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GLENWOOD SPRINGS FIELD OFFICE

Roan Plateau Planning Area Including Naval Oil Shale Reserves Numbers 1 & 3

Resource Management Plan Amendment & Environmental Impact Statement

Volume II



**FINAL
August 2006**

**United States Department of the Interior
Bureau of Land Management
Colorado State Office
Glenwood Springs Field Office**

Final

**Roan Plateau
Resource Management Plan Amendment
and
Environmental Impact Statement**

**Volume II
Chapter 6 - Consultation and Coordination**

August 2006

Chapter 6 – Consultation and Coordination

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6 Consultation and Coordination

6.1 INTRODUCTION

This document was prepared in consultation and coordination with interested public individuals and organizations, Federal and State of Colorado agencies, and local municipal and county governments. Involvement and input from all of these entities is a vital component of the RMPA process and EIS preparation.

Public involvement for the Roan Plateau RMPA/EIS was conducted in two phases:

- Public scoping
- Public review and comment on the Draft RMPA/EIS

A summary of the public scoping process is available in Chapter 1 of the Draft RMPA/EIS and is not reproduced here. This chapter summarizes and responds to public comments submitted on the Draft RMPA/EIS as well as information on the extended Cooperating Agency consultation process.

6.2 DISTRIBUTION AND AVAILABILITY OF THE DRAFT RMPA/EIS

6.2.1 Document Release and Notice of Availability

The BLM released the Roan Plateau Planning Area Draft RMPA/EIS on November 19, 2004. Attachment A contains the published Notices of Availability (NOAs), including both those of the BLM and the Environmental Protection Agency (EPA) as published in the Federal Register. BLM's NOA appeared on November 26, 2004. The Draft RMPA/EIS was initially made available for public comment for 90 calendar days. The comment period started on December 3, 2004, the date of EPA's notice was published. On February 14, 2005, BLM extended the public comment period for an additional 60 days. Public comments were due by April 11, 2005. All comments had to be postmarked or received by the BLM Glenwood Springs Field Office, 50629 Highways 6 and 24 (or at P.O. Box 1009), Glenwood Springs, CO 81601, not later than April 11, 2005, to be included in this analysis.

6.2.2 Announcements and Advertisements

Postcards announcing the release of the Draft RMPA/EIS were mailed to all individuals on the project mailing list on November 19, 2004. These postcards included information on how to procure a copy of the document. Copies of the Draft RMPA/EIS as well as contact names and phone numbers of BLM officials at the BLM GSFO, could be obtained by downloading from the project website www.roanplateau.ene.com or by requesting a paper or electronic (CD-ROM) copy.

Announcements regarding the release of the Draft RMPA/EIS were placed in the local area papers, viz., the *Rifle Citizen Telegram* and the *Glenwood Springs Post Independent* (Attachment B). These announcements included instructions for obtaining copies of the document as described above as well as the locations of copies for review and photocopying in the Garfield County libraries, the BLM GSFO, the BLM Meeker Field Office, and the State BLM Office in Lakewood, Colorado. These announcements summarized the five alternatives analyzed in the document and provide information regarding the public comment period and how comments could be submitted. The announcements also listed the date, time, and place for three public meetings.

The same announcement and information was posted on the Announcements page of the project website. Beginning on November 19, 2004, the entire Draft RMPA/EIS document was available for download from the website as labeled document sections. A separate page on the website allowed individuals to

request paper or CD copies of the Draft RMPA/EIS. In addition, a page of the website provided for electronic submission of public comments to the Draft RMPA/EIS.

6.2.3 Public Meetings

Three informational public meetings were held in the vicinity of the Roan Plateau Planning Area within 30 days of the release of the Draft RMPA/EIS. These informational meetings were announced on the project website and in local papers (Attachment B) and were held in the communities of Parachute (Battlement Mesa), Rifle, and Glenwood Springs. Major points for the Draft RMPA/EIS were presented at these meetings and questions regarding the planning process and Planning Area were answered by BLM representatives.

6.2.4 Public Comment Collection and Analysis

As noted in the NOA and all public announcements, only written comments on the Draft RMPA/EIS were accepted. No verbal testimony was accepted at the informational meetings, although BLM provided attendees the opportunity to clarify their understanding of the planning process and the project area. Attendees were also provided with information on how to submit written comments to the BLM. The project website comment submission instructions, and all announcements concerning the public comment process, provided information on requesting the confidentiality of individual respondents and how to withhold individual names or addresses from public review or from disclosure under the Freedom of Information Act. All comment submissions are available for public review at the BLM GSFO and are registered into the project Administrative Record (AR).

The majority of comments were submitted electronically into a comment management database via a Comment Page on the Project website. Commenters were requested to provide contact information including name, address, telephone number, and e-mail address. All individual commenters using the website, or providing written comments, were able to request confidentiality for their contact information. Comments submitted through the website were identified as pertaining to a particular topic or section of the Draft RMPA/EIS. All commenters that provided an e-mail address were sent a message confirming the receipt of their comment.

Hard copy comments were received by the BLM GSFO were also converted to an electronic format and entered into the comment database. BLM specifically requested that comments not be submitted via e-mail or fax, because confirmation of such comments is difficult to guarantee. A number of e-mail messages and faxes were nevertheless submitted and were processed.

6.2.5 Other Outreach and Consultation

Following closure of the extended public comment period, BLM initiated additional consultation and work sessions with the Cooperating Agencies to discuss resolution of public concerns and comments in regards to the final format and content for the Proposed Plan. This group included those entities with which BLM initially negotiated Memoranda of Understanding; the City of Rifle, the Town of Parachute, Garfield County, Rio Blanco County, and the Colorado Department of Natural Resources. The City of Glenwood Springs later requested and was granted the same status as well.

The Cooperating Agency meeting process comprised six work sessions during July and August of 2005. Meetings were attended by representatives from all six Cooperating Agencies. These work sessions were open to the public and the media. Attendees signed-in and minutes were taken during the course of each meeting. Meetings followed agendas agreed to in advance by all participating entities. Meeting minutes are documented in the Roan Plateau RMPA/EIS Administrative Record. Handouts and meeting minutes were made available to the public and media attending the meetings, in addition to the Cooperating Agency representatives.

During this process, it became clear that most of the Cooperating Agencies shared the concern expressed in the majority of public comments regarding impacts to sensitive resources and the socially and

economically important recreational opportunities on top of the plateau. Other specific concerns generally focused on three components of the lower portion of the Planning Area (below and along the Roan Cliffs): the need to protect deer and elk winter range, the need to protect high-sensitivity viewsheds as seen from local communities and major travel corridors, and the need to maintain existing opportunities for off-highway vehicle (OHV) travel. Additional concerns expressed and discussed during the cooperating agency meetings included (among others) impacts of oil and gas development on local economies, both directly and indirectly through increased traffic and infrastructure costs to the counties and communities; impacts on the regional culture, including hunting and livestock grazing; and impacts to air quality and local water supplies.

