 IBLA at 157; William P. Maycock, 177 IBLA 1, 16-17 (2009). The Yates decision does not authorize the BLM to ignore relevant lease terms or the BLM regulations at 43 C.F.R. § 3101.1-2. Further, BLM must recall that it cannot impose new, unreasonable mitigation requirements on existing leases. Courts have recognized that once the BLM has issued an oil and gas lease conveying the right to access and develop the leasehold, the BLM cannot later impose unreasonable mitigation measures that take away those rights. See Conner v. Burford, 84 F.2d 1441, 1449-50 (9th Cir. 1988); 43 C.F.R. § 3101.1-2 (2012) (BLM can impose only "reasonable mitigation measures . . . to minimize adverse impacts . . . to the extent consistent with lease rights granted").

Further, the BLM has not analyzed or disclosed the potential impacts the limited future leasing under Alternatives B and C may have upon existing leases. Encana owns numerous leases within the Planning Area, but to the extent such of these leases are isolated, they are virtually impossible and not economically feasible to develop. Any responsible oil and gas producer who decides to take the risk of exploring by drilling a wildcat area must do so

only after assembling a large enough block of leasehold acreage so that, if the drilling is successful, it can obtain an adequate return on the high risk dollars invested. The BLM has, in other contexts, recognized this need for control of a reasonable acreage block. See Prima Oil & Gas Co., 148 IBLA 45, 51 (1999) (BLM policy to suspend leases when "a lessee is unable to explore, develop, and produce leases due to the proximity, or commingling of other adjacent Federal lands needed for logical exploration and development that are currently not available for leasing"). The BLM must recognize, study, and report the economic impact its decision to close significant portions of the Planning Area to leasing, or to make significant portions only available with major constraints, will have upon future exploration and development in the area. It is not enough for the BLM to simply assert that existing lease rights will be protected. Rather, the BLM must analyze how existing lease rights will be impacted by future limitations on future additional leasing and development and identify the protections it will afford to existing leases.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana is very concerned about the information in section 2.4 suggesting that BLM will apply COAs and other best management practices ("BMPs") on site-specific projects because the BLM does not seem to recognize it cannot constrain valid existing rights. GJ DRMP/EIS, pg. 2-15. The BLM cannot impose COAs or other restrictions that interfere with Encana's existing lease rights. Through a RMP the BLM simply cannot constrain or impose limits on Encana's existing rights.

As discussed earlier, the BLM often cites the recent decision in Yates Petroleum Corp., 176 IBLA 144 (2008) for the proposition that it can impose COAs on existing leases. In Yates, the IBLA affirmed that BLM may impose COAs on existing leases, but only when justified by site-specific research and information. The Yates decision does not stand for the position that BLM can impose COAs broadly on existing leases in a document such as the GJ RMP. The BLM must revise the language in section 2.4 to recognize the limits of its authority.

Response
The federal government retains certain rights when issuing an oil and gas lease. While the BLM may not unilaterally add a new stipulation to an existing lease that it has already issued, the BLM can subject development of existing leases to reasonable conditions, as necessary, through the application of COAs at the time of permitting. The new constraints must be consistent with the applicable land use plan and not in conflict with rights granted to the holder under the lease. The Interior Board of Land Appeals has made clear that, when making a decision regarding discrete surface-disturbing oil and gas development activities following site-specific environmental review, the BLM has the authority to impose reasonable protective measures not otherwise provided for in lease stipulations, to minimize adverse impacts on other resource values. See 30 USC 226(g); 43 CFR 3101.1-2. See Yates Petroleum Corp., 176 IBLA 144 (2008); National Wildlife Federation, 169 IBLA 146, 164 (2006).

The BLM has the discretion to modify surface operations to change or add specific mitigation measures when supported by scientific analysis. The BLM has the ability to require these mitigation measures associated with oil and gas activities as COAs. All mitigation and conservation measures not already required as stipulations would be analyzed in a site-specific NEPA document and incorporated, as appropriate, into COAs in the permit, plan of development, and/or other use authorizations. In discussing surface use rights, 43 CFR 3101.1-2 states that the lessee has the right "to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource" but lessees are still subject to lease stipulations, nondiscretionary statutes, and "such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other

resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed." Lessees are also required to conduct operations in a manner that not only "results in maximum ultimate economic recovery of oil and gas with minimum waste" but also "protects other natural resources and environmental quality" (43 CFR 3162.1). While it would not be consistent with lease rights granted to preclude any development of the lease, the BLM may require relocation of proposed operations not to exceed 200 meters and may prohibit surface disturbing operations for no more than 60 days per lease year [43 CFR 3101.1-2] when such action has been deemed necessary, through a site-specific NEPA analysis, to minimize adverse impacts to other resource values, land uses, or users.

Through the years, two areas of concern have consistently arisen from this split estate land issue:

Does the BLM have the statutory authority to regulate how private surface owners use their property, and does the BLM have the authority to condition and regulate a federal mineral development, such as federal oil and gas leases? These two concerns have been addressed in the resolution of two resource management plan (RMP) protests in 1988 on split-estate lands (North Dakota RMP and Little Snake RMP) and two Washington Solicitor's Opinions (April 1 and 4, 1988). The conclusion states:

> In summary, while the BLM does not have the legal authority in split estate situations to regulate how a surface owner manages his or her property, the agency does have the statutory authority to take reasonable measures to avoid or minimize adverse environmental impacts that may result from federally authorized mineral lease activity.

An example of the authority the BLM does have, is summarized in the January 7, 1992, Interior Board of Land Appeals Decision (122 IBLA 36, Glen Morgan, January 7, 1992), which states:

> The operator of an oil and gas lease is responsible for reclamation of land leased for oil and gas purposes, even after the expiration of the lease and even where the surface estate is privately owned. Such reclamation includes the restoration of any area within the lease boundaries disturbed by lease operations to the condition in which it was found prior to the surface-disturbing activities.

Another key point presented in this decision referenced the reservation of mineral reserves under Section 9 of the Stock-Raising Homestead Act. This section states that the US reserves the "right to prospect for, mine, and remove the [reserved minerals]," which encompasses "all purposes reasonable incident to the mining or removal of the coal or other minerals" (43 USC 299, 1988). As long interpreted by the DOI, such purposes include reclamation of the surface of the impacted land after mining is complete and the minerals are removed. No change has been made to the Proposed RMP/Final EIS.

Off-Site Mitigation

Summary
The BLM cannot require off-site mitigation.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana is opposed to the requirement under Alternatives B and C that would make off-site mitigation measures required before oil and gas development could take place in certain wildlife habitat. GJ DRMP/EIS, pg. 2-80. Such a provision is inconsistent with the BLM's current policy regarding off site mitigation as expressed in BLM Instruction Memorandum No. 2008-204. Instruction Memorandum 2008-204 makes it clear that off-site mitigation may only be offered voluntarily by a project proponent and can only be a condition of a permit on a site-specific basis, under very specific criteria. It is contrary to BLM's policy to require off-site mitigation for any and all surface disturbing authorization. The Instruction Memorandum makes it clear that it "is not the intent of the policy to solicit or acquire applicant-committed mitigation that exceeds the impact of the applicant's proposed project." Instruction Memorandum 2008-204, pg. 2. Further, the BLM's policy specifically notes that off-site mitigation is not to become the "default resource mitigation practice for project permitted by the BLM." Id. The BLM's current policy regarding off-site mitigation makes it absolutely clear that off-site mitigation is only required or appropriate when impacts cannot be mitigated to an acceptable level onsite. It is not intended to be applied in all circumstances. Such a position is contrary to BLM's policy and past procedures. The BLM cannot require off-site mitigation for all oil and gas development as such a policy ignores the fact that oil and gas development is an appropriate use of federal lands. 43 U.S.C. § 1701(l). As noted earlier, oil and gas development is specifically a principal or major use of the federal lands. Id.

Response
BLM IM 2013-142, Interim Policy and Draft - Regional Mitigation Manual Section – 1794, contains updated information on off-site mitigation policy for the Bureau. This IM and the draft manual replace IM-WO-2008-204, Offsite Mitigation (issued September 30, 2008). The draft manual promotes consideration of mitigation within a broader regional context and clarifies the 2008 offsite mitigation policy. See pages 1-6 in the IM, and specifically, "The BLM cannot always mitigate the direct and indirect impacts from land-use authorizations to an acceptable level at the location of the impacts (onsite mitigation). To achieve and sustain BLM resource and value objectives, it may be appropriate to compensate for the direct and indirect impacts of a BLM authorization by conditioning that authorization on the performance of mitigation outside the area of impact. Mitigation outside the area of impact occurs by replacing or providing similar or substitute resources or values through restoration, enhancement, creation, or preservation. The BLM's policy is to consider mitigation outside the area of impact when it is not feasible or practical to mitigate impacts to an acceptable level in the same area as the use-authorization." No change has been made to the Proposed RMP/Final EIS.

Best Management Practices and Standard Operating Procedures

Summary
BMPs and SOPs should be changed to improve their flexibility.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM includes several SOPs and BMPs in this section that address issues already regulated by other federal agencies or the State of Colorado – M&E-7, M&E-17, M&E-19, M&E-21, M&E-24, M&E-33, M&E-34, M&E-

43, and M&E-50. GJ DRMP/EIS, Appendix H. Whether it's Spill Prevention or Stormwater Management, the BLM should not develop separate, inconsistent requirements or restate existing regulations for its BMPs and SOPs.

Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: M&E-16 "Where winter range areas are not protected by lease stipulations, operations such as construction, drilling, completion, work-overs and other intensive activities will be avoided from January 1 to March 1 to minimize impacts to wintering big game". A three month no activity time period would be very difficult for large-scale operations. This would essentially limit coal development in the Bookcliffs that are shown on a map as available for leasing. This item should be revised to state, "Where winter range activities not protected by lease stipulations, and where mitigation cannot be agreed upon, intensive activity will be avoided from January 1 to March1..."

M&E-17 "Before activities take place, every pad, access road, or facility site will have an approved surface drainage plan..." All disturbances over 1 acre are required to get a Stormwater permit that is administered by the State. This item should be revised to state, "Proponent will comply with the States stormwater permitting requirement".

M&E-21, please see comments in M&E-17 about NPDES permit.

M&E-23, sizing of culverts to safely pass the 100-year event may be inconsistent with requirements from other regulatory agencies. Further, an allowance should be made for temporary and permanent culverts. Temporary culverts should not have to meet the 100-year criteria if regulation and inspection of drainage facilities falls under the jurisdiction of another State agency.

M&E-44, Dust from vehicular traffic, equipment operations, or wind events will be controlled as needed. No application of surfactants or dust agents will proceed without BLM approval. In areas with soils mapped as Mancos shale, application of water on native road surfaces will be limited, to minimize mobilization of selenium. Fugitive dust abatement falls under the jurisdiction of CDPHE. This stipulation should be changed to reference authority of CDPHE in issuing and enforcing air permits and that the proponent will comply with all terms of CDPHE construction permit.

M&E-80, "In areas of mapped Mancos shale, saline soils, or fragile soils, groundwater will not be discharged to surface water drainages, to minimize mobilization and transport of selenium, salts, and sediment within the Colorado River Basin. What authority does the BLM have to limit discharges if an applicant secures a discharge permit from CDPHE? This item should be removed as BLM has no authority in granting or denying discharges into surface water drainages. CDPHE is the authority responsible for regulating discharges to surface or groundwater.

Response
The BLM is responsible for ensuring that undue damage and degredation does not occur on BLM-administered lands, and the agency has the statutory authority to take reasonable measures to avoid or minimize adverse environmental impacts that may result from activities occuring on BLM-administered land. As such, the list of SOPs and BMPs in Appendix G is not comprehensive. The BLM will work with project applicants to determine appropriate SOPs and BMPs at the project level. No change has been made to the Proposed RMP/Final EIS.

6.2.7.9 Areas of Critical Environmental Concern

Summary
Overlapping NSO stipulations are redundant and they are not the least restrictive lease stipulation to protect the resource for which an ACEC is designated.

Comments
Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: NSO-12, specific to ACECs, states that it is needed to prohibit surface-disturbing activities on the South Shale Ridge in order to protect special status plant species such as the hookless cactus and the DeBeque phacelia. GJFO DRMP/DEIS Table 2-2 at 2-82. However, the GJFO DRMP/DEIS contains other NSO stipulations, such as NSO-13, NSO-15, and NSO-15, which protect the occupied habitat of special status species as well as provide surrounding buffer zones for further protection. A NSO stipulation designed specifically for the ACEC is duplicative. Thus, there is no basis to require an NSO stipulation or the ACEC at all, as it is also not the least restrictive lease stipulation to protect the resource.

Response
ACECs highlight areas where special management attention is needed to protect and prevent irreparable damage to resources (BLM Manual 1613.02, Areas of Critical Environmental Concern). In the case of South Shale Ridge, the potential ACEC is designed to protect wildlife and scenic values, in addition to special status plants. The NSO within the ACEC is needed to protect all values, and the stipulations are therefore not redundant. No change has been made to the Proposed RMP/Final EIS.

6.2.8 Resource Programs

6.2.8.1 Air Quality

Summary
The Draft RMP/EIS violates the Clean Air Act, conflicts with state authorities, and violates the interagency MOU.

Comments
Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: The RMP must explicitly justify the proposed management for air quality clearly in the RMP in order to demonstrate the BLM does not exceed its authority to control air emissions and air quality contrary to the Clean Air Act which is administered by the EPA and the State of Colorado. Although we appreciate the May 8 Response addressing this issue we remain skeptical that the proposed stipulations for oil and gas development may unduly hinder and discourage positive economic activity in the planning area and exceed BLM's authority.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: In addition to exceeding its authority over air quality programs, BLM's ARM conflicts with the Memorandum of Understanding (MOU) entered into by the Departments of Agriculture and Interior along with

the EPA regarding air quality analysis and mitigation on federal lands. Since this agreement was adopted on a national scale, we question BLM's attempt to establish a separate program for the GJFO. Clearly, the ARM must retain consistent with DOI's commitments in the MOU. As such, we recommend that BLM eliminate those sections of the ARM that exceed the elements provided for in the MOU.

Page G-1, Modification of the ARMP - "This ARMP may be modified as necessary to comply with law, regulation, and policy and to address new information and changing circumstances." Changes to the goals, objectives or management actions set forth in the GJFO RMP/EIS would require maintenance or amendment of the RMP while changes to implementation, including modifying this ARMP, may be made without maintaining or amending the RMP."

COMMENT: BLM's statement implies modifications may be made to the air resources management plan through plan maintenance without a RMP amendment or revision. This is contrary to the regulations at 43 C.F.R. 1600 which requires the agency to comply with both NEPA and FLPMA when making significant changes to a RMP.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: In addition to CDPHE 2008(a) Air Quality Control Commission Regulations cited in the DEIS, the CDPHE, Air Quality Control Division, also issued Regulation No. 7, CCR 1001-9, which further controls air emissions from oil and gas operations statewide. The CAA specifically restricts the authority of land management agencies to determining whether emissions from a "major emitting facility will have an adverse impact" on areas designated as Class I. Since oil and gas facilities have not been classified as major emitting facilities, BLM has no authority to regulate such emissions.

CDPHE is also responsible for regulating visibility and regional haze through its State Implementation Plan (SIP). While BLM may participate in the development of the SIP, the regulatory authority clearly rests with CDPHE and not BLM. Consequently, all proposed management actions relating to air quality and visibility are unequivocally outside the jurisdiction of BLM and must be removed in their entirety from the RMP revision.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Applications for Permits to Drill (APD) are issued with conditions of approval that require operators to comply with all applicable laws, but the BLM is not legally authorized to regulate air quality standards. It is the responsibility of the states to issue air permits for oil and gas operations and to ensure that operators comply with those permits and the CAA. Moreover, BLM can assume and inform the public that the CDPHE will ensure that air quality standards are and will be met throughout the life of the project.

The GJFO DRMP/DEIS should be revised to make clear that all oil and gas operations must be compliant with air rules and regulations as established by the State of Colorado. This should be the emphasis of the GJFO DRMP/DEIS, rather than any attempt to regulate and restrict oil and gas operations based on air quality and air emissions. For example, BLM should clarify A-1 and A-2 to identify that CDPHE - not BLM - regulations are not to be enforced as standard operating procedures. Further, related BMPs require pre-constriction air monitoring should make clear that the standards to be met are CDPHE standards, not BLM's.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM should clarify and acknowledge its very limited role in protecting and regulating air quality; BLM should remove any onerous restrictions contained in the GJFO DRMP/DEIS that attempt to legislate air quality.

Submission No: emc0920
Commenter: Kimberly Jackson, Colorado Department of Public Health and Environment
Comment: However, the Division would like to respectfully point out that Section GA.1 of the Air RMP (Interim Air Resources Management Strategy) creates new State obligations in addition to altering well-established processes for evaluating monitored exceedances. Based on Section 0 .4.1 , the BLM would require the Division to determine whether a monitored exceedance of a NAAQS (or a CAAQS) was or was not caused by an exceptional event. further, a new process would be established to ascertain whether BLM-sanctioned operations are responsible for the monitored exceedance. The Division prefers that the BLM use a collaborative, inter-agency approach to conduct annual reviews to address monitored exceedances. The Division would also request that the BLM clarify in the Final EIS that the BLM, after consultation, will be responsible for determining whether or not a BLM-authorized source or sources caused or contributed to a monitored exceedance.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM does not have authority to regulate air quality impacts or air pollution emissions. Additionally, BLM does not approve emissions sources through the NEPA process. BLM's role over air quality regulation is extremely limited. Under the Clean Air Act, each State has the primary responsibility for assuring air quality within the State. 42 U.S.C. 7407

In Colorado, the Colorado Department of Public Health and Environment has primary jurisdiction over air quality through delegation from the EPA. See Colo. Rev. Stat. 25-7-1309. The State of Colorado, through CDPHE, has the authority and responsibility to achieve and maintain National Ambient Air Quality Standards (NAAQS) in Colorado. BLM's sole function, through the NEPA process, is to disclose the impacts of proposed activities.

BLM's authority to develop land use plans and otherwise manage federal land under FLPMA does not usurp the air quality authority granted to CDPHE. In sum, to fulfill its legal obligations under NEPA and FLPMA, BLM must analyze and disclose impacts to air (e.g., NAAQS) in NEPA documents. BLM, however, is not the regulating agency to ensure that oil and gas operations comply with the Clean Air Act. "The CAA, and not NEPA, is the primary force guiding states and localities into NAAQS compliance." TOMAC v. Norton, 433 F.3d 852, 863 (D.C. Cir. 2006).