During the Consultation and Coordination process, the CDNR proposed an innovative approach to oil and gas development atop the plateau while providing substantial levels of natural resource protection. The CDNR approach received a favorable response from other participants in the process.

6.3 PUBLIC COMMENTS AND BLM RESPONSES

A total of 74,907 comment submissions were received by BLM at the close of the extended public comment period on midnight, April 11, 2005. The large majority of these submissions (approximately 97 percent) were received via the project website comment submission function. Less than 1 percent (692) of the comment submissions were received via the U.S. Postal Service as hard copy letters or postcards. Slightly more than 2 percent (1,671) of the total comment submissions were received via e-mail or fax. Comment submissions are summarized by type of comment in Table 6-1. Comment summaries and responses are provided in the following sections, organized by category of comment submission.

Table 6-1. Total Public Comment Submissions, Roan Plateau Draft RMPA/EIS

Public Website	Number of Submissions
Unique	1,402
Form letters	<u>71,142</u>
	72,544
Hard copy	
Unique	339
Form letters	<u>353</u>
	692
Fax/Email	
Fax – all form letters	685
E-mail – all form letters	<u>986</u>
	1,671
Total Comment Submissions	74,907

6.3.1 Form Letter Comments

The largest category of comment submissions was a number of copies each of several different form letters. These identical copies of each of the various form letters were received via the project website, hard copy letters, faxes, and e-mail. A summary of each form letter submission and the BLM response is listed in Table 6-2. An example of each form letter is presented in Attachment C.

Table 6-2. Summary of Form Letter Submissions

Form Letter Type	Summary of Comment	Response	Number of Submissions
Form Letter 1	Supports a balanced management plan that prohibits oil and gas leasing on the top and cliffs of the Roan Plateau and makes protection of natural features its first priority. Wants protections for important habitat, roadless backcountry, recreation areas and other special lands. Wants energy development to respect local communities, use Best Management Practices and technology and minimize damage.	Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments.	12
Form Letter 2	Opposes the Preferred Alternative. Supports priority to natural resource protection while prohibiting leasing, research, and development on the top or in the cliffs. Alternatively, would defer leasing in these areas until oil and gas can be developed such that it will not disturb the surface. Cites value on the top of the plateau: biodiversity, recreational opportunities, wildlife habitat, and wilderness. Requests all energy development in Planning Area use Best Management Practices and minimizes resource damage.	Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. The Proposed Plan emphasizes natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations. It incorporates 12 NGD/NSO restrictions, 14 SSR/CSU restrictions, and 5 Timing Limitations for the protection of a variety of resources (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). A number of BMPS would be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I).	65,543 (most from website, 121 hard copy)
Form Letter 3	Desires a final alternative that balances oil and gas development with traditional recreational uses of the land. Would prohibit leasing the top and cliffs of the Roan Plateau or, alternatively, defer leasing in these areas until oil and gas can be developed without surface disturbance. Wants energy development to respect local communities, use Best Management Practices and technology and minimize damage. Motorized use should be kept to designated and marked roads and trails.	Measures to conserve and/or protect special and unique natural, scenic, and recreational resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. The Proposed Plan emphasizes natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations. It incorporates 12 NGD/NSO restrictions, 14 SSR/CSU restrictions, and 5 Timing Limitations for the protection of a variety of resources (Section 2.3 and Table 2-1 in the Proposed	986 (via e-mail)

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Form Letter Type	Summary of Comment	Response	Number of Submissions
Form Letter 4	Wants BLM to select a final plan that keeps drilling off the top of Roan Plateau. To accomplish this, BLM would adopt the elements of the Community Alternative.	Plan/Final EIS). A number of BMPS would be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I). Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments.	141
Form Letter 5	Supports a reasonable energy plan. States that the Roan Plateau is a place that can help reduce the uncertainty of the national energy supply.	Development of the oil and gas resources is a major component of the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS	8
Form Letter 6	Similar to Form Letter 1 – Would prohibit leasing on the Roan Plateau's top and cliffs. Alternatively, would defer leasing in these areas until oil and gas can be developed such that it will not disturb the surface. Wants unchangeable protections for important habitat, roadless backcountry, recreation areas, and other sensitive resources. Wants energy development to respect local communities, use Best Management Practices and technology and minimize damage. Would close the plateau top and cliffs and other sensitive lands and habitats to future oil shale leasing, research, and development. Would keep motorized use on marked, designated roads and trails. Prioritize natural resource protection.	Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments.	13
Form Letter 7	States that the Roan Plateau offers us a great opportunity to develop an important energy security resource but, at the same time, can provide jobs and economic security to the region. Believes that the concerns of the environmental community are blown out of proportion. Believes that legal and regulatory mechanisms will ensure that development does not negatively impact the environment.	Development of the oil and gas resources is a major component of the Proposed Plan/Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.	17
Form Letter 8	In favor of an alternative that permits significantly more development than under the Preferred Alternative. States that this would provide a much greater benefit to the economy, both in Colorado and nationally. States that many environmental concerns are unfounded and that BLM	Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.	12

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Form Letter Type	Summary of Comment	Response	Number of Submissions
Form Letter 9	<p>has legal mechanisms to ensure that development does not negatively impact the environment. With the advances in natural gas drilling technology, including horizontal drilling, there will be little overall environmental impact from drilling activities.</p> <p>States that the Preferred Alternative irresponsibly stifles natural gas development in the U.S. Prefers much greater energy development in the area.</p>	<p>Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.</p>	8
Form Letter 10	<p>States that the Roan area already has considerable development, including an extensive road network. Contends that our future energy security depends on developing areas like this, and I think we should.</p>	<p>Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.</p>	14
Form Letter 11	<p>States that the Naval Oil Shale Reserve was established to reserve these resources for future development to contribute to our country's energy security. Notes that natural gas development is already occurring in this area under appropriate regulation. Contends that it does not make any sense to arbitrarily restrict further development if these same environmental considerations are required of new development.</p>	<p>Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.</p>	28
Form Letter 12	<p>States that if there is anyplace in the country that makes sense to develop, it is the Roan Plateau: already substantial development in the area, proven reserves of natural gas, and energy companies willing to extract the resource. Expresses confidence that full development can occur in a responsible way and will contribute to our overall economic and energy security.</p>	<p>Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.</p>	27
Form Letter 13	<p>States that we as a nation use a lot of oil and gas, and that the Roan Plateau has significant natural gas reserves. Contends that we can develop the Roan Plateau and still have responsible environmental safeguards for the work. Expresses the belief that allowing development now is the right thing to do for our country and for its energy security and that BLM has the ability to protect the Roan Plateau from irresponsible development and ensure that the drilling is done right.</p>	<p>Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS. The Proposed Plan incorporates a number of specific management actions (Section 2.3.1 in the Proposed Plan/Final EIS), as well as reclamation standards, regular monitoring requirements, and reclamation success criteria (Appendix J in the Proposed Plan/Final EIS) intended to reduce the area of long-term physical impacts of oil and gas development as well as encourage more successful reclamation and revegetation of these areas.</p>	12
Form Letter 14	<p>Expresses the opinion that the Roan Plateau offers a great opportunity to develop the natural gas resources located beneath it and to reduce our dependence on foreign sources of energy. Wants a plan that allows for significantly more natural gas production than under the</p>	<p>Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.</p>	17