CDPHE has the sole responsibility and authority to permit emissions sources and to enforce air quality regulations. Records of Decision for NEPA documents do not authorize any activity capable of emitting air pollutants. Companies must obtain a permit and authorization from CDPHE before constructing any regulated emission source. BLM must analyze and disclose impacts to air and other resources in NEPA documents, but it is not the regulating agency ensuring that oil and gas operations comply with the Clean Air Act.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Under the Clean Air Act (CAA), only the Environmental Protection Agency (EPA) and its delegates have sole authority for such regulation. BLM's proposed management exceeds its authority by attempting to

control air emissions and air quality despite the regulatory boundaries included in the Clean CAA. The CAA specifically restricts the authority of land management agencies to determining whether emissions from a "major emitting facility will have an adverse impact" on areas designated as Class I. Since oil and gas facilities have not been classified as major emitting facilities, BLM has no authority to regulate such emissions.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: As described in more detail below, Encana is strenuously opposed to the draft air resources management plan for the GJ Field Office Planning Area included in Appendix G. The BLM has limited authority regarding air emissions and air quality matters within the Planning Area. Encana encourages the BLM to remove or significantly revise the proposed draft air resources management plan. Additionally, any alternative that would substantially modify Encana's lease rights could subject the BLM to a rescission and restitution claim. Amber Resources Co. v. United States, 538 F.3d 1358, 1377- 78 (Fed. Cir. 2008). The BLM partially recognizes the extent of CDPHE's authority over air quality matters on page 4-24 of the GJ DRMP/EIS. The BLM does not clearly state, however, that CDPHE and not the BLM has exclusive authority over air quality and air emissions within the Planning Area.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana believes that the BLM's Goals and Objectives on pg. 2-24 are unnecessary given the authority of the EPA and CDPHE over air quality in Colorado. GJ DRMP/EIS, Table 2.2, pg. 2-24. Congress has already directed the EPA to develop new and revised national ambient air quality standards based on the latest scientific knowledge. 42 U.S.C. §§ 7408(a)(2), 7409(b)(1). Under the CAA, states are not authorized to develop emission standards which are less stringent than the national standards for any particular ambient air quality standard. 42 U.S.C. § 7416; 40 C.F.R. § 52.14. Given the fact the EPA and CDPHE are already developing and enforcing air quality control measures, there is no need for the BLM to develop goals, obligations, or requirements that may interfere with the EPA and CDPHE's authority. Further, the BLM has no authority over air quality so it cannot enforce its "goals and objectives" as currently drafted. The BLM should not attempt to develop or enforce air quality mitigation measures or standards but should leave air quality enforcement and control measures to the agencies with the experience and the authority over the same. Finally, the objective on page 2-24 of the GJ DRMP focuses solely on the oil and natural gas industry for air emission impacts and fails to acknowledge other potential sources of air emissions from BLM land-use activities.

Given the restrictions on BLM's authority over air quality, Encana does not support any of the emission measure controls the BLM has proposed under Alternatives B, C, and D. GJ DRMP/EIS, pg. 2-25. For example, the BLM attempts to require that all new drilling in the Planning Area be conducted using Tier II or Tier IV engines on page 2-25 of the GJ DRMP/EIS. This restriction is entirely inappropriate and beyond the BLM's authority because under the CAA the regulation of reciprocating internal combustion engines and other mobile sources is exclusively within the jurisdiction of the EPA, not the BLM. See 42 U.S.C. §§ 7522, 7523, 7524, 7525, 7541, 7542, 7543, 7547, 7550, 7601. The EPA, using its authority under the CAA, has specifically issued regulations regarding non-road diesel engines and fuels such as those typically used for drilling and development operations. 78 Fed. Reg. 6674 (Jan. 30, 2013); 69 Fed. Reg. 38958 (Jun. 29, 2004); 69 Fed. Reg. 33474 (Jun. 15, 2004). For that reason, the BLM must remove and eliminate all of its proposed actions requiring specific engine types or emission limits as such actions are beyond the BLM's expertise or authority.

Additionally, Encana encourages the BLM to revise or eliminate the requirement for green completion technology or limitations on the flaring of natural gas during well completions. Such matters are already regulated by the EPA through the new Crude Oil and Natural Gas Production Standards located at 43 C.F.R. Part 623, Subpart OOOO. Given the fact that the EPA has already adopted regulations, there is no need for the BLM to unnecessarily duplicate these restrictions. GJ DRMP/EIS, Table 2.2, pg. 2-25.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: When revising the GJ RMP, the BLM must be cognizant of its limited authority to regulate air quality and air emissions. The BLM does not have direct authority over air quality or air emissions under the CAA. 42 U.S.C. §§ 7401 et seq. Under the express terms of the CAA, the Environmental Protection Agency ("EPA") has the authority to regulate air emissions. In Colorado, the EPA has delegated its authority to the Colorado CDPHE. See COLO. REV. STAT. §§ 25-7-1309 (2012). The CDPHE has issued regulations for oil and gas-related emissions. See CDPHE, Air Quality Control Division, Regulation No. 7, CCR 1001-9 (Dec. 2012), and these regulations are the only authority for regulation of oil and gas-related emissions in Colorado. CDPHE also recently announced its intention to make further revisions to Regulation No. 7 later this year.

With respect to potential visibility impacts, the BLM's authority is also limited by existing federal law. Under the CAA, a federal land manager's authority is strictly limited to considering whether a "proposed major emitting facility will have an adverse impact" on visibility within designated Class I areas. 42 U.S.C. § 7475(d)(2)(B) (2012). Oil and gas operations do not meet the definition of a major emitting facility. Further, under the CAA, the regulation of potential impacts to visibility and authority over air quality in general, rests with the CDPHE. 42 U.S.C. §§ 7407(a). The goal of preventing impairment of visibility in Class I areas will be achieved through the regional haze state implementation plans ("SIPs") that are being developed. 42 U.S.C. §§ 7410(a)(2)(J). Although federal land managers with jurisdiction over Class I areas may participate in the development of regional haze SIPs, the BLM has no such jurisdiction in Colorado. 42 U.S.C. §§ 7491; see also COLO. REV. STATE. §§ 25-7-1008 (2012). Accordingly, the BLM has no authority over air quality and cannot impose emissions restrictions, either directly or indirectly, on natural gas operations in Colorado, particularly if the overall goal is to reduce potential visibility impacts. The BLM's proposed Management Actions relating to visibility must be eliminated.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana believes that the BLM's goals and objectives in Appendix G are unnecessary. Congress has already directed the EPA to develop new and revised national ambient air quality standards based on the latest scientific knowledge. 42 U.S.C. §§ 7408(a)(2), 7409(b)(1). Under the CAA, states are not authorized to develop emission standards which are less stringent than the national standards for any particular ambient air quality standard. 42 U.S.C. § 7416; 40 C.F.R. § 52.14. Given the fact the EPA and CDPHE are already developing and enforcing air quality control measures, there is no need for the BLM to develop goals, obligations, or requirements that may interfere with the EPA and CDPHE's authority. Further, the BLM has no authority over air quality so it cannot enforce its "goals and objectives" as currently drafted. The BLM should not attempt to develop or enforce air quality mitigation measures or standards but should leave air quality enforcement and control measures to the agencies with the experience and the authority over the same. Finally, the objective on page 2-24 focuses solely on the oil and natural gas industry for air emission impacts and fails to acknowledge other potential sources of air emissions from BLM land-use activities.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: The BLM has limited statutory authority to address air quality in land use plans. That authority is to "provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans." 43 U.S.C. § 1712(c)(8). The RMP can fulfill this standard by simply requiring all oil and gas operations to comply with applicable state and federal air pollution control requirements.

Submission No: rmc0068
Commenter: Robert Boswell, Piceance Energy, LLC
Comment: Instead of recognizing the limited role the BLM plays in air quality regulation, the RMP exceeds the BLM's appropriate authority and adopts specific air pollution control requirements. For example, the RMP requires "all drilling and completion engines" used for oil and gas development to meet specific diesel emission standards. Draft RMP/EIS at 2-25. The Air Resources Management Plan ("ARMP") requires the proponent of any oil and gas activity to develop, and the BLM to approve, an emission reduction plan related to air emissions. Draft RMP/EIS at G-7. And the BLM may impose specific air emissions mitigation requirements to applications for oil and gas development. Draft RMP/EIS at G-13-G-19. These requirements exceed the BLM's authority over air quality, and should be deleted.

Response
Section 176(c) of the CAA requires that federal agency activities, approvals, and permits conform to applicable federal and state standards. Under this authority, the BLM is not a regulator of air quality, but is obligated to ensure that BLM-authorized activities comply with the CAA and its implementing standards and regulations (including state standards, which may not be less protective of air quality than federal standards). This includes ensuring that future activities on BLM-administered lands do not contribute to new violations of air quality standards in any area, including areas outside BLM jurisdiction (42 USCG 7506). As Chapter 4 indicates, some of the alternatives have the potential to increase levels of criteria pollutants within the planning area and within Class I areas within 100 kilometers of the planning area, thus triggering the BLM's responsibility to monitor and mitigate for those air quality impacts. For example, implementing Alternative D would likely result in concerns with nitrogen and sulfur loadings, ozone, nitrous oxide, and particulate matter concentrations, and visibility degradation in Class I areas downwind of the planning area. This inventory and analysis, and the development of the CARPP, have been performed in compliance with CAA regulations, the 2011 Interagency MOU, and CDPHE standards and regulations. Because the CARPP does not include planning level decisions, a plan amendment is not required to modify the CARPP. While the BLM reserves the option to modify the CARPP in the future, any modifications which could result in significant impacts on the human environment not considered or addressed in this RMP/EIS would receive further NEPA analysis. No change has been made to the Proposed RMP/Final EIS.

6.2.8.2 Climate Change

Summary
The BLM should address climate change using the Recommended Risk Assessment and Management Approach for Addressing Climate Change in BLM Land Use Planning.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: Recommendations: BLM should use the framework and approach set forth in the Recommended Risk Assessment and Management Approach for Addressing Climate Change in BLM Land Use Planning to address climate change in the Grand Junction RMP in a meaningful and solutions-oriented manner.

Response
The Proposed RMP/Final EIS is consistent with BLM and DOI guidance on addressing and evaluating climate change. There is no final CEQ guidance on climate change. No change has been made to the Proposed RMP/Final EIS.

6.2.8.3 Water Resources

Summary
The BLM's BMPs conflict with authority of other agencies. BLM protection for municipal watersheds is redundant with existing federal and state laws. The BLM has no authority to restrict use of waters appropriated by the State of Colorado.

Comments
Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM should include an affirmative statement on BLM's deferential authority to Colorado on water use.

Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: Appendix H, H-11 ..."Furthermore, discharges should be limited to a volume less than or equal to the naturally occurring mean annual peak flow (which is roughly equivalent to a peak generated by a 2-year, 24-hour storm event) and that can be handled by the natural channel under anticipated conditions". What authority does BLM have to regulate volume of discharge?

The Clean Water Act, by a 1977 amendment, gives the State the authority to regulate probable contaminates, but nowhere does it give the State, or BLM authority to regulate discharge volume. That section of the Stipulation should be removed unless there is a Federal law allowing BLM to regulate the discharge rate.

Appendix H-14, "Discharge of surface and groundwater to surface drainages will comply with the Federal Water Pollution Control Act (Clean Water Act) and will be pre-approved by BLM and meet the following criteria".

If a proponent discharges surface or groundwater to surface drainages, they are required by law to secure a discharge permit from CDPHE. What regulatory authority does BLM have over discharge regulation? Further limitations imposed by BLM my duplicate or contradict terms of the discharge permit from CDPHE.

H-14(a) "Discharge operations will not negatively impact downstream beneficial uses". This item should be revised, as BLM has no authority in establishing discharge criteria. CDPHE sets the discharge standards and are the

authority in discharge regulations. Stipulation should read, "Proponent shall comply with all terms of CDPHE discharge permit".

H-14(b) "Discharge soil/water interactions will not facilitate the movement of water quality contaminants (e.g. salt, selenium...sediment, metals) above natural rates in surface and/or groundwater". This item should be revised, as BLM has no authority in establishing pollutant discharge criteria. CDPHE sets the discharge standards and are the authority in discharge regulations. Stipulation should read, "Proponent shall comply with all terms of CDPHE discharge permit".

H-14(d) "Discharges will be limited to a volume that can be handled by the natural channel and less than or equal to the naturally occurring mean annual peak flow (roughly equivalent to a 2-year, 24-hour storm peak)". This item should be removed, as BLM has no authority in establishing discharge volume criteria according to the Clean Water Act. In fact, a Federal Court in Virginia has ruled that the EPA cannot use flow volumes as a proxy for pollutant levels in a TMDL to regulate pollutants.

H-14(f) "Subject to BLM approval, water quality thresholds for both surface and groundwater will be set and monitored during discharge operations in order that they will cease if thresholds were exceeded." This item should be removed, as BLM has no authority in discharge regulations. CDPHE is the authority responsible for regulating discharges to surface or groundwater, not the BLM and further, BLM does not have regulatory authority to set water quality thresholds for either surface or groundwater.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: What is BLM's justification for its proposal to prohibit leasing in the Palisade and Grand Junction municipal watersheds? Existing Federal and state laws are sufficient to protect water resources within these watersheds and this requirement would present an additional layer of regulation inconsistent with existing law. It would be more appropriate for BLM to utilize Lease Notice-1, under which the lessee is required to implement special protective measures for water resources and to collaborate with municipalities and comply with applicable municipal watershed plans. BLM needs to provide adequate justification for its proposal. Moreover, the DEIS is inconsistent in that it contains both a no leasing designation and an NSO stipulation for the Grand Junction and Palisade municipal watersheds.

We also remind BLM that any NSO stipulations for that may be applicable for future leases may not be imposed on valid existing leases simply because a plan amendment has been prepared. Further, restrictions on surface-disturbing and disruptive activities that are inconsistent with original lease terms would abrogate valid existing lease rights.\.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Likewise, BLM should clarify and affirmatively state that it has no legal or regulatory authority to restrict use of waters appropriated by the State of Colorado. The United States Congress, and the courts, defer to state water law. The Mining Act of 1866, 30 U.S.C. 51, and the Act of 1870, 30 U.S.C. 52, clarified that water rights do not accompany federal grants of land, but that all land grants "shall be subject to any vested and accrued water rights. . . As recognized by local rules and customs." Cal. Or. Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 155 (1935). The Desert Land Act of 1877, 43 U.S.C. 321, stated that "the waters of all lakes, rivers, and other source of water supply upon the public lands and not navigable, shall remain and be held free for the appropriation

and use of the public. . ." 43 U.S.C. 321. The Supreme Court interpreted these combined laws as establishing "all non-navigable waters [as] . . . Subject to the plenary control of the designated states . . . With the right in each to determine for itself to what extent the rule of appropriation or the common-law rule of riparian rights should obtain." Cal. Or. Power Co., 295 U.S. at 163-64.

Black Hills, however, recognizes that BLM may include an analysis of actions on water-related resources although BLM has no authority to restrict water use. BLM has no authority to restrict the amount of water that Black Hills and other oil and gas companies use for their oil and gas operations or removes from the waters of the state.

Response

The BLM's authority to regulate for water quality on public lands derives from FLPMA 102(a)(8), which directs the BLM to manage the public lands in a way that protects water quality. Before the BLM grants any permits or leases, the applicant is required to ensure that the terms of the proposed use comply with applicable federal and state water quality regulations. The BLM does not set water quality standards, which are established by the individual states and the EPA. However, the BLM is authorized to enforce water quality standards as part of its permit process. Discharge volume has a clear effect on water quality (greater volumes may cause erosion and sediment transport, thus increasing total suspended solids); therefore, regulation of discharge volume falls within both the state and BLM authority to protect the quality of water resources under the Clean Water Act, FLPMA, and other federal and state regulations. The BLM discharge limitations would be consistent with or more protective of water quality than CDPHE permit conditions as determined through site-specific NEPA analysis. Requiring monitoring of pollutant levels in discharges is both consistent with CDPHE regulations and appropriate for ensuring compliance with the Clean Water Act. An operator getting a National Pollutant Discharge Elimination System (NPDES) permit for operations on federal land must comply with the terms of that permit, which is regulated in Colorado by CDPHE. Fines can be levied by CDPHE if conditions of the permit are not followed. The BLM can request a copy of the permit from the operator to determine if a permit was acquired, and if the conditions of the permit are being followed.

The Draft RMP/EIS proposed to prohibit new leasing in the Palisade and Grand Junction municipal watersheds under Alternatives B and C, and applied an NSO stipulation under the same alternatives for the purpose of limiting the potential of contaminating public drinking water sources. (The NSO stipulation is broader than fluid mineral leasing and applies to all surface-disturbing activities which is why a separate prohibition on leasing is included in the Proposed RMP/Final EIS.) The purpose and justification of this stipulation were provided in Table B-5 in Appendix B. Modifications and exceptions are applicable, as noted in the description of NSO-6 in Appendix B. The BLM does not plan to dictate water allocations approved under Colorado state law; however, the BLM has authority under FLPMA to impose constraints on uses of such allocations that might have adverse effects on water quality. No change has been made to the Proposed RMP/Final EIS.

6.2.8.4 Special Status Species

Migratory Bird Treaty Act

Summary

The TL stipulation addressing migratory bird habitat is duplicative and unwarranted because migratory birds already receive full protection under the provisions of the Migratory Bird Treaty Act.

Comments

Submission No: emc0711

Commenter: Claire Moseley, Public Lands Advocacy

Comment: Page 2-60, Alternative C - STIPULATION TL-3: Migratory Bird Habitat: "Prohibit surface occupancy and surface-disturbing activities, including vegetation-altering projects, in migratory bird habitat during nesting season (April 15 to July 31 or as site-specific analysis dictates) when nesting birds are present."

COMMENT: What is BLM's justification for these stipulations, which appear to be designed to preclude all development activities within the entire GJFO during significant portions of each year? They are duplicative and unwarranted because migratory birds already receive full protection under the provisions of the Migratory Bird Treaty Act. Therefore, absent clear scientific documentation that they are truly needed, it is incumbent upon BLM to eliminate these unwarranted timing stipulations from the final planning documents.

Submission No: emc0858

Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.

Comment: Encana is also opposed to the proposed TL-3 stipulation under Alternatives B and C that would impose TLs in migratory bird habitat. GJ DRMP/EIS, Table 2.2, pg. 2-60. As the BLM is aware, a list of species protected under the Migratory Bird Treaty Act is extensive. The proposed stipulation would effectively prohibit oil and gas operations in the entire Planning Area between May 15 and July 15. As such, the restriction is overly broad and conflicts with Encana's existing lease rights. Further, the provisions of the Migratory Bird Treaty Act itself provide more than adequate protection for the species. There is no reason for the BLM to add additional layers or requirements on existing oil and gas operations. The BLM should eliminate the proposed timing stipulation related to Migratory Bird habitat. GJ DRMP/EIS, Table 2.2, pg. 2-60.

Response

The TL stipulations protecting migratory birds are developed in order to ensure compliance with the MBTA and do not exceed its requirements. The TL stipulation also does not apply to areas where vegetation has been removed prior to the surface disturbance restriction period described in the TL stipulation description.

The BLM signed an MOU with USFWS in 2010 (Information Bulletin No. 2010-110) that includes the goal of implementing conservation measures for Migratory birds. The MOU states:

> [The BLM shall,] In coordination with the FWS, develop conservation measures and ensure monitoring of the effectiveness of conservation measures to minimize, reduce or avoid unintentional take. As needed, modify conservation measures to be more effective in reducing unintentional take and, as practicable, to restore and enhance the habitat of migratory birds.

Under Alternative B, the core migratory bird breeding season is protected so that most nest impacts would be avoided. Under Alternative C, a greater portion of the breeding birds and breeding activity would be protected; dates are based on peak breeding dates given in the Colorado Breeding Bird Atlas (1998). For clarity and consistency with the MOU, this information has been added to the justification for stipulations TL-3 and TL-4 (Appendix B, Table B-7).

Endangered Species Act

Summary

The BLM cannot implement restrictions for any species, including candidate species, above and beyond what is already required in the Endangered Species Act. Likewise, the BLM cannot create and protect de facto unoccupied critical habitat; only the USFWS can do that through the Secretary's determination.