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Form Letter Type	Summary of Comment	Response	Number of Submissions
Form Letter 15	<p>Preferred Alternative. States that we can produce more gas and take care of the environment at the same time.</p> <p>Wants a responsible balance between the needed development of the region and the environmental protection of the Roan Plateau.</p>	<p>Development of the oil and gas resources is a major component of the Proposed Plan in the Proposed Plan /Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS. The Proposed Plan incorporates a number of specific management actions (Section 2.3.1 in the Proposed Plan/Final EIS), as well as reclamation standards, regular monitoring requirements, and reclamation success criteria (Appendix J in the Proposed Plan/Final EIS) intended to reduce the area of long-term physical impacts of oil and gas development as well as encourage more successful reclamation and revegetation of these areas.</p>	22
Form Letter 16	<p>Similar to Form Letters 1 and 6 – Wants a balanced management plan that prohibits leasing on the Roan Plateau's top and cliffs. Unchangeable protections for important habitat, roadless backcountry, recreation areas and other sensitive resources. Wants energy development to use best technology and minimize damage.</p>	<p>Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. The Proposed Plan emphasizes natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations. It incorporates 12 NGD/NSO restrictions, 14 SSR/CSU restrictions, and 5 Timing Limitations for the protection of a variety of resources (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). A number of BMPS would be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I).</p>	5,401
Form Letter 17	<p>Wants BLM to select an alternative that honors the community-supported compromise solution. Would prohibit leasing on the Plateau's top and cliffs and provide protection for important habitat and recreation areas. Would ensure that energy development respects surrounding communities and prioritizes natural resource protection.</p>	<p>Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman</p>	685 (via fax)

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Form Letter Type	Summary of Comment	Response	Number of Submissions
Post Card 1	Supports a management plan that incorporates the conservation vision developed by Center for Native Ecosystems and other conservation organizations. Urges BLM to manage the Plateau to provide habitat protection, wilderness, and backcountry recreation.	Salazar's comments. Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details.	45
Post Card 2	States that the final plan should include a number of specific actions including: defer all leasing on top during the life of the plan or until gas resources can be extracted from under the Plateau without disturbing the surface; expand ACECs and strengthen stipulations to protect; expand protective stipulations, as in Alternative II, and include the Parachute Creek WMA; protect Hubbard Mesa SRMA with NSOs; include an SRMA on top of the plateau for backcountry opportunities; limit motorized and mechanized travel to designated routes; adopt travel management prescriptions in Alternative II; require Best Management Practices and technologies that minimize environmental and community impacts; and involve local communities in determining how development occurs in Planning Area.	Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. The Proposed Plan emphasizes natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations. It incorporates 12 NGD/NSO restrictions, 14 SSR/CSU restrictions, and 5 Timing Limitations for the protection of a variety of resources (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). A number of BMPS would be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I). Vehicle traffic would be limited to designated routes throughout the Planning Area, excluding the Hubbard Mesa OHV riding area and over snow travel by snow mobile.	175
Total Form Letter Submissions			73,166

Form Letter 2 was by far the most frequently submitted. Although 121 copies of this letter were received as hard copy, the majority were sent to the project website comment submission system in batches from an auto-server system. The system by-passed several of the required contact information fields for comments, instead including the name and address of each commenter at the end of the otherwise identical text submission. The acknowledgment e-mail message sent in response to each of these submissions was returned to the project website server as being undeliverable.

Based on analysis of zip codes included at the end of the identical comments, approximately 7 percent (4,769 from the auto-server and 15 hard copies) of the individual submissions of this form letter were sent on behalf of commenters in Colorado. The rest were sent on behalf of individuals throughout the United States and other countries.

6.3.2 Unique Comments

A total of 1,741 unique (non-form letter) comment submissions were received. The majority of these (1,568) are best described as positions or opinions, rather than comments regarding methodologies or data used in the draft document. These 1,568 submissions comprise four general types: 1) against leasing and drilling for oil or gas (or other mineral extraction) on top of the Roan Plateau – these submissions often cite the need to protect other natural resources in the area from this type of disturbance; 2) supportive of leasing and drilling for oil or gas on top of the Roan Plateau and throughout the Planning Area – these submissions often cite energy needs of the U.S. or national security as a reason to develop this resource; 3) supporting an assemblage of management concepts for the Planning Area – this assemblage is generally referred to as the Community Alternative; and 4) general positions or opinions that do not necessarily relate specifically to the content of the Draft RMPA/EIS. A summary of the comments and the BLM response is included in Table 6-3.

As noted above, the large majority of comment submissions present positions, opinions, or ‘votes’ rather than specific comments regarding the analysis, data, or other information in the draft document. BLM appreciates that so many people have taken an interest in the management of these public lands. Comments were reviewed in accordance with the Council on Environmental Quality Review of NEPA, which notes that “Relative depth of feeling and interest among the public can serve to provide the general context for decision-making” but that “the appropriateness, specificity, and factual accuracy of comment content serves to provide the basis for modifications to planning documents and decisions” (CEQ 2002). All positions and opinions were considered, along with policy and the results of the analysis. Every comment and suggestion has value, whether expressed by one or many commenters and was taken into consideration as BLM reviewed and evaluated its response to all comments in the context of formulating the Proposed Plan/Final EIS.

A total of 173 unique (non-form letter) and substantive (comments regarding methodologies or data used in the draft document) submissions were received from individuals and organizations. A number of these contained more than a single comment, for a total of 516 specific comments. These comments are summarized by submission category (individual or organization) and tallied by comment topic in Table 6-4. The most numerous are grouped in the General Comment topic category (131). Comments on the Oil and Gas topic are the second most numerous (111), followed by Terrestrial and Aquatic Wildlife (47), Climate and Air Quality (36), and Socioeconomics (31). All other comment topics received less than 24 comments from individuals and/or organizations. BLM reviewed and evaluated all information received through these comments and, as appropriate, incorporated them into the Proposed Plan and Final EIS.