Comments

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Threatened and endangered species are afforded protection pursuant to the Endangered Species Act (ESA) based on an informed, public process. Appropriate conservation measures are implemented based on a species' status on the list of endangered species, including the designation of critical habitat which must take into account economic impacts from oil and gas development. BLM cannot further restrict other uses of public land through proposed protective measures above and beyond what is already required for the conservation of species such as the DeBeque phacelia and Colorado Hookless cactus.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Of particular concern to Black Hills is BLM'S treatment of the DeBeque phacelia and Colorado hookless cactus. Both species are listed as threatened under the ESA; FWS has designated critical habitat for the DeBeque phacelia, but not for the Colorado hookless cactus. See 77 Fed. Reg. 48368 (Aug. 13, 2012) (DeBeque phacelia); 74 Fed. Reg. 47112, 47113 (Sept. 15, 2009) (Colorado hookless cactus).

FWS, in designating critical habitat for the DeBeque phacelia, stated that "conservation efforts will allow for oil and gas development of Federal lands" and therefore are not expected to infringe on valid existing lease rights. 77 Fed. Reg. 48376. Further, FWS stated that it is "committed to working with project proponents to implement a series of conservation efforts to protect the plants and their habitat, while allowing oil and gas development projects to move occupied lands following Section 7 consultation, BLM's imposition of no surface occupancy (NSO) and controlled surface use (CSU) stipulations that outright bar oil and gas development on unoccupied lands is unjustifiable.

BLM has no legal authority to protect potential, suitable or potentially suitable habitat, especially when surveys have found no existence of species on those lands. BLM must follow section 7 of the ESA and the guidelines that limit its consultation to the species and its critical habitat.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Protection of Special Status Plant Species Overreaches BLM's Authority. To protect threatened, endangered, proposed, and candidate species, the GJFO DRMP/DEIS proposes not authorizing land use permits "when impacts on threated and endangered species habitats are shown to be negative." GJFO DRMP/DEIS Table 2-2 at 2-54 (emphasis added". "Negligible," however, is not the standard for protection under the ESA. A species is provided protection when supported by the best available scientific evidence. Further, unoccupied habitat, as discussed above, is held to a high standard-high than "negligible." Congress did not provide FWS authority to protect species habitat when impacts are "negligible." Instead, Congress created a thorough process involving review of scientific data and public participation in the process. BLM, in protecting special status plant species, should adhere to a similar standard.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Under preferred Alternative B, BLM proposes use of NSO stipulations within 200 meters of "current and historically occupied and suitable habitat for threatened, endangered, proposed and candidate plant species." GJFO DRMP/DEIS Section 4.3.6 at 4-171. The stated purpose of the NSO stipulations is to protect certain species from "indirect impacts or loss of immediately adjacent suitable habitat." Appendix B at B-31. BLM provides no scientific justification for mandating these buffers year-round or at these distances. Where BLM is instituting NSO stipulations for the unoccupied habitat of ESA threatened, endangered, proposed, or candidate species, BLM is creating de facto critical habitat and bypassing the appropriate FWS process.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: BLM proposes to use the same NSO restrictions for plant and animal species listed under the ESA on those that are only candidate and proposed species in this NSO stipulation. Imposing the same restrictions for non-listed species as listed species is excessive, unwarranted and appears to rely on an unreasonable assumption that the FWS will ultimately decide to list certain species that have habitat in the planning area. In addition, BLM fails to specify which species would be subject to this stipulation. We are particularly troubled that species that have been proposed for listing may incur the same level of restrictions as those listed under the ESA, which sets a dangerous precedent at the RMP level.

We also object to NSO stipulations that would apply to both occupied and historically occupied plant habitat. We are unaware of provisions under the ESA that could result in BLM's proposal to prohibit surface disturbance in historically occupied habitat.

We strongly recommend that BLM remove this language from the final EIS and instead rely on management prescriptions that are based solely on the current status of species in the planning area, rather than categorically assigning the same management restrictions to both listed and non-listed species. Further, BLM must eliminate the restrictions proposed for special status species and craft restrictions for non-listed species that are less restrictive than those for listed species.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Requested Action: BLM may protect species based on sound scientific data and studies, not because impacts to species are negligible; this "negligible" standard must be removed from the RMP.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Protection of Unoccupied Habitat is Unwarranted. There is no provision or mechanism under the ESA to protect unoccupied, "suitable habitat" other than through designation of critical habitat. The ESA defines critical habitat as "the specific areas within the geographical area occupied by the species, at the time it is listed . . . " 16 U.S.C 1532 (5)(A)(i). Unoccupied habitat may be designated by FWS as critical habitat if, "upon a determination by the Secretary that such area [is] essential for the conservation of the species." 16 U.S.C. 1532(5)(A(ii). Designation of unoccupied habitat places a higher burden on FWS to show the need for this designation. See Arizona Cattle Growers' Ass'n v. Salazar, 606 F.3d 1160, 1163 (9th Cir. 2010).

Further, only habitat that has undergone the public process for designation as critical habitat requires Section 7 consultation. BLM is attempting to create de facto unoccupied critical habitat through preferred Alternative B without showing the need for such designation. BLM cannot protect suitable or potentially suitable habitats as critical habitat. NSO-13, as presented, is unlawful and unsupported by existing data and information.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM should revise its proposed protection of threated, endangered, proposed, and candidate species to follow the requirements of the ESA and FWS's implementing regulations and not go further. Additionally, BLM should remove restrictions on oil and gas development for potential, suitable, and unoccupied habitats.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The RMP must be amended to clarify that FWS -and not BLM- designates critical habitat for threatened and endangered species. It should also clarify that BLM does not manage or protect suitable and potential habitat as if it is "critical habitat." BLM should also remove the onerous NSO and CSU lease stipulations and COAs for unoccupied lands.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM's proposed imposition of NSO stipulations as COAs on valid existing leases is contrary to congressional mandate and the ESA.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Encana is also opposed to the proposed stipulation that would allow the BLM to prohibit surface use in both occupied and historically occupied plant habitat. GJ DRMP/EIS, Table 2.2, pg. 2-58. Encana is not aware of any provision under the Endangered Species Act ("ESA") that requires the BLM to prohibit surface disturbance in historically occupied habitat. The ESA protection for plant species is quite specific and does not address historic habitat. The BLM's proposed stipulation is not only inconsistent with Encana's existing lease rights it is also inconsistent with the ESA. As such, the proposed stipulation under Alternatives B and C must be significantly revised. The BLM should develop stipulations that are more flexible.

Response
Section 7(a)(2) of the ESA forbids federal agencies from actions that are likely to result in the "destruction or adverse modification" of critical habitat as designated by the Secretary of the Interior.

The ESA itself establishes no standard for allowing damage to critical habitat; that determination is left to USFWS, which has defined "destruction or adverse modification" to mean a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species (50 CFR 402.02). In consultation with USFWS, and based on the small populations of threatened and endangered species and the limited geographic distribution of the critical habitat within the planning area, the BLM has determined that a more-than-negligible adverse effect on critical habitat would appreciably diminish the value of critical habitat. Based on this determination, the BLM has proposed NSO stipulations for activities that would result in a more-than-negligible adverse effect on critical habitat. Additionally, the commenter's concern about "negligible" misunderstands the relevant standards: listing a threatened or endangered species, or designating critical habitat, is subject to a high standard of proof. However, where critical habitat has already been designated, the determination of the vulnerability of the critical habitat to direct or indirect alteration is up to the professional judgment of professional biologists involved in Section 7 consultation with USFWS, supported by sound research provided in the administrative record. In regards to an effects analysis, it is the burden of the action agency to make the determination. In this case, the action agency (i.e., the BLM) works with USFWS to establish a matrix for making effects determinations. In regards to critical habitat, the BLM endeavors to not affect, or to minimize effects on, the primary constituent elements for which the habitat was designated. The BLM coordinates with USFWS to determine buffer distances and other measures for making determinations (i.e., No Effect; May Affect, Not Likely to Adversely Affect; May Affect, Likely to Adversely Affect). New information continues to shape determination criteria

The ESA, Section 7(a)(1), requires the BLM to use its authorities to further the purposes of the ESA by implementing programs for the conservation of threatened and endangered species and the ecosystems upon which they depend.

BLM Manual 6840, Special Status Species Management, contains an objective to initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA. BLM Manual 6840 provides the following objectives:

A. To conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species.

B. To initiate proactive conservation measures that reduce or eliminate threats to [BLM]-sensitive species to minimize the likelihood of and need for listing of these species under the ESA.

BLM Manual 6840 provides the following examples of actions appropriate for ESA compliance:

- Developing and implementing activities that provide for the conservation and recovery of species listed pursuant to the ESA.
- Undertaking actions designed to maintain the integrity of the primary constituent elements of federally designated critical habitat on BLM-administered lands.
- Ensuring that BLM actions are not likely to jeopardize the continued existence of any endangered species or threatened species or destroy or adversely modify designated critical habitat.

- Developing and implementing agency land use plans, implementation plans, and actions in a manner consistent with conservation and/or recovery of listed species.

The FLPMA mandates that the public domain be managed for multiple uses, and the BLM's proposed protective measures for sensitive species have been developed in that context, including reasonable consideration of oil and gas development future and existing leases. However Section 103(c) of FLPMA provides a definition of "multiple use" that makes clear that no single use has absolute priority over all other uses, regardless of the perceived benefit of that use. As a result, the BLM and USFWS are within their authority in proposing protective measures to help prevent the ESA listing of sensitive species, though that may interfere with some consumptive uses of public lands. The listing of candidate species would trigger even more prohibitions on competing uses of the species' habitat, and would result in a greater impact on activities on private and public land.

The BLM's responsibilities with respect to federally listed species (i.e., threatened, endangered, proposed, or candidate species) are not limited to the very least that the BLM can do without affecting development or consumptive uses of public land: the ESA sets a floor for protection and conservation activities on public lands, not a ceiling. The BLM's authority to preserve historically occupied habitat for a listed species derives from the policy intent behind the ESA, as well as Section 102(8) of the FLPMA, which provides for the protection of ecological and environmental values, and of habitat for fish and wildlife.

See Section 6.2.7.8, Energy and Minerals, for additional information regarding the placement of restrictions on valid existing lease rights.

While the commenters' concerns regarding NSO stipulations for federally listed species habitat are noted, the BLM has reserved some flexibility in the permitting process, by providing for site-specific exceptions, waivers, and modifications. If the terms of the appropriate exception, modification, or waiver could be met by an applicant, even lands subject to NSO stipulations could be opened to oil and gas development. The current special status species are discussed in Section 3.2.8 of the RMP/EIS. The NSO applies to federally listed species, and Draft RMP/EIS CSU-9 applies to sensitive plant species; the stipulations do not specify the exact species because they are expected to change over the life of the plan. No change has been made to the Proposed RMP/Final EIS.

6.2.8.5 Cultural Resources

Summary

Because all federal undertakings must comply with the National Historic Preservation Act, standard stipulations to protect cultural resources, are unnecessary and outside the requirements of the Act.

Comments

Submission No: emc0893

Commenter: William Sparks, Black Hills Plateau Production, LLC

Comment: BLM Must Follow the National Historic Preservation Act when Regulating Cultural Resources. The GJFO DRMP/DEIS proposes to prohibit surface occupancy or surface disturbing activities within 100 meters of certain identified cultural resources, while prohibiting such activities within 200 meters from other cultural resources. These proposed protective measures go above and beyond Section 106 of the National Historic

Preservation Act (NHPA). The NHPA requires identification of sites, assessment of potential impacts and implementation of mitigation measures to protect the cultural resources in the area. Instead, BLM proposes use of categories of use and a corresponding scale for protective measures. The NHP, and BLM current practice, provides operational flexibility not found in the current proposals within the GJFO DRMP/DEIS.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: Recommendation: Pages 2-102-104, Allocation to Use Categories and Surface Disturbance Prohibitions - Cultural sites will be allocated to various use categories according to nature and relative preservation value (Table 2.2,). Categories include Scientific Use, Conservation for Future Use, Traditional Use, Public Use, Experimental Use, and Discharge from Management. Alternatives B, C, and D propose to prohibit surface occupancy or surface disturbing activities within 100 meters of sites designated as Scientific, Conservation, and Public Use, and 200 meters for Traditional Use sites.

COMMENT: For sites that are relatively isolated, project redesign/relocation to accommodate this buffer may not prove to be a major inconvenience or obstacle, but if multiple sites are clustered together these buffer zones may overlap and would likely place large swaths of land off limits to necessary surface infrastructure for resource development. We oppose BLM's proposed management scheme because it is completely unwarranted. All federal undertakings require compliance with Section 106 of the National Historic Preservation Act (NHP), which necessitates identification of sites, assessment of potential impacts, and determination of necessary mitigation measures to protect cultural resources present in the area. The approach outlined by Congress in the statute was carefully designed to provide the essential flexibility needed when drafting a surface use plan of operations that protects cultural resources while still allowing access to oil and natural gas resources. Default stipulations prohibiting surface occupancy remove this important option from the toolbox of both operators and federal land management personnel. It would appear that BLM is seeking to remove the need for FO archeologists to work with operators in developing reasonable mitigation plans for such areas in accordance with the NHP. We recommend BLM eliminate the use of these unnecessary and excessively restrictive stipulations from the final planning documents.

Response
The BLM concurs that all federal undertakings must be in compliance with the NHPA. The Draft RMP/EIS proposes NSO or CSU stipulations for sites that have already been identified as either eligible for or potentially eligible for the NRHP (see NSO-37, NSO-38, CSU-27, and CSU-28). This is not in excess of the process defined in Section 106 and its implementing regulations, but in furtherance of that process. By setting aside culturally sensitive areas from development in advance, the BLM is able to avoid immediate and cumulative adverse effects on historic properties by limiting site-disturbing development activities. However, these NSO or CSU stipulations do not complete BLM's Section 106 compliance. If an applicant applies for an exception, modification, or waiver of the NSO or CSU stipulation in a protected area, the BLM would initiate the full Section 106 process and would consult with the applicant, the State Historic Preservation Office, Native American tribes, and other interested parties to identify an Area of Potential Effect, confirm an eligibility determination, identify effects associated with the applicant's proposed activity, and choose appropriate mitigation. Such a staged approach to NHPA compliance is a standard method for cultural resources management over broad geographic areas in a time of constrained resources. No change has been made to the Proposed RMP/Final EIS.

Surveys and excavation are implementation-level actions and do not need to be identified in the RMP. Appendix C, page 9 of the BLM Land Use Planning Handbook (H-1601-1) identifies implementation decisions for cultural resources:

> Identify site-specific information needs, impacted resources, protection measures and opportunities to use cultural properties for scientific, educational, recreational, and traditional purposes. Evaluate whether intended uses would result in changes to cultural properties' significance or preservation values, and if so, how resource conditions should be monitored, measured, and maintained at an acceptable level.

6.2.8.6 Lands with Wilderness Characteristics

Summary
Inventorying and managing lands for wilderness characteristics outside of existing wilderness study areas (WSAs) is unlawful and based on outdated guidance.

Comments
Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: Lands with Wilderness Character outside of Wilderness Study Areas (WSA). We do not support the de facto creation of additional wilderness areas by managing any areas outside of WSAs to protect wilderness characteristics. We assert such management is outside BLM jurisdiction and legislatively prohibited by Congress.

Submission No: emc0693; rmc 0076; and emc0789
Commenter: Thomas Hundtroft, Bookcliff Rattlers; Steve Acquafresca, Mesa County Board of County Commissioners; and Keith Fife, Mesa County
Comment: We contend that DRMP section 3.2.14 is unlawful. At DRMP page3-143 BLM claims that its authority to inventory lands for wilderness quality still exists under Section 201 of FLPMA. This is plainly incorrect. Section 201 specifically addresses areas of critical environmental concern. Section 603, now expired, specifically identified lands with wilderness character. Congress did not make this distinction by accident.

Section 201 states:
" (a) The Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values (including, but not limited to, outdoor recreation and scenic values), giving priority to areas of critical environmental concern. This inventory shall be kept current so as to reflect changes in conditions and to identify new and emerging resource and other values. The preparation and maintenance of such inventory or the identification of such areas shall not, of itself, change or prevent change of the management or use of public lands."

Claiming that this has somehow extended BLM's authority to inventory lands with perceived wilderness characteristics, and take any management action to preserve such perceived characteristics, is unlawful. Section 201 never mentions wilderness. In terms of FLPMA and in matters of BLM management, the word "wilderness" has its own legal baggage, and Congress has not placed that word in Section 201. BLM cannot by any stretch of the imagination claim that this passage retains BLM authority to "inventory public lands for wilderness characteristics and to consider such information during land use planning." (DRMP page 3-143).

In fact, BLM is under legislative direction from Congress to cease and desist from that policy. Congress revoked BLM's authority to seek out and preserve lands with alleged wilderness qualities when Congress amended the FLPMA, as noted in this DRMP. Congress further instructed BLM to stop doing this again in 2011:

In H.R. 1473, the Department of Defense and Full-Year Continuing Appropriations Act, included a provision cutting off all funding through September 2011 for the controversial Secretarial Order #3310, which outlined plans for the creation of new de-facto wilderness areas or "Wild Lands." The CR specifically states that no federal funds "may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on Dec. 22, 2010."

In addition to the Congressional action, Senator Hatch reprimanded the Secretary of the Interior: "As you know, Congress prohibited the use of federal funds to implement the rejected Wildlands policy. We were pleased when you abided by the Congressional order and reaffirmed your commitment to the American people that this policy would not be implemented. However, we are deeply troubled with the issuance of the new BLM manuals, which appear to be the latest rendition of the controversial Wildlands proposal. We are equally troubled that our offices and the public were not afforded the courtesy to provide input and that we were not notified of their existence-some of which appear to have been in place since March. The Wildlands policy was an unpopular policy then, and it remains an unpopular policy now. The mere fact these new handbooks were developed and released without public notice only affirms our deep skepticism for the motives behind the underlying directives." Signed into law on April 15, 2011.

It is clear that Congress did not intend for this prohibition end in 2012, as the reprimand indicates Congressional skeptism of BLM's intentions. Congress was correct: BLM still intends to inventory lands with perceived wilderness characteristic regardless of Congressional intention.

Resolution: We join Congress in insisting that BLM cease and desist from seeking out and identifying lands with perceived wilderness characteristics. It is clearly unlawful. Please remove this entire section and all corresponding maps and tables from the Final RMP and ROD.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM incorrectly suggests that it is required to perform a wilderness inventory pursuant to BLM Manual 6300 issued by the BLM in 2011. GJ DRMP/EIS, pg. 4-255. The manual was placed in abeyance by the BLM on July 25, 2011. BLM Instruction Memorandum 2011-154 (07/26/2011). Since that time, the BLM issued new manuals regarding wilderness characteristics in 2012. The BLM should correct the information in the final EIS for the GJ RMP and ensure it is compliant with the most recent guidance from the BLM national office.

Response
The BLM's authority to designate additional lands as WSAs pursuant to FLPMA Section 603 expired on October 21, 1993, as affirmed in the settlement agreement from Utah v. Norton. Any remaining authority for managing lands to protect or enhance wilderness characteristics is derived directly from FLPMA Section 201 (43 USC 1711). Section 201 of the FLPMA requires the BLM to maintain on a continuing basis an inventory of all public lands and their resources and other values, which includes wilderness characteristics. The statute provides some examples but should not be construed as an exhaustive list.