Table 6-3. Summary of Position/Opinion Submissions

Comment Summary	Response	Number of Submissions
Against leasing and drilling for oil or gas (or other mineral extraction) on top of the Roan Plateau – these submissions often cite the need to protect other natural resources in the area from this type of disturbance.	The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.	602
Supportive of leasing and drilling for oil or gas on top of the Roan Plateau and throughout the Planning Area – these submissions often cite energy needs of the U.S. or national security as a reason to develop this resource.	Development of the oil and gas resources is a major component of the Proposed Plan/Final EIS as well as the five alternatives analyzed in the Draft RMPA/EIS.	654
Support an assemblage of management concepts and actions for the Planning Area that are referred to as the Community Alternative.	The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1).	177
State general positions or opinions that do not necessarily relate specifically to the content of the Draft RMPA/EIS.	Thank you for your interest and participation in the BLM land use planning process for the Roan Plateau Planning Area. Your comment has been noted and considered.	135
Total Position/Opinion Submissions		1,568

Table 6-4. Summary of Specific Comments From Individuals and Organizations by Topic (173 submissions, 516 comments)

Topic	Individual	Organization	Totals
No Topic Chosen	1	0	1
General Comment	55	76	131
Areas Managed to Protect Wilderness Character	4	3	7
Areas of Critical Environmental Concern	3	6	9
Climate and Air Quality	25	11	36
Cultural Resources	0	1	1
Forest Products	1	0	1
Geological Resources	0	1	1
Hazardous Materials	1	2	3
Lands and Realty	1	0	1
Oil and Gas	46	65	111
Onsite Travel Management	3	5	8
Other Minerals	7	5	12
Paleontological Resources	2	0	2
Rangeland Management and Health	3	8	11
Recreation	9	15	24
Socioeconomics	14	17	31
Special Status Fish and Wildlife	7	12	19
Special Status Plants and Significant Plant Communities	4	9	13
Terrestrial and Aquatic Wildlife	16	31	47
Transportation and Access	0	11	11
Upland Vegetation and Riparian/Wetland Areas	2	8	10
Visual Resources	0	2	2
Water Resources	9	11	20
Water Resources, Oil and Gas	1	0	1
Wild and Scenic Rivers	1	2	3
Total	215	301	516

The unique and substantive comments and BLM responses are summarized in Sections 6.3.2.1 through 6.3.2.3. Included in these comments are comments from elected representatives, Cooperating Agencies, Other government entities, groups and organizations, and individuals. The breakdown of respondents and number of submittals is as follows:

- 4 comment letters from elected representatives
- 15 comment letters from government agencies
- 20 comment letters from organizations
- 134 letters or messages from individuals

Full text of the letters received from elected representatives and government agencies are include in Attachment D.

6.3.2.1 Commenting Elected Representatives

A total of 4 letters were received from public individuals who included:

- John T. Salazar, U.S. Congress
- Diana DeGette, U.S. Congress
- Ken Salazar, U.S. Senate

Their comments and BLM’s response are summarized below. The full text of the comments is contained in Attachment D.

United States Senator Ken Salazar

Topic: Oil and Gas

Comment text: 1) I respectfully request that the public comment period be extended for 30 more days.

Response: 1) BLM was pleased to extend the public comment period from 90 days to 120 days.

United States House Representative Diana DeGette

Topic: Oil and Gas

Comment text: 1) Drilling on top of the Roan Plateau should be delayed for the life of the management plan, or until such time that technology will allow for access to natural gas from the base area

1) BLM believes that the Proposed Plan represents a high degree of environmental protection while allowing recovery of a reasonable amount of the underlying natural gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would

Response: allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

Topic: Oil and Gas

Comment text: 2) The BLM must require BMPs and technologies to be used to minimize environmental and community impacts and to emphasize protection for the area’s natural resources in areas where natural gas drilling is allowed.

2) A primary focus of the Proposed Plan is on phased and clustered oil and gas development that provides for resource extraction while protecting sensitive ecological and hydrological resources and multiple uses. A number of BMPs (Appendix I), mitigation measures, and performance-based reclamation standards (Appendix J) will be required for all long-term ground disturbing activities, as well as a regular monitoring and adaptive management actions (Section 2.3.2 and Table 2-1 in the Proposed Plan/Final EIS).

Response:

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 3) It is vitally important for the BLM to protect lands on the Roan Plateau that it has concluded contain wilderness quality, are considered roadless, or contain high wildlife, ecological, or recreational values.

3) Although no special management for areas having wilderness character is included in the Proposed Plan, the Proposed Plan incorporates a number of surface use restrictions and stipulations for the protection of natural resources (Appendix C in the Proposed Plan/Final EIS) as well as required mitigation actions and focused management (Section 2.3.2 and Table 2-1). The Proposed Plan

Response: designates four ACECs (East Fork Parachute Creek, Trapper/Northwater Creek, Magpie Gulch, and Anvil Points). The Parachute Creek Watershed Management Area will be designated to protect watershed integrity and function related to the Colorado River cutthroat trout and supporting environmental factors under the Proposed Plan. River segments found to be eligible for a Wild and Scenic River (WSR) suitability analysis will be managed as WSRs until such analysis is complete.

Topic: Areas of Critical Environmental Concern

Comment text: 4) I support efforts to strengthen the permanent protective stipulations in Alternative II, including expanding the four ACECs to 40,495 acres and prescribing NSO and NGD protections for these sensitive places.

4) The Proposed Plan includes designation of the four ACECs discussed under Alternative II and special management of the relevant and important resources each contains (Section 2.3.2, Table 2-1 and Table 2-2 in the Proposed Plan/Final EIS).

Response: While the total area of the four ACECs is somewhat less than under Alternative II, the reason for the reduced area is a refined analysis by BLM of areas that relate directly to the relevant and important criteria. Thus, BLM has concluded that the smaller ACECs of the Proposed Plan would protect these values to the same level as Alternative II, and clearly better than the Preferred Alternative of the Draft RMPA/EIS.

United States House Representative John T. Salazar

February 17, 2005

Topic: Oil and Gas

Comment text: 1) I am writing you to request a 30 day extension for the public comment period

Response: 1) The public comment period was extended from 90 days to 120 days.

April 11, 2005

Topic: General Comment

Comment text: 1) I am disappointed the BLM failed to include alternatives that garnered much community support in the initial scoping period for the EIS. Specifically, I am referring to "Alternative F."

1) Components of "Alternative F" are substantially included in Alternatives I and II of the Draft. The major component of the five alternatives in the Draft RMPA/EIS that garnered the least "community support" was the inclusion of new leasing for oil and gas exploration and development on top of the plateau, except for Alternative I (No Action). In response to this issue, BLM would like to offer the following four points for consideration:

First, BLM believes it important to note that some members of the local community and other stakeholders expressed a desire to see as much production of natural gas from BLM lands in the Planning Area as practicable, in light of the nation's dwindling supply and escalating costs and/or the various socioeconomic benefits in terms of employment, tax revenues, royalties, etc.

Response: Second, BLM has concluded that the Transfer Act requires that currently unleased lands in the NOSRs be made available for leasing, within the multiple-use framework of FLPMA and BLM regulations and policies and in compliance with other laws such as the Endangered Species Act, Clean Air Act, Clean Water Act, and so forth. Therefore, after serious consideration of information received during scoping, BLM concluded "Alternative F" may not have met this requirement of the Transfer Act; and that addressing components of Alternative F in the No Action and Alternative II was more appropriate. This is due in large part because the No Action alternative would preclude oil and gas development atop the plateau.

Third, in developing the Proposed Plan (see Section 2.3 and Table 4-2 of the Proposed Plan/Final EIS), BLM has adopted the concept of phased and clustered development proffered by the Colorado Department of Natural Resources through the Consultation and Coordination process (see Chapter 6). Specifically, the Proposed Plan would require the use of directional drilling, with up to seventeen wells clustered on a single pad and a minimum separation of 0.5 mile between pads, to limit the amount of long-term ground-disturbing activity. Additionally, development would be limited to only one area at a time, and the total amount of land allowed to be in a disturbed condition at any one time would also be

limited. This phasing would minimize the road lengths needed for access for oil and gas development and would keep most of the upper plateau in a condition free from development at any given time, thereby benefiting both wildlife and recreationists. The CDNR concept adopted by BLM in the Proposed Plan would also focus development on ridgetops, close to existing roads. While having some increased visual impacts within a specific development area, this component would minimize impacts to the ecologically, visually, hydrologically, and recreationally more sensitive stream valleys.

Fourth, and also as a result of the Consultation and Coordination process, the Proposed Plan would (a) include all four Areas of Critical Environmental Concern (ACECs) identified in the environmentally most protective alternative (Alternative II), with a variety of management prescriptions to protect water quality, vegetation, wildlife, and visual quality (Table 2-2); (b) establish a Watershed Management Area (WMA) for the entire top of the plateau, with a variety of management prescriptions specifically to protect water quality and aquatic resources (Table 2-3); and (c) increase the amount of protection—compared to any of the five previous alternatives except No Action—for areas mapped by CDOW as wildlife security (seclusion) areas. These increased protections under the Proposed Plan are in addition to retaining other key protections under the Preferred Alternative (Alternative III) for the East Fork falls and box canyon, the visually sensitive cliffs and I-70 viewshed areas, the Anvil Points Cave, big game winter use and raptor and waterbird nesting areas, old-growth Douglas-fir forest, and Federally listed, proposed, or candidate threatened or endangered species and BLM sensitive species. BLM believes that, taken together, these components of the Proposed Plan—to a greater degree than any of the other alternatives, as well as the so-called “Community Alternative” proposed by some commenters—would result in appropriate levels of both environmental protection and energy development.

Moreover, the Proposed Plan would result in the fewest pads, fewest miles of new access roads, and fewest acres of surface disturbance while accommodating levels of gas production comparable to the most intensive development scenario of the Draft RMPA/EIS (Alternative V). In terms of ultimate gas production from BLM lands in the Planning Area, GIS modeling of the CDNR concept combined with the surface restrictions under the Propose Action indicate that more than 90 percent of the underlying area could be accessed given current technology. If drilling technologies continue to advance, this figure could increase.

Topic: Oil and Gas

Comment text: 2) The BLM should not approve any drilling on top of the Roan Plateau. If the energy needs of this country warrant development in twenty years, the BLM, in consultation with local communities, can revisit that option.

Response: 2) The Proposed Plan emphasizes balance in managing for a variety of multiple resource uses incorporating outcome-based adaptive management, including a systematic, phased and clustered oil and gas development within a non-contracting Federal Unit. As described in the Proposed Plan/Final EIS, this approach would include a minimum of 0.5 mile between well pads, with up to seventeen wells per pad and the placement of most oil and gas facilities along existing ridgetop roadways. It also would include extensive areas of NGD/NSO and SSR/CSU restrictions to protect a variety of resources, designation of four ACECs and the Parachute Creek Watershed Management Area, restriction of motorized and mechanized travel to designated routes (except for over-snow travel by snowmobile), use of BMPs and mitigation measures, and application of weed control and performance-based reclamation standards. BLM believes that, taken together, these measures and actions would provide ample protection of sensitive ecological, hydrological, and recreational resources atop the plateau while accommodating a reasonable level of natural gas production.

Topic: General Comment

Comment text: 3) Fully analyze the impact of the Community Alternative and incorporate its recommendations where appropriate.

Response: 3) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many

of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Oil and Gas

Comment text: 4) The BLM should work to provide the community with accurate research on the amount of natural gas that can be extracted by utilizing only drilling at the base of the Plateau.

4) That information has been added to Section 4.5.5 of the Proposed Plan/Final EIS. As indicated by Table 4-2 of both the Draft RMPA/EIS and Proposed Plan/Final EIS, approximately 46 percent of the total area available for surface facilities under the Proposed Plan is below the rim. Assuming a uniformly distributed gas resource, this would suggest that slightly less than half of the accessible gas

Response: resource on Federal mineral estate gas resource is below the rim. In reality, that percentage is probably lower than 46 percent, because the lands not available for surface facilities (i.e., with NSO stipulations) generally occur as wider polygons below the rim (see Map 1 of the Proposed Plan/Final EIS) and are thus less subject to being accessed with directional drilling. In other words, less than 46 percent of the total gas resource on Federal lands in the Planning Area is likely to be producible from below the rim.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 5) Provide adequate spacing between gas wells and other mitigation plans so the mule deer population at the base of the Plateau is not negatively impacted due to decreased wintering habitats and migration corridors. I ask BLM to provide a full analysis of the impact this project would have on hunting in the area, including any economic loss that might result due to a reduction in hunting activities.

Response: 5) The Proposed Plan will include leasing and drilling atop the plateau as a part of a non-contracting Federal Unit, with lease restrictions on surface density (minimum 2,640 feet between pads) and phasing of development in successive "development areas." Economic impacts associated with hunting activities are addressed in Section 4.4.3 of the Proposed Plan/Final EIS.

Topic: Rangeland Management and Health

Comment text: 6) Fully analyze the implication the Draft EIS would have on livestock grazing levels on allotments in this area (page 4-210). The Final EIS should explain how each allotment might have to be reduced under each alternative. Measures to reduce the impact to allotment holders, such as smaller well pads, should be taken.

Response: 6) Grazing management would conform to BLM grazing regulations (43 CFR 4180) and BLM Colorado's Standards for Public Land Health and Guidelines for Livestock Management (Appendix F) by development of allotment management plans, regular monitoring of rangeland health, and evaluation of existing grazing management practices. (Section 2.3.3.5 and Table 2-1 of the Proposed Plan/Final EIS).