Chapter 6

The BLM Land Use Planning Handbook (H-1601-1) directs the BLM to "identify decisions to protect or preserve wilderness characteristics (naturalness, outstanding opportunities for solitude, and outstanding opportunities for primitive and unconfined recreation)" and to "include goals and objectives to protect the resource and management actions necessary to achieve these goals and objectives. For authorized activities, include conditions of use that would avoid or minimize impacts to wilderness characteristics." In addition, the BLM policy concerning considerations of lands with wilderness characteristics in a Draft RMP/EIS is outlined in BLM Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process.

The BLM performed the inventory for lands with wilderness characteristics in accordance with IM 2011-154, Requirement to Conduct and Maintain Inventory Information for Wilderness Characteristics and to Consider Lands with Wilderness Characteristics in Land Use Plans. The IM included a document titled, "Policy on Conducting Wilderness Characteristics Inventory on BLM Lands." The policy in and attached to the IM was formalized as BLM Manual 6310, Conducting Wilderness Characteristics Inventory on BLM Lands, and BLM Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process. While the wilderness characteristics inventory was performed under guidance provided in IM 2011-154, the subsequent policy in BLM Manual 6310, Conducting Wilderness Characteristics Inventory on BLM Lands, is similar in nature. The Lands with Wilderness Characteristics Inventory Report has been updated with the results of field work performed in summer 2014. The report is available on the RMP website at: http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp.html. In summary, routes were evaluated for consideration as Wilderness Inventory Routes; the field work findings did not support expansion of the areas around the Bangs and South Shale Ridge lands with wilderness characteristics unit.

6.2.8.7 Energy and Minerals

Casual Use

Summary
Geophysical exploration should be considered a casual use.

Comments
Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
BLM's proposal to preclude geophysical development on lands with wilderness characteristics is unfounded and inconsistent with BLM Manual 3150 (L)(.11), Onshore Oil and Gas Geophysical Exploration Surface Management Requirements, which classifies geophysical activities as a "casual use". Casual use is defined in the Manual as "Activities that do not cause any appreciable disturbance or damage to the public land or resources or existing improvements on that land are considered casual use." In fact, the Manual clearly recommends that exploration in closed areas as well as in areas subject to no surface occupancy stipulations be allowed because "geophysical data collected from areas closed for oil and gas development may provide additional insights into the interpretation of data collected in other areas that are open to development." We recommend that BLM revise its management approach to geophysical activities in all section of the DEIS to comport with established Bureau policy.

Response
BLM Handbook 3150, Onshore Oil and Gas Geophysical Exploration Surface Management Requirements, notes that oil and gas geophysical exploration requires a physical presence upon the land and may result in disturbance to the land or other resources. This includes, but is not limited to, geophysical operations and cross-country transit of vehicles over such lands. Appendix B of the Draft RMP/EIS identifies surface-disturbing activities and includes the use of mechanized earth-moving equipment, truck-mounted drilling and geophysical exploration equipment off designated routes, and construction of facilities such as oil and gas wells and/or pads (see Draft RMP/EIS at B-2). The Draft RMP/EIS does not preclude geophysical exploration in areas managed with NSO stipulations if such activities can be mitigated. Areas identified as closed to fluid mineral leasing and geophysical exploration are sensitive to surface-disturbing activities. No change has been made to the Proposed RMP/Final EIS.

Master Leasing Plan Policy

Summary
The Shale Ridges Master Leasing Plan must be updated to conform to BLM IM 2013-101.

Comments
Submission No: emc0969
Commenter: Pat Berry
We are writing to support the adoption of a stronger "Master Leasing Plan" (MLP) to be incorporated in the Final RMP for the area known as Shale Ridges and Canyons (Shale Ridges). MLPs are crucial for taking a landscape-level look at planning and making smarter decisions before oil and gas leasing occurs. A Master Leasing Plan for the Shale Ridges is missing from the Draft RMP which does not allow adequate recognition for major components necessary to protect vital resources for this area.

Specifically, the Final RMP must comply with the BLM's recently released guidance on integrating MLPs into ongoing planning processes. In the Draft RMP the Shale Ridges MLP is addressed only in the Appendix and should be easily recognizable throughout the RMP specifically in chapters such as alternatives, affected environment and environmental consequences.

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The BLM must develop a "vision" and "framework" for the Shale Ridges MLP that acknowledges the need and opportunities to avoid conflicts with "important resources." Furthermore, the BLM must incorporate the "vision" and "framework" throughout the Final RMP.

Submission No: emc0725 and emc0682 and emc0909
Commenter: Greg Gnesios and Daniel Robinson and Bennett Boeschenstein
Comment: This balance, unfortunately, is missing from the Draft RMP, which does not provide adequate recognition or protection for recreation in the Shale Ridges MLP. In the Final RMP, the BLM must take the following steps to improve the Shale Ridges MLP and comply with the agency's recently released guidance on integrating MLPs into ongoing planning processes, set forth in Chapter V of H-1624-1, Planning for Fluid Mineral Resources (Chapter V):

1. Develop and adopt a "vision" and "framework" for the Shale Ridges MLP that includes a specific recreation component: Chapter V requires the creation of "a guiding framework for the development of the area" and "vision for how future development will proceed." This requirement is critical, because it provides the overarching context for developing the appropriate "objectives" and "protection measures" for the MLP. The protection and enhancement of recreation opportunities in Shale Ridges must be a central component of this "vision" and "framework."

2. Incorporate the Shale Ridges MLP throughout the Final RMP: In the Draft RMP, the BLM addressed the Shale Ridges MLP in an appendix. This is not allowed by Chapter V, which states that MLPs "should be easily recognizable throughout the RMP document. ... " Chapter V - F.1. Additionally, Chapter requires the incorporation of MLPs into specific chapters, such as the "alternatives," "affected environment" and "environmental consequences" chapters. Id. At Chapter V-F.

3. Develop and adopt "objectives" and "protection measures" specifically for recreation resources in Shale Ridges: "The two main elements of master leasing planning for an area are the development of (1) resource condition objectives and (2) resource protection measures." Thus, in the Final RMP, the BLM must develop such "objectives" and "protection measures" for recreation resources in Shale Ridges. The "objectives" must acknowledge the importance of recreation in Shale Ridges and the need to protect and enhance existing recreation opportunities and the potential for future growth.

Submission No: emc0927
Commenter: Michael Saul, National Wildlife Federation
Comment: BLM's dismissal of a robust and detailed Master Leasing Plan proposal in Appendix P fails to meet the obligations of its own leasing reform guidance. See Instruction Memorandum 2013- 1011 and Chapter V of H-1624-1 - Planning for Fluid Mineral Resources: Master Leasing Plans. IM 2013-101 requires preparation of a Master Leasing Plan where: -A substantial portion of the Federal land in the area to be analyzed in the MLP is not currently leased.
-There is a majority Federal mineral interest.
·The oil and gas industry has expressed a specific interest in leasing.
·Additional analysis or information is needed to address likely resource or cumulative impacts if oil and gas development were to occur where there are:

Citizen groups one two area within the GJFO - the Shale Ridges and Canyons citizen MLP recommendation. BLM acknowledges that this area meets criteria 2, 3, and 4 (DRMPA/EIS P-3 to P-4). It rejects consideration of MLPs because approximately 74% of the total area is currently leased, then briefly reiterates the general management measures of the overall RMP, without considering management measures applicable to the specific resources of the proposed MLP. Although IM 2013-101 does not define the term "substantial," CWF and NWF are deeply troubled by the Colorado BLM's continued and unjustified refusal to consider MLP analysis wherever more than 50% of an area is under lease. The Shale Ridges and Canyons region contains 166,700 acres of unleased federal land. P-3. The Instruction Memorandum and Handbook address "substantial" unleased lands, not "majority" unleased lands. 2 BLM itself, in the Vernal Utah RMP, has acknowledged that areas with as high as 75% existing leasing can still satisfy the "substantially unleased" requirement. In addition, the newly-released MLP guidance reiterates that, even if all four criteria are not strictly met, MLPs may still be prepared at the discretion of the BLM. Given the resources at stake within the Shale Ridges portion of the GJFO, this area is an excellent candidate for exercise of such discretion. There are nearly 200,000 acres within the proposed MLP zone where the BLM itself acknowledges important resource conflicts, including wildlife, cultural resources, wilderness potential, and State

Wildlife Areas. DRMPA/EIS P-4, P-17 to P-24. A cramped reading of the word "substantial" in IM 2013-101 is not a valid reason for failing even to consider alternative management possibilities for these two resource-rich areas.

Submission No: emc0927
Commenter: Michael Saul, National Wildlife Federation
Comment: By simply listing stipulations and designations that might apply under the global alternatives, BLM ignores the stated purpose of the MLP process to ""conduct the MLP process at a more focused level than the broader level of analysis normally conducted in an RMP. . . ." IM 2013-101.

Submission No: emc0932
Commenter: Tim Brass, Backcountry Hunters & Anglers
Comment: While it is noted in the draft RMP that an MLP is not required, we understand that the guidance cited (M 2010-117) is no longer valid and that changes in the stipulation which required that "a substantial portion of the area to be analyzed in the MLP is currently leased", and that an MLP may now be warranted (IM 2013-101). We strongly support the development of an MLP for the area as mapped though the external proposal (Figure P-5).

An MLP would benefit wildlife habitat and health through coordinated timing, concentrated development and mitigation. Further, the process could improve coordination between lessees through a publicly transparent process. This landscape-scale approach is necessary to prevent further declines in mule deer populations that have been documented by CPW (2004 DAU D-11 & 2012 DAU D-41). As emphasized in CPW's 2012 DAU D-41, "Many more wells and pads are planned across DAU D41, but the planning has not been nearly as comprehensive and the relevant data are not readily available for these areas." An MLP would help minimize the negative impacts that energy development and human activity can have on mule deer populations (Hebblewhite et. al. 2008, Sawyer et al 2006; 2009). We suggest that BLM follow the planning outline recommended in CPW's 2012 DAU D-41 (p. 13).

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The BLM must fully identify and describe the Shale Ridges MLP's "important resources," including lands with wilderness characteristics, recreation and critical wildlife habitat. That information must appear throughout the Final RMP, but a detailed discussion of baseline conditions should appear in the "Affected Environment" chapter.

Submission No: emc0665
Commenter: Sherry Schenk
Comment: I would like to see a Master Leasing Plan created for the lands within the Field Office jurisdiction that may be suitable for oil and gas exploration and development. A plan that covers the whole area would allow for more public and stakeholder input into leasing. It would designate suitable places for energy development, an outline of a known process to initiate oil and gas exploration that all would recognize and a structure that would be helpful to all those involved. An MLP would also allow for the identification of potential resource conflicts and possible detrimental environmental impacts. An MPL would create an organized plan that could be utilized by all.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Failure of DRMP to comply with Colorado's Oil and Gas Leasing Reform Implementation Strategy and the Department of Interior's IM 2010-117 Leasing Reform.

The Grand Junction Field Office (GJFO) is not complying with its directive to ensure oil and gas leasing consistency among the BLM Field Offices as part of its implementation of the new leasing policy. A major part of BLM's implementation of the new leasing policy is to ensure oil and gas leasing stipulation consistency among the BLM Field Offices in each State. That does not appear to be taking place within this DRMP. As described in the DRMP, under each alternative, a different leasing strategy is proposed based upon various versions of the new leasing stipulations. In addition, the lease stipulations are not consistent with other BLM field offices nor with similar resource settings, as required in the Colorado BLM Oil and Gas Leasing Reform Implementation Strategy (Colorado Strategy, page 6, March 2011).

At a minimum, stipulations and their enforcement play a major role in the management of responsible development of energy resources. Here, the GJFO has failed to provide a comprehensive analysis for the assignment and adequacy of stipulations. Such an oversight could have major habitat impacts, allowing development which could easily occur over the majority of the area given the recent energy interests, and could significantly reduce habitat availability and function at the landscape level and the local levels. As written, the DRMP, particularly the conservation Alternative C, is far less protective of the high value natural resources than the BLM could have developed. We ask the BLM to remedy this in a supplemental DRMP.

The BLM EA does not include consistent conformance with the BLM's IM 2010-117 for consideration of new information. On May 17, 2010, the BLM issued the IM No. 2010-117 titled "Oil and Gas Leasing Reform - Land Use Planning and Lease Parcel Reviews". This IM was effective immediately and required the BLM State and Field Offices to establish a process designed to ensure a more orderly, effective, timely and environmentally responsible leasing of oil and gas resources on Federal lands (see IM Purpose). This includes examining resource management decisions adequacy to determine whether the RMPs adequately protect important resource values in light of changing circumstances, updated policies, and new information (IM Section I-A). To that IM, the Colorado State BLM Office issued in March 2011 the Colorado's Oil and Gas Leasing Reform Implementation Strategy. However, this Strategy fails to incorporate these required changes at the field office level. TU has serious concerns with the lack of reference or implementation to the 2010-117 IM in the DRMP.

Response

The Proposed RMP/Final EIS has been revised to address new BLM guidance on Master Leasing Plans (BLM IM 2013-101). In particular, the Shale Ridges MLP has been incorporated into Chapters 2, 3, and 4, and a vision and framework for the plan can be found in Chapter 2, Section 2.7.

See Section 6.2.7.8, Energy and Minerals, for a discussion of imposing restrictions on existing leases and on split-estate lands.

Recreational Gold Mining

Summary

Proposed management actions would infringe upon valid existing rights and recreational mining.

Comments
Submission No: emc0399
Commenter: Patrick Wehling
Comment: 4-418 fifth paragraph: For both rivers under alts B, C, and D - a No Surface Occupancy stipulation would be implemented. Larger scale, surface disturbing casual use prospecting may not be allowed under NSO (even if non-motorized) - however most casual use activities would likely continue to be allowed. The NSO stipulations can't be applied to gold prospecting activities on mining claims managed under the 1872 Mining Law, so only alt C would see an impact from applied NSO stipulations to lands where mining claims were found invalid.

This "Larger scale casual use prospecting" is a made up classification. There is no other reference to it in this RMP and I have not seen it elsewhere. The BLM is and will be the examiner of our casual use claims. The BLM can already monitor our surface disturbing or non disturbing activities on the Dolores and control it. Any mining activities that go beyond casual use require a Mining Plan of Operations (43 CFR 3809.11 [c] 6-7). We use great care not to exceed BLM limits because we want to continue to use the area. We are a non problem. We are very good tenants. The above paragraph suggests that if Alt. C is chosen by BLM, measures will be taken to assure that our claims are made invalid. If our mining claims are found invalid, then the 1872 mining law will have been violated.

Response
Section 4.6.3 (page 4-470) discloses that NSO stipulations cannot be applied to activities on mining claims managed under the 1872 Mining Law. In addition, Section B.1.1 states, "An NSO/No Surface-disturbing Activities stipulation cannot be applied to operations conducted under the 1872 Mining Law unless the lands have been withdrawn from mineral entry and the operator has no valid and existing mining claims." No changes have been made to the Proposed RMP/Final EIS.

6.2.8.8 Recreation

ERMAs

Summary
The ERMAs described in Appendix K, Recreation and Visitor Services Management Framework, do not follow the BLM Handbook instructions.

Comments
Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: ERMAs Are Shown As SRMAs. The ERMA's described in the Allocation Plan do not follow the BLM Handbook instructions.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: Our discussion: The DRMP misrepresents the H-1601-1 guidance. The handbook does not mention "non-compatible uses." All the DRMP ERMA's are tiny compared to the description in H-1601-1. The Handbook describes ERMA management as custodial only, and not use-based at all.

In short, the ERMAs proposed in the DRMP qualify as SRMA's, not ERMA's. The Grand Valley ERMA should be an SRMA and the Barrel Springs ERMA appears to be the wrong size. The same is true of the Castle Rock SRMA and the Palisade Rims ERMA. A glaring conflict is the North Desert Open Area, which is proposed to be an ERMA. However, the management actions required to implement the closures proposed for that exact area make it an SRMA, because of the intensive management presence which will be required. It cannot be left to custodial management. GJFO is totally ignoring its own agency planning policy.

Response

The proposed management framework for each ERMA presented in Appendix K follows the decision guidance in BLM Handbook 1601-1 – Appendix C for Recreation and Visitor Services (which was updated through the issuance of IM 2011-004). In particular, this guidance states, "The ERMAs must have measurable objectives. Supporting management actions and allowable use decisions must facilitate the visitors' ability to participate in outdoor recreation activities and protect the associated qualities and conditions. Non-compatible uses, including some recreation activities, may be restricted or constrained to achieve interdisciplinary objectives." No longer are ERMAs slated for custodial management. In Appendix K, each ERMA identifies the management focus, management actions and allowable use decisions, and best management practices necessary to facilitate the visitors' ability to participate in outdoor recreation activities and protect the associated qualities and conditions. The Proposed RMP/Final EIS is also consistent with BLM guidance, but the suite of ERMAs and objectives for each have been modified in response to public comments. See pages 2-185 through 2-227.

6.2.8.9 Comprehensive Travel and Transportation Management

Backcountry Airstrips

Summary

Comprehensive travel and transportation management is in violation of BLM guidance and NEPA because backcountry airstrips need to be fully included in the travel management planning process.

Comments

Submission No: emc0878

Commenter: John McKenna, Recreational Aviation Foundation

Comment: During your planning process the RAF would request that you take into consideration the BLM's policy manual which states in part. 06A2bii 1626 - TRAVEL AND TRANSPORTATION MANAGEMENT - (Public) BLM MANUAL Rel. 1-1731 07/14/2011

d. Water and Air. Resource Management Plans shall address access across BLM-managed lands to federal-and state-owned waters and for aircraft landings on land and water. Recreational backcountry airstrips can be an integral part of a balanced and efficient transportation system. Backcountry airstrip designations need to be consistent with the goals and objectives for the planning area and applicable Federal Aviation Administration regulations.

With the lightest footprint on the land we believe aviation is a legitimate user, and we would request full inclusion in your process.

Response
Backcountry airstrips are fully incorporated into the planning process. The Travel Management Plan, in Appendix M Section 4.5.2, states that backcountry airstrips are "designated and managed the same as travel routes for other forms of transportation. As such, management of backcountry airstrips would conform to all decisions, including those regarding route construction and maintenance, outlined in this travel management plan." The Proposed RMP/Final EIS, Appendix M, has been updated with a comprehensive list of backcountry airstrips and proposed management for each. Most airstrips identified by the public were already designated for aircraft use, but the Hubbard airstrip was found to be missing from the original inventory and has been added to the Proposed RMP/Final EIS designated route maps.

Conformance with NEPA, Revised Statute 2477, and Other Travel Laws

Summary
Comprehensive travel and transportation management is in violation of BLM guidance and NEPA because route closures will not preserve important recreational assets or historic, cultural, and natural aspects of our national heritage. The RMP does not maintain access to RS 2477 routes.

Comments
Submission No: rmc0059
Commenter: Larry Gobbo
Comment: Motorized usage on BLM & forest service holdings is grandfathered in on several WSAs and must be preserved. For example the law upon which the people of Garfield and Pitkin Counties were standing was the protection of right of ways provided by RS 2477, an old 1866 mining law, which, though repealed, still protects certain public rights of way from closure.

Submission No: cfc0138
Commenter: Jerry Smith
Comment: NEPA Sec. 101 [42 USC ß 4331] (b) (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;

We submit that because of the age of many, if not most of the roads, trails, and routes that the 2013 GJFO RMP/TMP proposes to close to motorized use, the GJFO is NOT "preserving important historic, cultural, and natural aspects of our national heritage."