Topic: Water Resources

Comment text: 7) Provide for full water quality monitoring to ensure area water quality is not diminished. This is particularly important in the creeks which contain populations of genetically pure Colorado River cutthroat trout.

Response: 7) At present, BLM does not believe that full water-quality monitoring is warranted, given the anticipated low levels of impacts to occupied or potential Colorado River cutthroat trout habitat. The low impacts are based on the requirement for phased and clustered development under the Proposed Plan, as well as designation of four ACECS and the Parachute Creek Watershed Management Area, extensive areas of NGD/NSO and SSR/CSU protections, emphasis on locating oil and gas facilities along existing ridgetop roadways, various water-related BMPs and mitigation measures, and improvements to range condition and reclamation. Additionally, BLM is required to ensure that applicable water quality standards are not violated.

6.3.2.2 Commenting Public Agencies

A total of 15 letters were received from public agencies, including Cooperating Agencies. The City of Parachute and Rio Blanco County did not provide initial comments and summaries of their comments are not provided below. The Cooperating Agencies provided a second round of comments in the Fall of 2005. The full text of these comments is included in Attachment E. Commenting Public Agencies include:

- City of Glenwood Springs (Cooperating Agency)
- City of Parachute (Cooperating Agency)
- City of Rifle (Cooperating Agency)
- Colorado Department of Natural Resources (Cooperating Agency)
- Garfield County (Cooperating Agency)
- Rio Blanco County (Cooperating Agency)
- City of Aspen
- Colorado Geological Survey and Colorado Oil and Gas Conservation Commission (Cooperating Agency)
- Colorado State Parks (Cooperating Agency)
- Mesa County Commissioners
- Moffat County
- Northwest Resource Advisory Council
- Pitkin County
- Summit County
- Town of New Castle
- U.S. Department of the Interior – Fish and Wildlife Service
- U.S. EPA, Region 8

6.3.2.3 Cooperating Agencies

Cooperating Agency comments and BLM's response are summarized below. The full text of the comments is contained in Attachment D.

Colorado Department of Natural Resources

Topic: General Comment

Comment text: 1) The document addresses impacts only in relation to oil and gas. Therefore, it does not fully describe the "project" as required by NEPA. It also fails to describe irreplaceable losses of resources. CDOW believes that the document should also include a monitoring plan for all resources.

1) BLM disagrees with this assertion. Impacts, both positive and negative, related to other resources, land uses, and management actions are not only described throughout the impact analysis of Chapter 4 but are also specifically included in the impact summary tables of Sections 4.3.2 and 4.3.4.2.

Response: Irreplaceable and irretrievable resources are addressed in Section 4.6, although more specific, quantitative analysis is not possible due to unavoidable uncertainties about specifics of future development (where, at what pace, in what manner, etc.). Monitoring is being addressed in Appendix J of the Proposed Plan/Final EIS, and BLM anticipates continued discussions with CDOW will further refine monitoring and mitigation as part of future lease planning.

Topic: General Comment

Comment text: 2) The Planning Area should include the entire Parachute Creek watershed. The document should include the area west of Parachute Creek due to its important to wildlife, water quality, fisheries, and cumulative impacts.

Response: 2) BLM believes that the current Planning Area boundaries are appropriate but recognizes that some resources, such as highly mobile and wide-ranging wildlife species, use habitats that cross the Planning Area boundaries. The Proposed Plan/Final EIS provides additional information on offsite conditions and impacts, including the area west of Parachute Creek.

Topic: General Comment

Comment text: 3) The Draft should address full field development, since leases will authorize drilling beyond the 20-year period of the plan. The analysis should address impacts when the entire area is fully developed.

Response: 3) It is BLM's policy to limit the impact analysis to 20 years. Beyond that timeframe, attempting to anticipate conditions and impacts becomes highly speculative due to the many environmental, geopolitical, technological, or economic factors that affect wildlife but are subject to substantial change. The RFD and Table 4-3 of the Proposed Plan/Final EIS provide general information on the potential level of development beyond 20 years.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 4) The Draft drops some of the protective measures of the 1999 FSEIS. These measures, such as TLs, NSOs, and lease notices related to wildlife and wildlife habitats, should be fully retained, at a minimum.

Response: 4) These have been fully restored as part of the Proposed Plan (Section 4.3.2 in the Proposed Plan/Final EIS).

Topic: Areas of Critical Environmental Concern

Comment text: 5) CDOW believes that all four ACECs are critical to protection of wildlife and fisheries, while allowing ample oil and gas development.

Response: 5) The Proposed Plan incorporates all four ACECs (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). While the four ACECs occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area.

Topic: Socioeconomics

Comment text: 6) The socioeconomic analysis is inadequate given the monetary importance of hunting and wildlife viewing to the local economies. This section needs thorough revision.

Response: 6) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS uses recent data from Colorado Division of Wildlife to evaluate economic benefits of hunting to the local economies.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 7) The Draft should include a reclamation monitoring plan, should require performance-based reclamation standards, and should provide information on the amount of land in reclamation at full field development.

Response: 7) The Proposed Plan/Final EIS includes a monitoring appendix (Appendix J) describing performance-based reclamation standards and success criteria under the Proposed Plan. BLM believes that information on the amount of land in reclamation at full-field development is too speculative for the type of quantitative estimation requested in the comment.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 8) The Draft should provide more information on fawning, calving, and transitional or migration corridors for big game. The impact analysis should give more details on how these critical areas will be protected from oil and gas or other impacts.

Response: 8) The migration routes (cliff passages) are addressed in considerable detail in Section 4.3.2. Deer and elk production (fawning/calving) is also addressed, although in general terms because CDOW has not mapped specific production areas—with birthing and rearing instead occurring as a dispersed use across most of the upper plateau or higher portions of the lower plateau. The phased and clustered development under the Proposed Plan would reduce concerns about these impacts by reducing the number of pads and access roads in active use at any one time, and limiting development to only one area at a time (see Sections 2.3 and 4.3.2).

Topic: Terrestrial and Aquatic Wildlife

Comment text: 9) The Draft includes some erroneous statements concerning Chronic Wasting Disease, its relevance to reductions in deer populations and harvest numbers (overstated in the Draft), and the likelihood of habituation (overstated in the Draft).

Response: 9) This discussion in Sections 3.3.2 and 4.3.2 has been eliminated.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 10) The indirect impacts to deer and elk of oil and gas operations are likely to be much greater than indicated in the Draft, based on recent scientific literature.

Response: 10) The Proposed Plan/Final EIS uses the more conservative (i.e., greater) widths for zones of reduced wildlife use reported by Sawyer et al. (2004, 2005) and other sources favored by CDOW.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 11) A reduction of 33% in deer and the irreversible and irretrievable loss of winter range are much more than "moderate" impacts.