The public, for recreational and/or commercial needs, has consistently used these roads, trails, and routes since they came into existence. Some of these roads, trails, and routes have existed over 100-years and have seen significant travel with little to no detriment to the surrounding environment.

Even though the BLM is no longer held to recognize the RS2477 law, many of these roads, trails, and routes would likely be eligible for "Historical", "Cultural", and "National Heritage" protection if the RS2477 research of each of these roads, trails, and routes were pursued and proven.

As "highways" used to "open the American West", many of these historic roads, trails, and routes absolutely deserve as much protection as any pictograph or Indian Cultural sites whether or not RS2477 is applied to them or not.

Many of these roads, trails, and routes have histories of family use for recreational uses such as annual hunting access, camping, OHV, and other pursuits. In some cases, hours of undocumented maintenance have been done to these roads, trails, and routes so that these pursuits might continue. Many of these "family pursuits" have personal "heritage" and "cultural" meanings to members of the public.

By continuing access to as many of these roads, trails, and routes by the recreating public as possible, the BLM will be "maintaining, wherever possible, an environment which supports diversity, and variety of individual choice." Unnecessary closure of roads, trails, and routes is the complete opposite. If, as we believe, recreational experiences are "renewable resources", closure of roads, trails, and routes is "depleting a resource" of historic, cultural, and national heritage values".

Submission No: cfc0074
Commenter: Brandon Siegfried
Comment: Additionally, there was no investigation to clarify established legal established rights of ways, like RS 2477 and prescriptive easements. I feel this DRMP fails to give consideration to: the average hunter is now 59 years old; handicapped citizens; seniors; youth, and the long time motorized recreation access heritage in Mesa and Garfield Counties.

Submission No: cfc0072
Commenter: Brandon Siegfried
Comment: Ultimately the federal government (BLM) does not have the authority or jurisdiction to vacate any route on prior unreserved public lands in the state of Colorado or in Mesa/Garfield County. Based on State Law and County Regulations a vacation procedure must occur with public comment for each specific route being considered for closure. I claim that every public land route in the GJ DRMP has an establish legal ROWand the BLM cannot legally close any route without documenting and investigating the possibility of RS 2477, Mining/Gas/Timber Laws, and prescriptive easements. In the state of Colorado lack of use does not grant vacation of a route. The route can be rebuilt by the people at any time. Any route established prior to October 21, 1976 on unreserved public lands is a protected RS 2477 route, and any route that has provided unrestricted access in the state of Colorado for 20 consecutive years have an established Prescriptive Right.

Closing 60-83% of the general public's motorized access is arbitrary and capricious as the GJ DRMP gives no scientific or specific impacts/ reasoning for the BLM anti-access recommendations. One must presume it is driven by a biased perspective and ultimately does not take into consideration differing opinions or citizens rights.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: We appreciate that the DRMP recognizes the roads defined on our maps that we shared with the BLM as "County Roads" and "Vested County Interest" roads. We believe the roads identified on those maps as County Roads are a clear 60' ROW held by a RS 2477 right, with only a handful of exceptions that are held by other ROW grants.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Travel Management Plan: We appreciate that the DRMP recognizes the roads defined on our maps that we shared with the BLM as "County Roads" and "Vested County Interest" roads. Our comments include an updated list and map of Vested Interest Routes (VIR) and Vested Interest Areas that should remain open to public use based on extensive public input and review. We look forward to working with the BLM as a cooperating agency to finalize these routes for the Final RMP.

Vested Interest Routes
We have identified additional Vested Interest Routes (VIR). Members of the public have identified the high value recreation route opportunities. The social and economic values of the routes were considered in the selection process. Some routes were selected because of they are critical for public safety. Many of the proposed routes connect to county roads and provide loop opportunities. Mesa County is interested in partnering with the tourist industry, the BLM and user groups to promote these routes as destinations by means such as visitor information guides and signage.

Mesa County Vested Interest Areas:
The vested interest areas as shown on the VIR map have high value because of the high concentration of use and potential for tourism.

Response
The BLM follows the minimization criteria in 43 CFR 8342.1 when evaluating potential designations for routes and travel systems. In addition, as described in Appendix M, Section 2.5, various other laws and regulations apply to the route designation process. Taking all of these laws, regulations, and policies into account, the route designation criteria listed in Appendix M, Section 2.7.2, include criteria to protect historic, cultural, and natural values. No change has been made to the Proposed RMP/Final EIS.

The BLM cannot make a determination on RS 2477 or historic public access routes. A federal district court needs to determine if the routes in question have valid rights on BLM-administered land. These determinations are issued through a Quiet Title action. Likewise, the BLM cannot vacate county roads. The county vacates roads through a formal process with public hearings. Counties do not typically vacate roads that they do not maintain. Under current guidance and law, abandonment in Colorado does not include routes that have not been used recently, as long as public use occurred before 1976. Prescriptive ROWs are not valid on BLM-administered land. ROWs on BLM-administered land need to be issued by the federal government or under RS 2477 claims processed by the federal district court. The BLM utilized Mesa County's map of Vested Interest Routes in development of the Travel Management Plan (Appendix M; maps are available on the RMP website), but no changes were made in regards to proposed management policies for RS 2477 or historic public access routes. The Proposed RMP/Final EIS contains an updated set of route designations, which are available for download and review on the RMP website.

Concurrent RMP and Travel Management Plans

Summary

Completion of the travel management plan simultaneously with the RMP does not meet the intent of RMP planning.

Comments

Submission No: emc0690

Commenter: Brian Hawthorne, Blue Ribbon Coalition

Comment: Notwithstanding the suggestions herein, BRC is not comfortable that the BLM can successfully adopt a programmatic RMP simultaneously with a project-level Comprehensive Travel Plan of the detail and complexity attempted here. A land use plan such as a BLM RMP is "designed to guide and control future management actions and the development of subsequent, more detailed and limited scope plans for resources and uses." 43 CFR 1601.0-2 (emphasis added). An RMP "is not a final implementation decision on actions which require further specific plans, process steps, or decisions under specific provisions of law and regulations." 43 CFR 1601.0- 5(k).

The (two plans in one) current procedure BLM is using in Colorado presents challenges, if not insurmountable hurdles, to the proper execution of these varied planning elements. The agency and public are unable to fully, if at all, utilize appropriate "tiering" in the planning process. The programmatic RMP and the site-specific Travel Plan are both "moving pieces" of the same puzzle and there is no refinement (in the Travel Plan) that can occur through subsequent reflection on the RMP. Similarly lost are any benefits that might attend "amendment" of a programmatic RMP through a subsequent and more focused Travel Planning process that is procedurally distinct from RMP generation.

As noted above, the DEIS unwisely attempts to combine the BLM's broadest level of programmatic planning with its most detailed (and newest) project-level analysis. Specifically, an RMP revision is attempted here which will further include "travel plan" components that effectively render site-specific decision across all lands within the Field Office jurisdiction.

As the U.S. Supreme Court, upon the Solicitor General's argument on behalf of BLM, has observed land use plans like RMPs are "tools by which present and future use is projected" and are a "preliminary step" which lead to further management actions and "subsequent, more detailed and limited scope plans for resources and uses." Norton v. SUWA, 542 U.S. 55, 69 (2004) In fact, "a land use plan is not ordinarily the medium for affirmative decisions that implement the agency's 'project[ions].'" Id. (quoting 43 CFR § 1601.0-2 (2003) (bracketing in SUWA). Again, "BLM's Land Use Planning Handbook specifies that land use plans are normally not used to make site-specific implementation decisions." Id. At 70.

For whatever reason, the Colorado State Office has chosen to ignore these well-established truths and has combined RMP revision and travel planning in a single process. This combined process leads to several unacceptable and unnecessary impacts. There is no "tiering" possible between the broad vision of the programmatic plan and the refinement of the site-specific analysis. The public gets only one blurred ability to participate, and then only at a moving target of unbounded decision permutations. Put differently, a nearly-infinite array of road/trail/area prescriptions might fit within one or more management philosophies on any site, but the public here was expected to anticipate the outcome of the RMP "zoning" process in creating site-specific requests/comments. If there are any flaws in the RMP, there is a significant risk that site-specific prescriptions will

have to be remanded and re-analyzed, for it seems logical that detailed refinements to the planning structure cannot survive when built upon a flawed foundation.

The DEIS presents a planning method that flatly contradicts applicable BLM planning guidance. Such guidance has not existed in an intellectual vacuum, but has in fact been used to strategic advantage by BLM in prevailing in long-running and costly litigation involving the same areas, issues, and interested publics. The DEIS failed to justify this deviation in sound and accepted planning practice.

Response
Completing a travel management plan within the RMP revision is consistent with guidance in BLM Manual 1626(.06[B][1]). No change has been made to the Proposed RMP/Final EIS.

Minimization Criteria

Summary
The BLM improperly applied the OHV minimization criteria in 43 CFR 8342.1.

Comments
Submission No: emc0693
Commenter: Thomas Hundtoft, Bookcliff Rattlers
Comment: We would like to point out a misinterpretation of the regulations we found in Appendix M, Evaluation Process. The DRMP cites the 43CFR 8342 regulations. In particular, we notice that the regulation says, the minimization of conflicts among various uses of the public lands; and in accordance with the following criteria: to prevent impairment of wilderness suitability.

Here the regulation is very vague; it should properly be assumed this only applies to Wilderness Areas and WSA's. However, it appears that BLM has expanded its meaning to include new areas outside WSA's at random throughout the planning area, and to place buffers around existing WSA's, and to expand existing WSA's.

For example, referring to the Travel Management maps: In Zone V, BLM has imposed a no motorized zone at Juanita Arch with no rationale given. In the north sector of Zone V east of Highway 141 another large non-motorized area is created, again no rationale or analysis provided.

In Zone V in Alternative C BLM has created a large no motorized zone in Tenderfoot Mesa, again with no rationale given.

In Zone U, Alternative B, BLM creates a no motorized zone which approximately triples the size of the WSA, with no statutory authorization cited. There is no analysis or rationale provided.

In Zone J the WSA boundaries are expanded. No analysis or statutory authorization is cited for these expansions.

In Zone M, almost the entire zone is changed over to non-motorized. This is the scale of closure that requires Congressional approval[21], yet no analysis or statutory authorization is cited for this expansion.

In Zone P BLM has made a large part of the Bangs Canyon SRMA non-motorized, which is in conflict with the existing plan. BLM has stated in Chapter 1 that existing Decisions under current implementation would not be changed by this RMP.[22] The Bangs Canyon plan has been through IBLA and has undergone its own revisions as circumstances required. BLM has provided no analysis or rationale for making a major change to that Plan in the DRMP.

These areas are created throughout the planning area, we have cited only a few examples. Perhaps BLM wishes to make the areas less accessible, yet BLM has created so many of these and they are often so large, that a rationale or statutory authorization for the changes is necessary in the Travel Management analysis. BLM provides none, which causes the actions to appear arbitrary (without reason, unwarranted by the facts).

Response
The alternatives were developed using the criteria in 43 CFR 8342.1 and are intended to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability. Impacts on these resources and the measures taken to minimize impacts are described in the sections pertaining to these resources. The full list of route designation criteria can be found in Appendix M, Section 3.2.2. In addition, the Travel Management Plan comment response report for the route designations also lists all resource values found along the route that led to the designation, along with the specific minimization criteria that are/is being applied. See the RMP website:http://www.blm.gov/co/st/en/fo/gjfo/rmp/rmp.html.

6.3 FEDERAL LAND POLICY AND MANAGEMENT ACT

6.3.1 Consistency

Summary
Alternatives B, C, and D go beyond the legal requirement they are required to meet. Proposed stipulations are inconsistent with other agencies' regulations and recommendations. State plans that must be addressed in federal planning acknowledging significant contributions of recreation are not acknowledged. The BLM should coordinate closely with CPW on habitat management objectives and building flexibility into the RMP.

Comments
Submission No: cfc0154
Commenter: K. Hoover
Comment: Alternative A also states that it meets the legal criteria that they are required to meet. The other Alternatives go way beyond what the law says the BLM should be doing, therefore making them BLM future job security or welfare. This is just a way to grow the government agency of the BLM.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Many of the newly proposed stipulations regarding wildlife are more restrictive than existing BLM stipulations or the requirements and guidelines of other agencies, such as the Colorado Parks and Wildlife Department (CPW). BLM must provide a thorough scientific discussion of the basis for the requirements of these stipulations.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: For example, stipulations TL-20 and TL-21, overlapping timing limitations, close areas from oil and gas development during certain date ranges to protect big game winter habitat and protection areas. These restrictions are unwarranted and exceed protections determined necessary by CPW, especially since the currant species populations protected by stipulations are healthy. Further, the six-month required closure for winter habitat stands to create a boom and bust cycle for the local community. Despite significant negative impacts, BLM makes no effort in the GJFO DRMP/DEIS to analyze how its stipulations would seriously curtail oil and gas exploration and development activities or the severe negative impacts they would have upon the local economies. BLM must also analyze the economic impact of these restrictions on oil and gas operations, as well as the affected state and local communities.

Submission No: emc0711
Commenter: Claire Moseley, Public Lands Advocacy
Comment: The species habitat delineations in the DEIS far exceed those identified by the Colorado Division of Parks and Wildlife (CPW). What is BLM's justification for these discrepancies, particularly due to the fact that the State manages the species for which habitat is identified? In fact, in 2009 the Departments of Interior, Agriculture and Energy signed a Memorandum of Understanding (MOU) with the Western Governors' Association (WGA) in which the departments agreed to coordinate with states in the identification and uniform mapping of wildlife corridors and crucial habitat. We ask BLM to explain why this has not been performed for this RMP revision. Moreover, we can find no reasoning or justification for BLM's maps to differ from those used by the State.

Submission No: cfc0021
Commenter: David Malehorn
Comment: State plans that must be addressed in federal planning acknowledging significant contributions of recreation are not acknowledged.

Submission No: emc0826
Commenter: Nick Payne, Theodore Roosevelt Conservation Partnership
Comment: TRCP recommends the BLM coordinate with Colorado Parks and Wildlife closely to 1) ensure land use planning and habitat management objectives in the final RMP and ROD achieve and sustain the state wildlife agency's population management objectives for species like sage grouse, mule deer, and others; and 2) ensure commitments made in the proposed RMP are flexible enough to change if state needs require such management flexibility.

Submission No: emc0694
Commenter: Bonnie Petersen
Comment: The BLM Proposed RMP for the GJFO fails to address numerous other State planning documents as required by federal law like the Statewide Comprehensive Outdoor Recreation Plan.

Response
The FLPMA requires the BLM to affirmatively act to plan and manage its resources and to consider the relative value of resource, and not necessarily the combination of use, in order to support multiple uses (see Glossary definition) at present and in the future.

The BLM is required to make judicious use of the land and to make periodic adjustments in use to address changing needs and conditions. The BLM is also required to consider the relative values of resources, and not necessarily the combination of uses that will give the greatest economic return or the greatest unit output.

BLM management stipulations cannot be less restrictive than law or regulation. A reasonable array of alternatives in resource management planning will almost always consider some protective measures beyond the bare legal minimum, because future changes in the value of a resource, intensity of use, and scientific knowledge regarding a resource may reveal the legal minimum to be insufficiently protective. This consideration of measures beyond the legal minimum is compatible with the BLM's authority under FLPMA and other applicable federal laws and regulations.

Except in specified circumstances, as a federal agency, the BLM is not required to comply with state laws and regulations. The BLM has consulted with CPW regarding fish and wildlife protective measures, but is not obligated to be perfectly consistent with CPW's guidelines.

Figures showing habitat for elk, mule deer, and sage-grouse are provided for informational and analytical purposes, and are not intended to represent critical habitat under the ESA. As discussed in Chapter 5, CPW is a cooperating agency with the BLM on the Draft RMP/EIS, and has participated in the planning process and development of alternatives. Additionally, the Draft RMP/EIS is consistent with CPW's Colorado Comprehensive Wildlife Conservation Strategy and the Colorado Division of Wildlife Strategic Plan 2010-2020.

The MOU with the Western Governors' Association described by the commenter has expired. Additionally, it placed no affirmative responsibility on the BLM or the DOI to delineate habitat boundaries exactly the same as any other state or federal agency. Habitat boundaries used in the Proposed RMP/Final EIS are delineated using the newest maps from CPW.

No change has been made to the Proposed RMP/Final EIS.

6.3.2 Multiple Use Mandate

Summary

The alternatives violate FLPMA when the BLM fails to adequately integrate the physical, biological, economic, and other sciences, proposes to manage land solely for wilderness characteristics, close routes to motorized use, and unnecessarily places an emphasis on resource protection at the expense of oil and gas.

Comments

Submission No: emc0893

Commenter: William Sparks, Black Hills Plateau Production, LLC

Comment: The GJFO DRMP/DEIS Fails to Utilize Scientifically Acceptable Methods of Analysis. The restrictions placed on oil and gas development through the GJFO DRMP/DEIS do not meet FLMPA's standards for scientific integrity. FLPMA mandates that BLM integrate the "physical, biological, economic, and other sciences: in developing land-use plans. 43 U.S.C. 1712. In developing an RMP, BLM must "estimate and display the physical, biological, economic, and social effects of implementing each alternative considered in detail.: 43 C.F.R. 1610.4-6. Further, the

objective of resource management planning is "to maximize resource values for the public through a rational, consistently applied set of regulations and procedures which promote the concept of multiple use management and ensure participation by the public, state, and local governments." 43 C.f.R. 1601.0-2.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Black Hills agrees that BLM's authority to designate new WSAs ended in 1993. While under FLMPA, BLM may have a duty to keep an inventory of its lands, BLM lacks the authority to protect lands with wilderness characteristics solely to protect "wilderness." Wilderness and "wilderness characteristics" are not a use of public lands, but designations of public lands. See 43 USC 1782, 1702 (1) (wilderness characteristics are not a stated use of public lands). Thus, BLM's preferred alternative to protect lands solely for the preservation of wilderness value violates FLPMA's mandate to manage public lands for multiple use and sustained yield.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: Contrary to FLPMA's mandate to manage public lands for multiple use, the GJFO DRMP/DEIS restricts oil and gas development and unnecessarily places an emphasis on other resources. The DRMP/DEIS must be analyzed within the context of BLM's legal obligations under the Federal Land Policy and Management Act (FLPMA), 43 U.S.C 1701, et seq., and the National Environmental Policy Act (NEPA), 42 U.S.C. 4321, et seq.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM must manage lands within the Planning Area for multiple use. A significant portion of the Planning Area is already leased for oil and gas development. These valid and existing lease rights must be respected. Further, Congress directed BLM to manage lands for resources such as energy development. Environmental concerns cannot be prioritized over existing oil and gas lease rights.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The GJFO DRMP/DEIS Must Follow the Concept of Multiple Use as Required by the Federal Land Policy and Management Act. Contrary to FLPMA's mandate to manage public lands for multiple use, the GJFO DRMP/DEIS restricts oil and gas development and unnecessarily places an emphasis on other resources. The DRMP/DEIS must be analyzed within the context of BLM's legal obligations under the Federal Land Policy and Management Act (FLPMA), 43 U.S.C 1701, et seq., and the National Environmental Policy Act (NEPA), 42 U.S.C. 4321, et seq.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: FLPMA identifies mineral exploration and production as one of the "principle or major uses" of public lands. 43 U.S.C. 1702 (1). Further, FLPMA emphasizes the importance of public resources to America's domestic energy supply and contains an express declaration of Congressional policy that BLM manage public lands" in a manner which recognizes the Nation's need for domestic sources of minerals, (and other commodities) from the public lands." 43 U.S.C. 1701(a)(12). FLPMA's definitions of multiple use and the major uses of public lands highlight the on-going utilization of natural resources on public lands for the benefit of the American people. 43 U.S.C. 1702(c).

Congress directed BLM to manage lands on a multiple-use basis, but also directed that it "make the most judicious use of the land for some of all of the public land resources" and, where appropriate, using "some land for less than all of the resources." 43 U.S.C 1702(c). In other words, as federal courts have recognized, Congress made it clear in FLPMA that "BLM need not permit all resource uses on a given parcel of land." Rocky Mtn Oil & Gas Asss'n v. Watt, 696 F.2d 734,738 (10th Cir. 1982).

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The first is of course that FLPMA requires BLM to manage for outdoor recreation and human occupancy and use, as we have noted above. The wholesale closures proposed are a direct violation of FLPMA Title I, Section 102(a)(8). Also in Title I of FLPMA, under "Definitions," the term "multiple use" quite clearly calls out recreation as one of the multiple uses. The roads and trails on BLM lands support all the recreation that occurs on BLM lands. In fact, for many types of outdoor recreation, the roads and trails themselves are the recreation resource, so closing most of the roads puts BLM in direct conflict with FLPMA. This would be the case with route K48, discussed above. BLM is removing a lawful and legally mandated resource from the available amenities.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: The error here is that the DRMP fails to acknowledge that such encumbrances are required, because they are directed by the statutory authorization for BLM. That is, BLM has been directed by Congress to develop those resources for human benefit, and to minimize the impact, but not to relinquish the development for the sake of achieving no impact. The productivity of the land for human uses is reliant on the continued development of these resources, including the associated impacts and mitigation.

The same deference can be claimed for the outdoor recreation that uses the roads and trails. In other words, the productivity of the land for human uses includes allowing the public the right to continue to use the existing roads and trails. The roads and trails are the product. Closing the roads and trails will reduce the productivity of the lands under the terms of the NEPA. Closing too many roads and trails will permanently constrain the productivity of the land. The soil on the road is being productive by being a road or trail. BLM must minimize the impact, but it is not directed by Congress to relinquish the roads and trails for the sake of no impact. In studying this DRMP, it appears that "no impact" to the vast majority of the planning area acreage is the BLM's goal. Yet this is already present; referencing a separate comment's calculations, the roads and trails occupy only 4/10ths of one percent of the planning area. 99.6% is unoccupied. It is left to the production of natural values.

Response
Section 202(c)(2) of the FLPMA requires the BLM to integrate physical, biological, economic, and other sciences in developing land use plans (43 USC 1712(c)(2)). FLPMA regulations 43 CFR 1610.4-3 and 1610.4-6 also require the BLM to analyze social, economic, and institutional information. Section 102(2)(A) of NEPA requires federal agencies to "insure the integrated use of the natural and social sciences . . . in planning and decision making" (42 USC 4332(2)(A)). The Draft RMP/EIS addresses all BLM resource programs present in the planning area and presents analysis of the tradeoffs of implementing each of the four alternatives. Where there are competing resource uses and values in the same area, Section 103(c) of FLPMA (43 USC 1702(c)) requires that the BLM manage the public lands and their various resource values so that they are utilized in the combination that will best meet multiple use and sustained yield mandates.

The FLPMA gives the BLM discretion to make decisions that satisfy a range of needs. The BLM is faced with the complicated task of managing a balance among the many competing uses to which land can be put. The BLM's multiple use mandate does not require that all uses be allowed on all areas of the public lands; that would preclude any kind of balance. The purpose of FLPMA's mandate is to require the BLM to evaluate and choose an appropriate balance of resource uses, which involves tradeoffs between competing uses. Section 102(8) of FLPMA specifically states that preservation and protection of lands in their natural condition is part of the BLM's mission. The FLPMA requires the BLM to make judicious use of the land and to make periodic adjustments in use to address changing needs and conditions. The BLM is also required to consider the relative values of resources and not necessarily the combination of uses that will give the greatest economic return or the greatest unit output.

While recreation is a use identified by FLPMA, the BLM has the discretion to limit uses that damage the long-term protection of lands in their natural condition and that interfere with both other recreational uses and other resource types (such as soil and water quality, and species habitat). Reduction of off-road motorized vehicle use does not constitute an absolute bar to all recreational uses, but merely limits one specific sub-type in favor of uses more compatible with long-term resource protection.

As provided in Chapter 1, Planning Criteria 11 states that valid existing rights will be protected during the resource management planning process. For discussion of stipulations or other restrictions in relation to existing lease rights, please see Section 6.2.7.8, Energy and Minerals.

No change has been made to the Proposed RMP/Final EIS.

6.3.3 Planning Issues and Criteria

Valid Existing Rights

Summary
The Draft RMP/EIS contains deficient or unclear planning issues and criteria for valid existing rights.

Comments
Submission No: emc0679
Commenter: Michael Burke, Grand Junction Area Chamber of Commerce
Comment: Alternatives B, C, and D do not address how they will protect valid existing rights by current lease holders, and this must be addressed.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: BLM must recognize valid existing lease rights and ensure that protective measures for special status species provide necessary operational flexibility.

Submission No: emc0893
Commenter: William Sparks, Black Hills Plateau Production, LLC
Comment: The GJFO DRMP/DEIS must be updated and revised to ensure that BLM recognizes and preserves valid existing lease rights. It should include a paragraph detailing the rights and preservation of valid existing oil and gas leases.

Submission No: emc0902
Commenter: Chris Clark, Occidental Petroleum Corporation
Comment: Page 1-14. Planning Criteria: The RMP/DEIS indicates that valid existing rights will be recognized.

COMMENT: Oxy is concerned that no explanation of what constitutes valid existing lease rights and how they relate to new land use decisions has been provided. Oxy recommends that BLM clearly state in the RMP/DEIS that the new restrictions proposed in the Preferred Alternative will not apply to lands under oil and gas lease as of the date of final RMP/EIS. Moreover, it must be made clear that BLM has no authority to impose these new restrictions through Conditions of Approval (COA) on applications for permit to drill (APD) if they would abrogate valid existing lease rights.

Response
Planning Criteria 11 states that the RMP will recognize valid existing rights. For discussion of stipulations or other restrictions in relation to existing lease rights, please see Section 6.2.7.8, Energy and Minerals. Operational flexibility with regards to addressing special-status species would be determined on a case-by-case basis going forward. Valid existing rights include all valid lease, permit, patent, ROWs, or other land use rights or authorizations in effect on the date of approval of this RMP. The Yates decision provides guidance on the BLM's authority to add COAs. The glossary has been updated with an improved definition of valid existing rights (see page Glossary-34). No other changes have been made to the Proposed RMP/Final EIS.

Travel Management and User Conflict

Summary
The Draft RMP/EIS contains deficient or unclear planning issues and criteria for travel management and user conflict.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: The BLM also improperly adopted this new Planning Criteria:
2. The BLM will incorporate key aspects of its OHV regulations, as well as ecological metrics, in planning criteria. (DEIS page 1-16)
Questions abound. For example, which aspects of its OHV regulations were incorporated into the planning criteria? Were these aspects also applied during the route evaluation process? What is the definition of "ecological metrics" and how will this topic be incorporated into the alternative development process? Which of the Planning Criteria contains these "ecological metrics?" (The term "ecological metrics" is used only once the DEIS.)

The result is a preferred alternative that is substantially similar to the "conservation" alternative, an "Issue Statement" for travel management that contains none of the extensive positive socioeconomic value while assuming habitat is being degraded and fragmented.

Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Planning Issue 1 Assumes Route Closures. The assumption that routes must be closed, when the existing footprint of all the routes equals well under 4/10ths of one percent of the entire 1 million acre land base, is misguided. This assumption is also not borne out by the analysis: The Environmental Consequences chapter does not indicate that there is any significant problem in the planning area under the existing situation.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Because of the absence of any legal standards, and the apparent direction in NEPA that we share the resources, BLM has made a basic mistake by placing the minimization or resolution of user conflicts in the foundation of the DRMP (in the Planning Issues). By placing this goal in the Planning Issues, BLM must address it, but because there is no statutory authorization, any management action BLM takes is obviously arbitrary. Any action BLM proposes can only be based on the prevailing personal philosophies of whoever happens to be writing the Plan and EIS, because there is no legal standard.

This renders a number of the proposed actions unlawful. It renders many of the existing management Decisions unlawful. Many of those Decisions are being carried forward into the revised RMP.

BLM must remove "minimizing user conflicts" from its Planning Issues, and adjust the plan accordingly. This could entail significant changes to the Plan. It will definitely entail significant changes to the present management Decisions, and most especially, BLM must change those Management Decisions that are being carried forward to the revised Final RMP.

Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: What Planning Issues were used to formulate the comprehensive travel plan? Was the Planning Issue we identified in section E-1 of our 1/9/2009 Scoping comment letter1? Suggestion: The FEIS should supplement the disclosure of Issue and Criteria development and how it was used in the Comprehensive Travel Plan.

Response
The BLM's Travel and Transportation Manual (BLM Manual 1626) allows RMPs to include the preparation of a Travel and Transportation Management Plan. It also includes as one of its goals to support the agency's mission and land use planning goals and objectives to provide for resource management, public and administrative access, transportation needs and promote sustainable landscapes for future generations. In compliance with the BLM's guidelines, therefore, the development of the Travel Management Plan in Appendix M of the Draft RMP/EIS required BLM staff to address Issues 1 and 3 as listed in Table 1-4, Planning Issue Categories and Statements, of the Draft RMP/EIS.

Minimizing user conflicts was identified as an issue during the public scoping process and affirmatively required under the BLM's implementing regulations and guidance. Because user conflict was identified as a controversy facing BLM-administered lands in the planning area, and because BLM regulations require user conflict to be addressed in Travel Management Plans, it was adopted as a planning issue to guide this RMP revision (see more discussion of user conflict in **Section 6.2.5.8**, Recreation – User Conflict). One of the primary tools for reducing user conflict is the BLM's recreation and visitor services program and specifically the guidance in IM 2011-004 and Appendix C of the Land Use Planning Handbook. These

guiding resources were used in the development of a range of alternatives for recreation, including the designation of ERMAs and SRMAs to reduce user conflict and enhance recreational opportunities and experiences.

The inclusion of minimizing user conflicts specifically as a goal of the RMP is also based in BLM guidance and regulations. As stated in Manual 1626, the recreation program has a specific need to recognize and manage motorized recreational use of OHVs and nonmotorized travel, such as foot, equestrian, and nonmotorized mechanical travel. The planning process should consider and address the full range of various modes of travel on public lands, not only motorized access needs. Manual 1626 goes on to affirmatively require each new RMP to include OHV area designations as open, limited, or closed to motorized travel activities. Criteria for these designations are found in 43 CFR 8342.1, which requires designations to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands; minimize harassment of wildlife; and minimize conflicts between off-road vehicle use and other existing or proposed recreational uses. The definition of the term "user conflict" has been added to the Proposed RMP/Final EIS Glossary, page G-35.

There is no requirement that planning issues be rooted in a statutory authorization. Rather, the BLM Land Use Planning Handbook (H-1601-1) describes planning issues as:

> disputes or controversies about existing and potential land and resource allocations, levels of resource use, production, and related management practices. Issues include resource use, development, and protection opportunities for consideration in the preparation of the RMP. These issues may stem from new information or changed circumstances, and the need to reassess the appropriate mix of allowable uses. Planning issues are addressed in and provide major focus for the development of alternatives.

Planning issue statements are also presented as questions to help maintain the focus of the analysis necessary to answer the questions (BLM NEPA Handbook [H-1790-1]).

Other resources considered during the preparation of the TMP included BLM's National Management Strategy for Motorized Off-highway Vehicle Use on Public Lands (2001); National Mountain Bicycling Strategic Action Plan, The BLM's Priorities for Recreation and Visitor Services (Purple Book May 2003), and BLM Technical Reference 9113-1: Planning and Conducting Route Inventories. No change has been made to the Proposed RMP/Final EIS.

The relationship between planning issues and the travel management plan is described in Appendix M, Section 2.3.1.

The planning criterion relating to OHV regulations and ecological metrics refers to the minimization criteria found in 43 CFR 8342.1 and resource-specific route designation criteria used in route designations for the TMP. Chapter 2 has been updated with new clarifications for each resource that better explain the relationship between that resource and the route designation criteria. In addition, the TMP has been updated with new information on the route monitoring strategy (see Appendix M, Section 5.6).

Planning Issues and an Encyclopedic EIS

Summary

As a whole, the planning issues are skewed toward environmental protection at the expense of other uses and are not rooted in a statutory authorization. This results in an encyclopedic document.

Comments

Submission No: emc0819

Commenter: Mark Krey

Comment: My concern is that this RMP imposes new restrictions developed from primarily an environmentalist's viewpoint. An EIS was prepared to support it. The governing authority is NEPA. The "Environment" is given nearly all the consideration and almost none is given to a couple of other "E" words: "Economic" and "Enjoyment". None of the 16 appendices appears to discuss the economy. It appears the BLM has made little effort to study the impacts of any of the Alternatives on the economic and recreational benefits this resource area provides. Of the RMP's 17 Planning Issue Categories listed in the Executive Summary, most are concerned only with environmental protection. Even if the issue is not overtly environmental, like Issue 1: Travel Management, the associated statements mostly defend environmental concerns:

How will motorized, nonmotorized, and mechanized travel be managed to provide commodity, amenity, and recreation opportunities, reduce user conflicts, enforce route designations and closures, reduce fragmentation and habitat degradation, and protect natural and cultural resources?

Submission No: emc0693

Commenter: Thomas Hundtroft, Bookcliff Rattlers

Comment: To summarize, the 17 items listed as "Planning Issues" are actually just subject areas. There are no controversies or disputes identified with any of them. BLM has not followed CEQ direction for compliance with Section 102(E) as set forth in §1500.1(b) or §1500.2(b). BLM has not even followed its own definition from its own Executive Summary. The Planning Issues present no problem with the present situation that needs to be solved nor do they present any future condition that would improve the present situation. It appears that the Planning Issues were developed (listed) before the proposals, and then the ID Team thought up three new ways to manage the activities in the Planning Area. This sounds very much like a team which is writing this revision only to comply with the law 12, and not because there is a compelling need for major changes to the present management scenario.

That explains why this EIS is simply an encyclopedic listing of everything that lies within the Planning Area, and then another encyclopedic list of anything that may affect those things. In BLM's presentation, everything is the same as everything else. This DRMP is in direct violation of 40CFR §1500.4 :

"(b) Preparing analytic rather than encyclopedic environmental impact statements." (emphasis added)

And another, further violation, of 1500.4,

"(c) Discussing only briefly issues other than significant ones (§1502.2(b))."

We don't know which issues are significant because we don't know what the issues are. The result is, there is no analysis, in the sense that CEQ intends, which is a cause-and-effect analysis. Not a listing, but an analysis. That is, in

an analysis we have a human activity, and we have a change in the natural environment, and we have a statistically reliable causal relationship. Nothing like that is presented anywhere in this DRMP analysis.

At DRMP the BLM cites the FLPMA:

"The FLPMA requires that the BLM "develop, maintain, and, when appropriate, revise land use plans." (emphasis added)

If, after all the resources BLM put into this DRMP, there are no controversies or disputes identified in the DRMP, it is not appropriate to make radical revisions of the 1987 RMP. BLM will be violating the FLPMA if BLM makes any radical and controversial changes, such as the changes that are proposed for the travel system.

The only rational, cost-effective solution is to craft a ROD which is comprised of mostly elements from Alternative A, No Action. We emphasize, the DRMP identifies no issues according to its own definition of issues. What is written in the DRMP is what is in the record. BLM cannot justify any radical changes with this document.

Response
The EIS for the RMP is a programmatic document, not a project-specific document; as such, it must cover all programs the BLM manages in the planning area. Therefore, the BLM has described these resources and programs in a summarized fashion in this programmatic document. Land use planning-level decisions are broad in scope and do not require an exhaustive gathering and analysis of site-specific inventory data. The structure of a programmatic EIS allows site-specific or implementation-level analysis to be conducted at a later stage, which is consistent with NEPA practice and CEQ guidance. No change has been made to the Proposed RMP/Final EIS in response to this issue topic.

Section 1.6 describes the extensive public scoping and issue-identification process, which involved public comment, coordination with stakeholders, and consultation with Native American tribes and federal, state, and local agencies to identify concerns held by the public and other agencies regarding the planning and management of the GJFO. The Planning Issues listed in Table 1-4, Planning Issue Categories and Statements, of the Draft RMP/EIS, were developed through this public process, in compliance with the BLM's Land Use Planning Handbook and the NEPA scoping process described in 40 CFR 1501.7.

Economic analysis is found in the text of the Draft RMP/EIS, not in the appendices. Chapter 4, Section 4.6.3, Socioeconomics and Environmental Justice, has an extensive discussion of the economic impact of the various alternatives, evaluating short- and long-term impacts on the recreation, grazing, and energy development sectors.

Noise and Soundscapes

Summary
The Draft RMP/EIS did not disclose its authority for managing noise and soundscapes, nor did it discuss the issue in depth.

Comments
Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: Planning Issue # 16: What measures should the BLM implement to preserve the natural soundscape in the planning area?

BLM's notion that they are under a legal mandate to manage for "natural soundscapes" is "fanciful." It is not set forth in FLPMA that the BLM undertake any such task. This is again, BLM saying to the Congress, "BLM will do whatever it wishes, and is not bound by any legislative direction." Furthermore, there are noise nuisance regulations in the CFR and there are already state laws in place regulating noise. This has already been decided by law and needs no further attention via this RMP. BLM is acting outside its jurisdiction by declaring a responsibility to manage for a "natural soundscape." That is a National Park Service standard, not a BLM standard or requirement.

Submission No: rmc0031
Commenter: Bill Hamann
Comment: Noise was listed in Table 1-4 as a planning issue; i.e, 'what measures should be taken to preserve the natural soundscape'. However, I could find no discussion of this issue in the DRMP. The allowable limit for motorized trail users is 94 decibels; which is equivalent to a chainsaw or jackhammer. There is absolutely no reason or rationale for setting the noise limit so high in a natural (backcountry) setting. It is presumably part of the motorized culture, but its adverse impacts on other users and wildlife are so great that it simply cannot be justified. The State of Colorado statute on noise limits decibels to 70 in industrial zones; this is equivalent to freeway traffic. Noise should be limited to 60 decibels in the backcountry (which is still above background noise, but tolerable).

Response
Planning issues are disputes or controversies about existing and potential land and resource allocations, levels of resource use, production, and related management practices. Issues include resource use, development, and protection opportunities for consideration in the preparation of the RMP. These issues may stem from new information or changed circumstances, and the need to reassess the appropriate mix of allowable uses. A legal mandate is not a required criterion for each planning issue.

The RMP/EIS contains many actions that protect soundscapes in the range of alternatives (e.g., managing lands for wilderness characteristics, closing areas and routes to motorized use, applying BMPs (e.g., FWS-51, M&E-45, etc.) for wildlife, and managing for naturalness in WSAs). Analysis of noise impacts on wildlife and special status species can be found in Sections 4.3.5, Fish and Wildlife, and 4.3.6, Socioeconomics and Environmental Justice, and analysis of noise impacts on recreation can be found in Section 4.4.3, Recreation and Visitor Services, of the Draft RMP/EIS. No change has been made to the Proposed RMP/Final EIS.