Response: 11) BLM agrees. Regrettably, the text for the Preferred Alternative was confusing and contained a critical typographical error. The actual estimate of loss (in terms of effective deer habitat and not deer populations) was stated correctly on page 4-83 of the Draft RMPA/EIS as 22.3%. This was the basis for the assignment of a "moderate" impact level. The 33% figure on page 4-87 is an error. Additionally, the Proposed Plan/Final EIS uses the larger zones of reduced wildlife use cited by Sawyer et al. (2004, 2005). The combination of wider disturbance zones but reduced levels of habitat loss under the Proposed Plan results in a revised estimate of an 18.7% effective reduction in deer winter range (see Table 4-13).

Topic: Terrestrial and Aquatic Wildlife

Comment text: 12) The protection afforded to Colorado River cutthroat trout appears inadequate to ensure that the species not only recovers but is not placed at risk of additional loss. Any loss is unacceptable. Examples of risks include locations of wells and pipelines within 200 meters of a stream and multiple daily stream crossings by truckloads of brine and other pollutants that could spill into the stream.

Response: 12) Regarding wells and pipelines within 200 meters of a stream, such would not be permitted under any of the alternatives considered in the Draft RMPA/EIS, or in the Proposed Plan/Final EIS. On the contrary, occupied trout streams, upslope watershed areas, and upstream or tributary reaches critical to water quality would be given special management emphasis, including extensive areas closed to long-term ground disturbing activities. For example, refer to Map 3 (for the Preferred Alternative) in the Draft and to Map 2 (for the Proposed Plan) in the Proposed Plan/Final EIS. Also see Tables 2-1 and 2-3. Regarding trucking of brine, spills are very infrequent, the proportion of road lengths involving stream crossings very small (especially under the ridgetop development emphasis of the Proposed Plan; see Chapter 2 of the Proposed Plan/Final EIS), and mitigation measures for stream crossings such as

use of culverts are intended to further reduce this risk.

Topic: Onsite Travel Management

Comment text: 13) BLM should reevaluate travel management. The policy should be one of "closed unless posted open." The Final document should address the impacts of different travel management options.

Response: 13) The onsite travel management sections in both the Draft RMPA/EIS and Proposed Plan/Final EIS (Section 4.5.2) do, in fact, address different travel management options and impacts of those options on the various resource areas cited throughout Chapter 4. All alternatives except Alternative I, and including the Proposed Plan, would specifically limit motorized or mechanized travel to designated routes, except for the OHV open travel play area of Hubbard Mesa. Over-snow travel by snowmobiles with a minimum of 12 inches of snow cover would be allowed under all alternatives except Alternative II. If CDOW has reason to believe that the off-route snowmobile travel atop the plateau is critical in terms of wildlife impacts, BLM would be pleased to reconsider this issue for the Proposed Plan.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 14) All four ACECs need to be included in the final alternative.

Response: 14) The Proposed Plan includes all four ACECs. Although these cover somewhat less area than under Alternative II, note that this represents a refined analysis by BLM of specific areas containing one or more of the relevant and important resource values. Therefore, BLM believes that the protection of these values would be comparable to Alternative II.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 15) The much smaller area identified as Wildlife Seclusion Areas, compared to the 1999 FSEIS, needs to be explained.

Response: 15) The Proposed Plan reinstates the security areas atop the plateau that were identified in the 1999 FSEIS but omitted from the five alternatives considered in the Draft RMPA/EIS. These would be protected by an SSR/CSU stipulation.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 16) Use of terms such as "moderate" is insufficient in comparison to the magnitude of some of the impacts anticipated.

Response: 16) The wildlife impact analysis (Section 4.3.2, summarized in Table 4-13), reconsiders these terms in light of the use of more conservative estimates of effective habitat loss resulting from reduced wildlife use near areas of oil and gas development.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 17) CDOW would not support closing any areas of public lands to hunting and does not believe that a refuge effect will result from oil and gas operations.

Response: 17) BLM does not intend to close any areas to public hunting, and such was not indicated in the Draft RMPA/EIS. The Draft stated that if some areas were closed to hunting for public safety, or if a refuge effect and habituation occurred, the impacts would be less than analyzed in Section 4.3.2. The Draft RMPA did not assume that these would occur.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 18) Weeds are a potential major issue, and the approach of Alternative II is the minimum that BLM should consider.

Response: 18) The Proposed Plan will emphasize implementation of an integrated weed management program (including mechanical, biological, and chemical methods) such as in Alternative II to deter and control

noxious. This is described in Section 2.3.2, and the resultant impacts are analyzed in Section 4.3.2 of the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 19) BLM should provide more information on the number of vehicle trips associated with oil and gas development.

Response: 19) The vehicle-trip table included in Section 4.5.5 (Table 4-34 of the Draft RMPA/EIS) is the best information available and, BLM believes, is adequate for the purpose of estimating vehicle-related impacts. However, note that the table has been corrected in the Proposed Plan/Final EIS.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 20) BLM should evaluate and provide discussion regarding how Informational Memorandum No. 2005-069 regarding compensatory mitigation. The Draft needs substantial revision to incorporate the IM.

Response: 20) BLM's preference is to implement onsite mitigation measures to avoid or minimize adverse impacts to the degree practicable. However, BLM recognizes that this is not always feasible or adequate. Therefore, as stated in the Draft RMPA/EIS and Proposed Plan/Final EIS, other types of mitigation (e.g., offsite) would be considered on a case-by-case basis, in cooperation with CDOW and the affected operator and property owner.

Colorado Geological Survey and Colorado Oil and Gas Conservation Commission

Topic: Oil and Gas

Comment text: 1) Can BLM include information about the actual width of the individual point-bar deposits being narrower than the entire meander belt, and the resultant impact on downhole spacing? This is the reason COGCC approved 10-acre downhole spacing in the same Williams Fork Formation. BLM should also include information about the status of approval of 10-acre spacing in the planning area.

Response: 1) The revised RFD presented as Appendix H of the Proposed Plan/Final EIS contains geologic information related to oil and gas development in the document. For the purpose of impact analysis under the Proposed Plan, BLM has assumed 10-acre downhole spacing throughout the Planning Area.

Topic: Oil and Gas

Comment text: 2) The Draft states that production increased from 188 to 260 million barrels. This should be MBO (thousand barrels of oil).

Response: 2) Thank you for catching this mistake. The error has been corrected in the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 3) Through simple math, it appears that the RFD would yield only 8.4% of the recoverable gas resource on Federal lands above the rim. BLM should make this conclusion more apparent.