6.3.4 Planning Process Procedures

Master Leasing Plan

Summary
The BLM must provide the public and stakeholders with the opportunity to review and comment on the range of alternatives and analysis for the Shale Ridges MLP.

Comments
Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The BLM must provide the public and stakeholders with the opportunity to review and comment on the range of alternatives and analysis for the Shale Ridges MLP. This can be done formally by soliciting comments on the Final RMP or informally through the issuance of a newsletter on the Shale Ridges MLP.

Response
The Master Leasing Plan, which was presented as Appendix P in the Draft RMP/EIS, has been incorporated into the Proposed RMP/Final EIS. The MLP analyzed is the same MLP boundary as proposed by the public. Please see page 2-386, for a description of the MLP alternatives. The corresponding analysis can be found in Chapter 4, pages 4-34, 4-75, 4-104, 4-131, 4-161, 4-203, 4-227, 4-341, 4-379, and 4-406.

Implementing the RMP

Summary
The BLM does not have the capacity to implement the RMP.

Comments
Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: According to the 40 Questions # 19B, while BLM is certainly within its legal authority to analyze proposals that are outside its ability to implement, it must be disclosed in the Final RMP and the ROD that the proposal will very likely be outside the BLM's ability to implement. BLM must disclose what the predictable outcome of the crowding will be, and it must disclose the likelihood of failure. BLM must disclose the opposition to its proposal, and that the amount of opposition will further hamper BLM's ability to implement. BLM must disclose that it does not have the enforcement capacity to exert such tight control over one million acres. BLM must disclose that it does not have the capability to "limit the number of users," nor does it have the resources to operate and enforce a permit system for the areas BLM thinks need such limitations. BLM must be able to provide a rational explanation and appropriate (proportionate) justification for these radical changes. What do we mean by proportionate? We mean that the proposed changes should match the actual scale of real negative effects. There is nothing in the DRMP that provides this.

Response
The CEQ guidance cited (40 Questions, question 2b) refers not to the intentional violation of land-management rules by users of the public lands, but to alternatives that are not fully funded by the lead

agency or that fall outside its legal jurisdiction. The CEQ still finds such an alternative reasonable for evaluation. The potential failure of the user base to comply with new OHV designations does not on its own make any of the alternatives unreasonable within the context of NEPA. No change has been made to the Proposed RMP/Final EIS.

Scoping Process

Summary
The BLM instituted a flawed scoping process.

Comments
Submission No: emc0690
Commenter: Brian Hawthorne, Blue Ribbon Coalition
Comment: The Scoping Summary Report (Scoping Report) indicates the agency employed an improper issue development process. The result narrowed the range of alternatives, pushed the "preferred alternative" into a predetermined outcome, distorted the disclosure and analysis of impacts and installed a biased approach to motorized recreation.

Response
Section 1.6 describes the extensive public scoping and issue-identification process, which involved public comment, coordination with stakeholders, and consultation with Native American tribes and federal, state, and local agencies to identify concerns held by the public and other agencies regarding the planning and management of the GJFO. The Planning Issues listed in Table 1-4, Planning Issue Categories and Statements, of the Draft RMP/EIS were developed through this public process, in compliance with the BLM's Land Use Planning Handbook and the NEPA scoping process described in 40 CFR 1501.7. No change has been made to the Proposed RMP/Final EIS.

Principal or Major Land Uses

Summary
The BLM needs to notify Congress when implementing a management decision that one or more of the principal or major uses is eliminated for two or more years on a tract of land more than 100,000 acres.

Comments
Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: FLPMA also requires the Secretary of the Interior to comply with specified procedural requirements before making a management decision that eliminates a principal or major use of the public lands for a period of two or more years on a tract of land more than 100,000 acres in size. 43 U.S.C. § 1712(e). Oil and gas development is defined as a principal or major use of the public lands. 43 C.F.R. § 1702(l). Under Alternatives B and C, the BLM would make over 100,000 acres unavailable to oil and gas leasing for a period of two years or more, yet BLM has not complied with the clear and unequivocal requirements of FLPMA. BLM must notify Congress of its intent to close significant areas to future oil and gas development prior to finalizing the GJ RMP. Given these difficult economic times, and the huge negative impact Alternatives B and C would have upon the

regional economy, it is particularly important for the BLM to notify Congress so it understands the impact of the BLM's decision.

Response
As required by FLPMA Section 202 (E)(2), the BLM would report to the Secretary to the House of Representatives and the Senate "any management decision or action pursuant to a management decision that excludes (that is, totally eliminates) one or more of the principal or major uses for two or more years with respect to a tract of land of one hundred thousand acres." When the Final RMP/Record of Decision is completed, the BLM will arrange to report any contiguous tracts of land of 100,000 or greater where one or more of the principal or major uses are excluded, if any exist in the final decision.

6.4 EDITS

6.4.1 Definitions

Mitigation

Summary
The BLM should modify its definition of "mitigation" and its use in the RMP.

Comments
Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy in Colorado
Comment: Recommendations - We encourage BLM to modify its definition of *mitigate* as follows (see strikethrough and italics) to reflect the opportunity to achieve no net loss, or even net gain, to priority species and vegetation: "Alleviation, ~~or~~ lessening, or *achieving net positive impact* of possible adverse effects on a resource by applying appropriate protective measures or adequate scientific study. Mitigation may be achieved by avoidance, minimization, rectification, reduction, and compensation" (Glossary-18).

We encourage BLM to repeat this definition at the end of the first paragraph of Appendix B, Stipulations, and in other parts of the plan as appropriate, to make it clear to the reader that "mitigate" includes all of the actions described above. We recommend that BLM revisit the use of the term "mitigate" and its associated components throughout the RMP, particularly in Table 2-2, and reflect the full mitigation hierarchy or clarify where the full mitigation hierarchy is not intended for use. In general we urge BLM to preserve its ability to use compensatory mitigation by clearly authorizing its use in the plan. For example, we would recommend that BLM modify STIPULATION CSU-10 as follows (see strikethroughs and italics), "Wildlife Habitat. Require proponents of surface disturbing activities to implement specific measures to ~~reduce~~ *mitigate* (i.e., avoid, minimize, rectify, reduce, and compensate for) impacts of operations on wildlife and wildlife habitat within high-value or crucial wildlife habitat…"

Response
The definition of mitigation in the Glossary (page G-19) conforms to the CEQ regulations. The definition identifies rectification and compensation as two methods of achieving mitigation that could also result in a net positive impact. The BLM agrees that CSU-10 should be edited to include "mitigate" as the proper descriptor; use of "reduce" was in error. See Appendix B, Table B-6.

Intermittent Streams

Summary
The definition for intermittent streams is incorrect and needs to be modified.

Comments
Submission No: emc0903
Commenter: Corey Heaps, Rhino Energy
Comment: Intermittent Steam as defined on page Glossary-14 is incorrect and should be revised. The definition shown is for an ephemeral stream according to 30 CFR 701. Intermittent is defined as 'a stream that is below local water table for at least some part of the year, and obtains its flow from both surface runoff and groundwater discharge. An Ephemeral stream flows in response to snow melt. An intermittent stream has flow during certain times of the year. Rainfall is supplemental to an intermittent stream.

Response
The BLM agrees with the commenter and has revised the definition of Intermittent Stream in the Glossary (see page Glossary-14).

Administrative Use and User Conflict

Summary
The Draft RMP/EIS fails to define "administrative use" and why this designation is needed. It also fails to define "user conflict."

Comments
Submission No: emc0789 and rmc0076
Commenter: Keith Fife, Mesa County; and Steve Acquafresca, Mesa County Board of County Commissioners
Comment: The phrase "user conflict," used repeatedly in the DRMP, is not defined anywhere in the DRMP.

Submission No: emc0789
Commenter: Keith Fife, Mesa County
Comment: Administrative users: The DRMP fails to: define this term; describe who will be allowed to use the routes; and provide any information about whether the denial of use would have any administrative remedy.

Submission No: rmc0076
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Administrative Closures: The DRMP fails to disclose what the objective is of denying general public use on these routes.

Submission No: rmc0086
Commenter: William Edwards, District Ranger, Gunnison, Uncompahgre, and Grand Mesa National Forests
Comment: I will start the comments with questions concerning administrative access.
• What is the BLM's definition of "administrative access?"

• For those routes identified as providing administrative access, can they also be used for foot, horse or bike travel?
• Will those routes designated as administrative in nature require additional written authorization from the BLM before motorized travel is allowed to occur?
• Will they be used by more than BLM personnel and for what purposes would they be used?
• How will motorized public access be controlled on those routes (i.e., rocks, gates, etc.)?

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: We have noted three major omissions in the DRMP. In studying the alternatives, we note that BLM proposes to close 980 miles of routes to public use, and only "permitted" or "administrative" use would be allowed. The first omission is, BLM fails to define this term. We can't tell from the DRMP text what exactly an administrative route is. The second omission is, BLM has failed to tell us who will be allowed to use the routes. We can't tell whether BLM means only BLM personnel, or only grazing permittees, or only oil and gas operators are qualified to use the routes.

Perhaps BLM intends for all of these people to obtain some kind of permit, yet no procedure for obtaining one is outlined or even suggested in the DRMP. BLM fails to inform us of how to gain permission, or how to know whether one has the permission to use these routes. Perhaps our organization, the Bookcliff Rattlers, can gain access by applying for a permit to use the routes. We wonder if there would be a time limit on the use of the routes. Furthermore, BLM doesn't tell us whether the seasonal closures would apply to permitted use.

And finally, BLM doesn't provide any information about whether the denial of use would have any administrative remedy. Could an individual or organization appeal such a denial?

Response
To address questions about user conflict, the Glossary has been updated in the Proposed RMP/Final EIS to include this definition of user conflict (see page Glossary-33):

> A state of personal or social disharmony resulting from unrealized or diminished achievement of a recreationist's or user group's desired or expected experiences. Factors which contribute to the achievement of desired experiences include: physical settings (e.g., remoteness, naturalness, human-made facilities), social settings (e.g., number of contacts with other users, group size, what other users are doing, evidence of use – noise, tracks, resource damage), and operational settings (e.g., access opportunities, type and quantity of visitor services and management controls). Circumstances which compromise or interfere with achievement a recreationist's expectations result in user conflict.

> To address questions about administrative use and access, the Glossary has been updated in the Proposed RMP/Final EIS to include this definition of administrative use on designated routes (see page Glossary-1): "Administrative Routes: Administrative routes are those that are limited to authorized users (typically motorized access). These are existing routes that lead to developments that have an administrative purpose, where the BLM or a permitted user must have access for regular maintenance or operation. These authorized developments could include such items as power lines, cabins, weather stations, communication sites, spring developments, corrals, or water troughs (H-8342 Travel and Transportation Handbook)." This is a separate

designation from the seasonal limitations and thus administrative use would not be subject to any seasonal limitation. As with all route designations, a route carrying the administrative use designation may be changed to a different designation if new information warrants a change. This process is outlined in Appendix M, Section 5.6.

6.4.2 Typographical and Factual Errors

Livestock Grazing

Summary
The dates stated in Appendix I for the Whitewater Common and North Fork of Kannah Creek allotments are incorrect.

Comments
Submission No: cfc0183
Commenter: Howard and Janie VanWinkle
Comment: The dates located in Appendix J do not match what the current grazing dates actually are. Correct dates are as follows:
Whitewater Common:
04/20 – 06/01 and 12/1 – 01/15
North Fork of Kannah Creek
04/20 – 06/01 and 12/1 – 01/15

Response
The BLM recently completed a decision that altered the Van Winkle's scheduled grazing dates from the original 10 year permit renewal Environmental Assessment completed in 2010 (CO-130-2010-067-EA). The new decision and Determination of NEPA Adequacy was overlooked, and the BLM has made necessary changes to the Proposed RMP/Final EIS to match current and up-to-date grazing schedules as follows:

- Whitewater Common: 04/20 through 06/01 and 12/1 through 01/15
- North Fork of Kannah Creek: 04/20 through 06/01 and 12/1 through 01/15

See pages J-14 and J-16 for the updated schedules.

Geology and Minerals

Summary
The Proposed RMP/Final EIS should be edited to include several corrections regarding geology and minerals resources in the planning area.

Comments
Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-30, in last sentence in Dakota Sandstone discussion, it is stated that the Dakota Sandstone in many locations forms a very hard, resistant quartzite. Comment: This hard resistant quartzite (orthoquartzite) is not in the Dakota but in the underlying Burro Canyon Formation where it occurs locally and is an expression of silicification in a regolith below the unconformity prior to deposition of the Dakota Sandstone. This hard unit is distinctive and occurs in many places in eastern Utah and western Colorado.

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-33, in last paragraph, the first sentence should end with "east", and the last sentence should end with "swamp" and "lagoonal" environments.

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-30, in 3rd paragraph, it should be: The unit thickens to the "west and southwest" . . . This is because the Navajo Sandstone thickens toward Utah and Zion National Park - it is absent just east of Uravan.

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-29, in first paragraph, it should be: The Chinle Formation, of "Late" Triassic age. . .

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-36, in 4th paragraph, the Green River Formation members listed should include the "Anvil points" Member at the start of sentence, as well as the Garden Gulch, Douglas Creek, and Parachute Creek Members listed.

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-40, in 2nd paragraph, 2nd sentence, reference should be to the "Uinta" basin.

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-100 Regarding the location for the Piceance bladderpod - there is no Book Cliffs north of DeBeque - they are the Roan Cliffs. This also applies in p. 3-101 regarding the Roan Cliffs blazing star and sunloving meadowrue.

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-169, in 2nd sentence under Locatable Minerals, it should be: "Placer and lode gold"

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-172, in the 4th paragraph: Orthoquartzite is in the Burro Canyon Formation, not the Dakota Sandstone. (Quartzite is a metamorphic rock)

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-177, in the second sentence under Gold: Alluvial plane should be alluvial plain. In the second paragraph under Uranium/Vanadium: should be "price of uranium and vanadium will. . . "

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-178, in the 3rd paragraph under Mineral Materials: Development potential of the Burro Canyon Formation (not Dakota Sandstone) is low.

Response
Requested changes have been made in each location in Chapter 3 in the Proposed RMP/Final EIS.

Old Spanish Trail

Summary
The Proposed RMP/Final EIS should recognize the Old Spanish Trail Association partnership, correct confusing language in Appendix I, and clarify an action in Chapter 2.

Comments
Submission No: emc0514
Commenter: Michael Elliot, National Park Service
Comment: Add the Old Spanish Trail Association by name to the list in row 3 of the same table listing partnerships. The association is identified elsewhere in the document as a principal partner, so this suggestion is just for consistency.

Submission No: emc0514
Commenter: Michael Elliot, National Park Service
Comment: Please check in Appendix I, page I-61, there is a confusing entry that seems to imply that the Salt Lake Wagon Road, and not the Old Spanish Trail is a designated NHT.

Submission No: emc0514
Commenter: Michael Elliot, National Park Service
Comment: Edit the paragraph in the table on the top of page 2-210 to the following:

"Objective: Manage the congressionally designated Old Spanish National Historic Trail in (cross out: consideration) accordance with (cross out: of) the BLM and National Park Service (NPS) jointly developed trailwide comprehensive plan and in coordination with the NPS (Figures 2-91 [Alternative A], 2-92 [Alternative B], 2-93 [Alternative C], and 2-94 [Alternative D], Appendix A). Identify the nature and purposes of the Old Spanish National Historic Trail as per the provisions of the National Trails System Act and the comprehensive

management plan, and (cross out:, to the greatest extent possible,) manage the trail in a manner so as to safeguard the nature and purpose of the trail and in a manner that protects the values for which the trail was designated."

Response
The Proposed RMP/Final EIS has been edited to add the Old Spanish Trail Association to page 2-452, to clarify text in Appendix I on page I-61, and edit the paragraph in the table on page 2-452.

Miscellaneous

Summary
Commenters identified typographical and factual errors in the Draft RMP/EIS that should be corrected.

Comments
Submission No: emc0903
Commenter: Corey Heaps, Rhino Western Operations
Comment: There is a reference error on page 2-82, See Figures 2-51, Appendix B (Should reference Appendix A).

Submission No: cfc0221
Commenter: Sandra Kiser
Comment: There's a word missing under Alternative C: Routes designated for "all" modes of travel: 1,746 miles

Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. C-3-34, in second sentence on top of page: "National Resource Conservation Service" should be Natural Resources Conservation Service.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Alt C - Misspelled "focus"

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Wrong table referenced - should be 4-48

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: Wrong table referenced - should be 4-49

Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: [Recreational shooting] The chart in Chapter 2 Alternatives pages 2-135 and 2-136 does not list Palisade Rims ERMA in Alternative B for closure, but is identified as a proposed Alternative B closure in Appendix K page 10. Additionally, the North Fruita Desert SMA Bike Emphasis Area is listed for closure only in Alternative A page 2-135, but it is identified as a proposed closure for Alternative A and D in Appendix K page 10.

Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-48, the 2nd Action. Does this allowance of taking salt cedar and Russian olive conflict with the action on Page 2-123, where commercial and private harvesting of these and other invasive woody species is to be prohibited?

Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: In Chapter 4 Alternatives on page 4-398 there is a brief statement for each of the four alternatives relative to the overall effect on recreational shooting. What appears contradictory is that it states that Alternative C "contains the fewest No Shooting Areas of the action alternatives because there are fewer SRMAs (Special Recreation Management Areas) where shooting would conflict with concentrated recreation opportunities." Yet, it states that Alternative D "would manage the fewest acres as closed to target shooting." The table in the Fact Sheet on recreational target shooting shows that Alternative D would close the least acres to shooting. These two statements need to be brought into harmony with each other.

Submission No: emc0631
Commenter: John Strand
Comment: Demaree Name Error: Zone B, and all other RMP documents using this name. Demaree is spelled Demeree on all maps on which it occurs as the name of this Wilderness Study Area. USGS uses the Demaree spelling for the name of the canyon on its 7.5 minute series 'Howard Canyon Quadrangle'. The GJFO website uses the Demaree spelling on its web page for this WSA. The 2008 Grand Junction Surface Management Status 1:100,000-Scale Topographic Map uses the Demeree spelling for the WSA, but then uses the Demaree spelling for the actual canyon of that name. This spelling error appears to have its origin from the 1:100,000-Scale map. If this is not believed to be an error, then it would be appropriate to conduct historical research to determine the origin of this name and correct spelling so the historical connection is properly maintained.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: BLM's information suggests the assessed value of oil and gas in Mesa County, Colorado grew from 9.4 million to 2.8 million between 2000 and 2009. GJ DRMP/EIS, pg. 3-271. There is likely a typo in the BLM's information.

Submission No: emc0693
Commenter: Thomas Hundtroft, Bookcliff Rattlers
Comment: If we have as our baseline the total available miles right now, it starts at 3,322. This is the figure verbally stated by BLM during the comment period. While it is in conflict with the number given in the BLM flyer announcing the December 2008 public meetings (3,700) this also conflicts with the totals from Table 1 (DRMP M-13 and M-14). In that table we begin with 3,283 miles in the no-action alternative. To confuse matters even more, we have Table 4-18 which starts us with 3,568 miles. Table 4-23 shows us with 3,838 miles. Table 21 shows 3,266. And at page 4-61 we have a total of 3,357 miles. BLM does not disclose how it has arrived at so many conflicting tables and numbers.

Submission No: rmc0095
Commenter: William Hughes
Comment: The next problem I encountered in trying to analyze the motorized proposals was trying to make the numbers add up. I referred to tables 4-18, 4-21, 4-23, and 4-25 as these were the most specific as to miles of roads and trails that were involved, and they were the only tables I could find that actually listed road and trail miles so I could compare the alternatives. Unfortunately, when I tried to cross check the four tables the numbers didn't add up in two of the four. I prepared my own table from these numbers to demonstrate the discrepancies in the BLM's data and to allow a real graphic view of the proposals the BLM is making. The impact on the motorized community is stunning! Then move on to the inaccuracies in the data and another 262 miles of roads disappear between Alternative A and Alternative B. I derived the Total Miles figure by adding up all the individual columns, the Miles per Chart Totals I derived by adding just the numbers the BLM listed at the bottom of each chart in the Total column. The whole issue has begun to feel to me like a giant shell game played by some carnie, definitely not like something that has been designed to present a clear picture of the issue to the public.

Submission No: emc0912
Commenter: Jason Bertolacci, International Mountain Bicycling Association
Comment: The draft repeatedly uses "motorized and mechanized" or "mechanized/motorized" to discuss travel management. This phrasing inaccurately links bicycles with motorized uses and results in management of mountain bicycles as if they were motorized. This is reflected in GJMP where travel restrictions and/or prohibitions are placed on travel for both motorized and mechanized travel. The 2002 National Mountain Bicycling Strategic Action Plan has an action item dedicated to clarification of the "distinction between non--motorized/mechanical transport and Motorized uses."[1] As currently drafted, this plan runs counter to that objective. We request the planning team separate the two terms and create distinct management policies unique to each form of recreational use.

Response
The BLM appreciates identification of these errors. Most have been corrected in the Proposed RMP/Final EIS. Regarding submission emc0912, the Proposed RMP/Final EIS has been edited for clarity regarding motorized and mechanized travel. The separate management actions for these two types of travel remain, including two distinct sets of route designations.

The following has not been corrected for the reason provided:

1. Submission No. emc0903: Comment: "*There is a reference error on page 2-82, See Figures 2-51, Appendix B (Should reference Appendix A).*" The reference on page 2-82 appears correct. Stipulation TL-12 for Alternatives B, C, and D states "See Figures 2-51 (Alternative B), 2-52 (Alternative C), and 2-53 (Alternative D) in Appendix A." All of the figures are listed as being in Appendix A instead of Appendix B, which is correct.

6.4.3 Clarifications

General

Summary
Commenters suggest editing the Proposed RMP/Final EIS to clarify certain topics.

Comments
Submission No: emc0624
Commenter: Craig Goodknight
Comment: p. 3-55, in 1st paragraph of Groundwater and groundwater Quality - What part of the Colorado Plateau is referred to when the statement is made "a broad plateau averaging 8,200 to 11,500 feet dominates the region"? Most of the Colorado Plateau is at an elevation of 4,000 to 7,000 feet.

Submission No: emc0469
Commenter: Suzanne Sellers, Colorado Water Conservation Board
Comment: Table ES-4 indicates that the BLM's preferred alternative (alternative B) is to find 11.53 miles of the Dolores River eligible for inclusion in the National Wild and Scenic Rivers Systems. While Tables 2-2, 2-5, Chapter 4 and Figure 2-71 (referenced by Table ES-4) indicates that the 11.53 miles of river are being recommended as suitable. Additionally, Table 2.2 refers to the description of the segments recommended for eligibility/suitability on the Dolores River provided in Appendix C. However, page C-3-33 of Appendix C, provides a description of suitable segments which total 19.9 miles and appears to contradict the 11.53 miles cited above.

Can you confirm that these segments of the Dolores River are being recommended as suitable under Alternative B and that the mileage is 11.53?

Submission No: emc0536
Commenter: Boone and Crocket Club
Comment: While the RMP/EIS provides some explanation for the closures to recreational shooting identified in each of the four alternatives, the manner in which this information is provided is scattered within Chapters 2, 3, 4, Appendix A, Appendix K and the RMP background documents and Fact Sheet. The plan could be improved and made more reviewer-friendly if a list was made as in Appendix K of all the proposed closures and it identified which Alternatives they fall in, along with an explanation for each of the proposed closures. The chart in Chapter 2 Alternatives pages 2-135 and 2-136 does not list Palisade Rims ERMA in Alternative B for closure, but is identified as a proposed Alternative B closure in Appendix K page 10. Additionally, the North Fruita Desert SMA Bike Emphasis Area is listed for closure only in Alternative A page 2-135, but it is identified as a proposed closure for Alternative A and D in Appendix K page 10.

Submission No: emc0917
Commenter: Juli Slivka, The Wilderness Society
Comment: The RMP should clarify that SRPs can and will be denied if BLM lacks capacity to administer the permit properly.

Submission No: emc0845
Commenter: Ron Lambeth
Comment: Page 2-78 & 79, Rough Canyon. Badger Wash, and Pyramid Rock ACECs seem to be missing in Alts. B and C lists. The first two have recognized wildlife values.

Alt. B has Glade Park WEA. Why doesn't Alt. C? Same thing with Roan and Carr Creeks WEAs, are they included in larger areas or in some other way?

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: Estimated Wells and Well Pads. There appears to be inconsistencies in the numbers presented for well pads and number of wells in the DRMP. The DRMP states on page 3-166 that there have been 30 approved multi-well pads with 6 wells. However, on page 3-167, the DRMP states there are 170 federal wells on multiple well pads for an average of 7 wells per multi-well pad. We request that the language be clarified and reflect actual more updated numbers.

Response
The BLM appreciates identification of these unclear statements. Most have been clarified in the Proposed RMP/Final EIS. The following have not been clarified for the reasons provided:

1. Submission No: emc0917. Comment: "The RMP should clarify that SRPs can and will be denied if BLM lacks capacity to administer the permit properly." The BLM does not plan to lack administrative capacity to properly implement the SRP program. Criteria for denying permits are outlined in Appendix L and no change has been made to the Proposed RMP/Final EIS.
2. Submission No: emc0845. Comment: Page 2-78 & 79, Rough Canyon. Badger Wash, and Pyramid Rock ACECs seem to be missing in Alts. B and C lists. The first two have recognized wildlife values. Alt. B has Glade Park WEA. Why doesn't Alt. C? Same thing with Roan and Carr Creeks WEAs, are they included in larger areas or in some other way?" Badger Wash and Pyramid Rock ACECs do not have wildlife-related relevance and importance criteria. Glade Park and Roan and Carr Creek wildlife emphasis areas are not listed in Alternative C because they are not proposed for management as wildlife emphasis areas under that alternative; they are proposed for designation as ACECs instead.

Maps and Figures

Summary
Commenters suggested edits to the MLP and travel management figures.

Comments
Submission No: emc0871
Commenter: Tilda Evans, Grand Valley Anglers
Comment: One oddity was noticed when looking at Travel Maps for the West Creek area in the narrows section (from Unaweep Seep to Ute Creek). The Travel Management Designation Map for Alternative B shows the area along the creek as "Open to Foot Travel Only." The Travel Management Map in Appendix A for Alt. B seems to show the corridor as "Open to all on designated Routes." Not sure which alternative was intended or if the intention should really be to match the surrounding areas which would restrict the corridor to foot or horse only.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: New stipulations will not affect land already leased unless a lease expires. Please add a map (Figure) overlaying areas to be closed and open to leasing on top of areas already leased and existing wells. (figures 2-42 - 2-45). Figures N-2 and N-4 do not cover all of Mesa County.

Response
A new figure (Figure 4-8) has been prepared that shows existing leases and wells along with the areas that would be open and closed to fluid mineral leasing under Alternative B.

The travel management figure for Alternative B (now the Proposed RMP) has been updated in response to public comments. The area from Unaweep Seep to Ute Creek was not labeled as open to foot travel only (the only area under Alternative B labeled as such was Pyramid Rock). The BLM believes the comment in regards to Figures N-2 and N-4 pertains to the Master Leasing Plan appendix (Appendix P of the Draft RMP/EIS). Figures for the MLP do not cover all of Mesa County because the MLP boundary does not conform to the county boundary; no change has been made to the Proposed RMP/Final EIS.

Air Resources

Summary
Commenters request clarification for two actions in Chapter 2.

Comments
Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 2-24, Table 2-2, Air Resources: First Goal, first action item - The first action item mentions that COA's, lease notices and stipulations will be developed for surface-disturbing activities. Please specify if this action item refers strictly to construction activities that will primarily result in fugitive dust or if it includes other actions resulting in emissions such as releases from well heads, compressors, condensate tanks, etc.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest
Comment: Page 4-15, Section 4.3.1. We suggest that the last full sentence be modified to read, "Actions that reduce or control emissions of air pollutants can be very effective at *maintaining or* improving air quality. . . "

Response
The action covering COAs and stipulations is purposefully general in nature so that it may apply to any permitted activity that may cause or contribute to exceedance of ambient air quality standards or cause significant adverse impacts on air quality related values. No change has been made to the Proposed RMP.

The sentence on page 4-15 of the Draft RMP/EIS ends with "…and preventing degradation" which the BLM believes addresses the commenter's request by stating that air quality conditions would be maintained. No change has been made to the Proposed RMP/Final EIS.

6.4.4 Stipulations, Best Management Practices, and Standard Operating Procedures

Summary
The Proposed RMP/Final EIS should clarify whether Standard Operating Procedures are required.

Comments
Submission No: emc0924
Commenter: Megan Kram, The Nature Conservancy in Colorado
Comment: Recommendations - It is clear that stipulations are required and that BMPs are not required; it is not clear whether SOPs are required or not required (and our recommendation is that they should be required). In Appendix H (BMPs and SOPs), the language in the first paragraph of the Introduction suggests that SOPs are not required: "Standard operating procedures are established guidelines that are followed by the BLM in carrying out management activities." However, the language of the SOPs themselves sounds like they are required; for example, "H-1: The operator/permittee shall adhere to all requirements under the Federal Water Pollution Control Act, as amended through P.L. 107-303, November 27, 2002." We recommend that these actions be required which could be accomplished by making SOPs more clearly mandatory or making them stipulations; if they are not required, consider making them BMPs to resolve the confusion. This change would simplify the plan and help the reader understand what truly is required and what is not.

Response
SOPs are not required. Rather, they are applied on a case-by-case basis according to the project-level analysis. Project proponents may also propose design features that obviate the need for a particular SOP. No change has been made to the Proposed RMP/Final EIS.

6.4.5 Updating and Adding Other Federal, State, and Local Plans

Summary
The Proposed RMP/Final EIS should contain an updated list of other federal, state, and local plans and incorporate them into the Proposed RMP/Final EIS as appropriate.

Comments
Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: D. Failure to consider the latest federal and state land and regulatory plans and requirements implemented since 2008.

Chapter 1 of the DRMP reviews a list of federal, state and local government plans that the BLM is required to consider and be consistent with in this RMP revision. Since the initial development of the planning revision process in 2008, there are numerous documents and regulatory actions which have occurred that directly impacts the GJFO's ability to manage its planning area consistent with other government entities. TU has reviewed the list provided under Chapter 1 (1.10) and the following documents are not included and therefore assumed not to have been incorporated into the DRMP. Please note that this list is not all inclusive and there may be additional documents not mentioned but require inclusion:

- Final 2012 Oil Shale and Tar Sands Programmatic EIS
- IM2010-117, BLM Oil and Gas Leasing Reform
- IM2013-033, BLM Fluid Minerals Operations-Reducing Preventable Causes of Direct Wildlife Mortality
- IM 2009-043, BLM Wind Energy Development Policy Instruction Memorandum
- Final Programmatic EIS for Solar Energy Development in Six Southwestern States -2012
- U.S. Forest Service Land Management Planning Rule- 2012
- U.S. Fish and Wildlife Service Biological Opinion on the 2012 Planning Rule

- White River BLM Field Office RMP Revision
- White River National Forest Oil and Gas Leasing EIS
- BLM's Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands; Proposed Rule - May 2013
- Colorado River Cutthroat Trout Conservation Agreement (initial date 2006; updated 2012) and 2012 Rangewide Assessment.
- Colorado Oil and Gas Conservation Commission's new regulatory rules regarding baseline water sampling, hydraulic fracturing chemical disclosure, and current and ongoing setback rules.
- Gunnison Sage Grouse proposed listing by USFWS as endangered (January 2013)
- Gunnison Sage Grouse Rangewide Conservation Plan
- Energy Gateway South Transmission Project Proposal EIS. In progress
- TransWest Express Transmission Project Proposal EIS. In progress

Given that the above plans, documents, and rulings significantly affect the BLM's ability to adequately and thoroughly take a "hard look" at environmental impacts and consequences from such actions, we believe the GJFO must develop a supplemental DRMP that incorporates the above new information and additional information not listed.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: Given the passage of time, the BLM should significantly update the list of RMP amendments and implementation-level plans included in the GJ DRMP/EIS. For example, the BLM continues to list the 2008 approved RMP amendments and ROD for oil shale and tar sand resources to address land use allegations in Colorado, Utah, and Wyoming and final programmatic EIS. GJ DRMP/EIS, pg. 1-17. After litigation and a settlement with the Department of the Interior ("DOI"), the BLM recently issued a new approved RMP related to oil shale and tar sand resources in the United States. 78 Fed. Reg. 19518 (Apr. 1, 2013). The BLM additionally lists the RMP amendment/ROD for the designation of energy corridors in the Western United States. GJ DRMP/EIS, pg. 1-17. As a result of litigation and another settlement, the BLM has rescinded the west-wide corridors RMPs and is in the process of developing the new document. Similarly, the BLM identifies a proposed forest plan for the Grand Mesa, Uncompahgre, and Gunnison National Forest that was issued in 2007. As a result of challenges to the 2005 Forest Planning Rule, this effort was abandoned. It is inappropriate for the BLM to refer to an abandoned forest service planning process. The BLM should also note, that the White River National Forest has released a draft EIS for oil and gas leasing for that forest. 77 Fed. Reg. 53198. This new information should be analyzed and incorporated, to the extent appropriate, into the GJ EIS.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM needs to update the information on page 3-199 of the GJ DRMP/EIS regarding the approved RMP amendments and ROD for the designation of energy corridors on BLM administered lands as a result of a recent settlement agreement in the case of Wilderness Society v. United States Department of the Interior, Civ. No. 3:09-CV-03048-JW (N.D. Cal.). Encana understands that the DOI is rescinding the existing RMP for energy corridors and will be preparing a new plan and EIS. The BLM should include this new information in the GJ RMP.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: On page 4-333, the BLM again incorrectly refers to the 2008 Oil Shale and Tar Sands Resource Management Plan Amendments. The BLM issued a new ROD and RMP amendment for oil shale and tar sands

resources on March 22, 2013. 78 Fed. Reg. 19518 (Apr. 1, 2013). This updated information must be incorporated in the GJ RMP and final EIS.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM needs to update the information on page 4-9 regarding past, present and reasonably foreseeable future actions because it contained inaccurate information regarding the ROD for oil shale development. On March 22, 2013, the BLM issued a new ROD for oil shale development across the Western States. 78 Fed. Reg. 19518 (Apr. 1, 2013). The 2008 ROD referenced in the GJ DRMP/EIS has been replaced.

Submission No: emc0858
Commenter: Shea Loper, Encana Oil & Gas (USA) Inc.
Comment: The BLM needs to update the information in the draft EIS regarding the DOI's policy regarding oil shale development. GJ DRMP/EIS, pg. 3-165. The BLM suggests that the most recent decision was a ROD issued in 2008 regarding oil shale leasing and development. The BLM actually issued a new draft EIS and a final EIS in 2012 revising and modifying the DOI's previous oil shale EIS. 77 Fed. Reg. 5833 (Feb. 6, 2012) (BLM Notice); 77 Fed. Reg. 5513 (Feb. 3, 2012); 77 Fed. Reg. 67362 (Nov. 9, 2012) (EPA Notice); 77 Fed. Reg. 67663 (Nov. 13, 2013) (BLM Notice). These new documents released after the DOI decided to substantially modify its previous policy. 76 Fed. Reg. 21003 (Apr. 14, 2011). In March of 2013, the BLM, in fact, issued a new ROD regarding oil shale management. 78 Fed. Reg. 19518 (Apr. 1, 2013). This information must be included in the final EIS for the GJ RMP.

Submission No: emc0847
Commenter: Bo Meulengracht, Trout Unlimited
Comment: The DRMP is outdated in its reference to oil shale development in Colorado. New land allocations in Colorado for oil shale development have occurred since 2008's oil shale environmental analysis. The final RMP must include updated oil shale discussions and reference the most recent oil shale PEIS (2013) and the two oil shale leases Colorado BLM has signed for RD&D oil shale proposals.

Submission No: cfc0165
Commenter: Bennett Boeschenstein
Comment: Recognize and include newly adopted municipal community and comprehensive plans by the City of Fruita (2008), the Town of Palisade (2008), the City of Delta (2008) and the City of Grand Junction (2009?). These plans should be reflected in the BLM Resource Management Plan.

Submission No: rmc0074
Commenter: Ron Velarde, Colorado Parks and Wildlife
Comment: Page 1-19, Section 1.10.2 State Plans
CPW requests that BLM include "The Colorado Division of Wildlife's (now Colorado Parks and Wildlife) most recent Strategic Plan (2009) for 2010-2020. CPW requested this plan be referenced and incorporated in our previous comments of January 2012.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Comment: The entire Mesa County Master Plan should be referenced as a Local Government Plan. The plan includes the GJ Comp Plan, the Rural Master Plan and several community/area plans. This document was provided to BLM and the USGS urban forecast modelers (David Hester and Steve Garman) early in the process.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest Service
Comment: Page 1-19, Section 1.10.1, U.S. Forest Service, Colorado: Please note that the White River National Forest is updating the 1993 Oil and Gas Leasing EIS decision. The DEIS was published in August, 2012.

Submission No: emc0898
Commenter: Andrea Holland, White River National Forest Service
Comment: Page 4-10, Table 4-1
Please update this table to reflect that the DEIS for the White River National Forest's Oil and Gas Leasing decision was released August 30, 2012. The Forest expects a final EIS in 2014.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
The Mesa County Master Plan is referenced as a 2000 document. It has been updated numerous time since 2000. The Rural Master Plan element was updated in 2006, GJ Comp Plan 2010, etc.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
Mesa County Energy Master Plan (referenced) was adopted as the Mesa County Mineral and Energy Resources Master Plan in 2011.

Submission No: rmc0075
Commenter: Steve Acquafresca, Mesa County Board of County Commissioners
The entire Mesa County Master Plan should be referenced under City and County Plans. The plan includes the GJ Comp Plan, the Rural Master Plan and several community/area plans. This document was provided to BLM and the USGS urban forecast modelers (David Hester and Steve Garman) early in the process.

Response
The Proposed RMP/Final EIS has been updated to include all relevant plans listed in the comments above. See pages 1-18 and 1-19. Please note that IMs and draft rules are not listed; the BLM must adhere to all IMs, and draft rules may be changed before they are finalized. A supplemental EIS is not warranted because these relevant plans do not present significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; through the RMP/EIS scoping process and cooperative agency involvement, the Draft RMP/EIS (and now the Proposed RMP/Final EIS) are consistent to the extent practicable with the relevant plans.

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