Response: 3) Table 4-28 of the Proposed Plan/Final EIS presents the estimated percent recovery of natural gas resources on Federal lands above the rim. However, note that the number is based on the number of wells anticipated during 20 years and not on the amount to be recovered as of the point of full-field development. A GIS analysis of systematically placed well pads using the CDNR concept of a minimum of 0.5-mile spacing, on ridgetops, with 10-acre downhole spacing, and with an assumed 2,500-foot horizontal reach using diagonal drilling resulted in well over 90 percent of the area of Federal mineral estate being accessible (Section 2.3.1).

Topic: Oil and Gas

Comment text: 4) The coalbed natural gas discussion would appear to need some revision. The assertion of a "high potential" is not supported by the average (versus maximum) values among 90 samples, while the

assertion that the coals are too deep is not supported by the fact that deeper strata are producing coalbed natural gas in the Piceance Basin.

Response: 4) The Proposed Plan/Final EIS (at Section 3.5.5) incorporates the requested revisions.

Topic: Geological Resources

Comment text: 5) What is the basis for the assertion that the Cameo Coals in the planning area lack natural fracture permeability?

Response: 5) The statement has been eliminated from the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 6) Has BLM considered an industry-proposed plan that would limit the surface disturbance at any one time to 200 acres? Has BLM considered leasing the entire upper plateau as a block to reduce pipelines and other facilities?

Response: 6) The Proposed Plan uses the non-contracting Federal Unit approach recommended by CDNR and incorporates the CDNR concept of phased and clustered development and focus of development on ridgetops. The maximum amount to be disturbed at any one time used in the Proposed Plan/Final EIS is 350 acres, representing approximately 10 percent of the Federal mineral estate lands atop the plateau.

Topic: Oil and Gas

Comment text: 7) Can BLM update the RFD to include newer (larger) estimates of annual drilling rates, reconsider the assumed maximum horizontal reach for directional drilling, and reconsider the assumption about a 5-month drilling season on top due to winter conditions?

Response: 7) The Proposed Plan incorporates a revised RFD which includes leasing and drilling atop the plateau based on 2,640-foot minimum surface separation of pads, with 17 wells per pad (16 Mesaverde at 10-acre downhole, and 1 Wasatch at 160-acre downhole). This is then limited by assumed average of 4 drill rigs, 30 days per well and 6 months of drilling time (weather-limited in winter) for 20 years.

Topic: Oil and Gas

Comment text: 8) Can BLM evaluate in more detail the concepts of staged drilling and/or cluster drilling on top of the plateau to keep more of the land available for wildlife and other uses?

Response: 8) The Proposed Plan would include leasing and drilling atop the plateau as a part of a non-contracting Federal Unit, with lease restrictions on surface density (see previous response #7) and phasing of development through successive “development areas.”

Topic: Rangeland Management and Health

Comment text: 9) Mitigation for erosion and stream damage caused by grazing does not appear to be coordinated with mitigation of oil and gas development. The most restrictive alternative for oil and gas is the least restrictive for grazing and vice versa. Shouldn't BLM consider mitigating the impacts of grazing on stream water quality in any management plan alternative?

Response: 9) The Proposed Plan incorporates a number of specific management actions intended to better mitigate, regulate, and monitor multiple use impacts, including livestock grazing, on other natural resource values (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Colorado State Parks

Topic: Recreation

Comment text: 1) OHV travel often gets the blame for problems associated with dust generation and siltation of streams. Will BLM's monitoring programs differentiate between recreational and industry (oil and gas) impacts?

Response: 1) Yes, to the extent that such damage can be differentiated. For example, whether the source of

sediments transported to a stream is from an oil and gas pad or access road, versus a recreation-only trail, or whether damage to vegetation is from off-route OHV travel (not permitted under any alternative except No Action) or oil and gas exploration and development.

Topic: Recreation

Comment text: 2) How will air quality impacts from dust affect recreational use, either directly or through degradation of adjacent vegetation?

Response: 2) Without information on the types of dust suppression methods to be employed, the specific road segments to be upgraded or constructed for oil and gas activity, and how recreational travel will be affected by oil and gas development, BLM cannot provide a reliable and detailed response to this comment. However, it seems safe to say that areas subject to active development would be of somewhat reduced quality for at least some types of recreation. The extent and consequences thereof are currently unknown. In this regard, please note that the Proposed Plan, with its requirement for phased and clustered development atop the plateau, would reduce the impacts on recreation compared to any alternative except No Action.

Topic: Recreation

Comment text: 3) How does BLM intend to control dust? Use of dust suppressants can affect adjacent vegetation and also impact streams and soil erosion through loss of cover.

Response: 3) BLM is aware of the negative aspects of dust suppression, and of the fact that fugitive dust can also be an issue. The exact method of dust suppression will be selected in conjunction with development of a transportation plan after lessee(s) have been identified, the area to be developed initially has been identified, and specific road segments needed for access have been identified. Tentatively, BLM anticipates not allowing magnesium chloride on segments representing a risk of transport to streams.

Topic: Recreation

Comment text: 4) What Best Management Practices will BLM employ to protect streams for water quality impacts so that both industry and recreation can benefit by maintaining stream quality?

Response: 4) BMPs and mitigation measures are generally described in Section 2.2 of the Draft RMPA/EIS and Proposed Plan/Final EIS and listed more comprehensively in Appendix I of the Proposed Plan/Final EIS.

Topic: Onsite Travel Management

Comment text: 5) Are there any considerations given to increasing recreational access to the top of the plateau? Has there been any discussion about land swaps or sales to provide a better access route to the top?

Response: 5) At present, BLM does not anticipate additional access to the top of the plateau. It is likely that access through private land to the west will be limited to oil and gas activities on the private lands atop the plateau. The same routes could potentially be used to access development on Federal lands atop the plateau. Without knowing who will be conducting oil and gas operations for Federal leases atop the plateau or which area will be developed initially, detailed analysis of access from the west is not possible. However, public access appears unlikely, at least during the period of oil and gas exploration and drilling. Whether these roads might become available for public use during long-term operations is not known and would not involve BLM.

Topic: Recreation

Comment text: 6) Please provide more detail on whether limitations on travel to designated routes would apply to the Hubbard Mesa SRMA? What about open travel play areas? If these are not provided for, recreational users will seek these opportunities elsewhere, potentially leading to habitat degradation in sensitive areas.

Response: 6) The five alternatives of the Draft RMPA/EIS would limit travel in Hubbard Mesa to designated

routes, except for Alternatives III and IV. The Proposed Plan would designate Hubbard Mesa as an open travel play (off-trail) OHV riding area (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Recreation

Comment text: 7) How does BLM plan to address impacts on recreation at Hubbard Mesa resulting from industrial traffic, roads, well pads, wells, utility corridors, and visual disturbances?

7) Under the Proposed Plan, the Hubbard Mesa OHV riding area would have an SSR/CSU restriction.

Response: This would provide BLM with more flexibility in requiring that proposed oil and gas, utility, or other activities be located and accessed so as to minimize interference with recreation.

Topic: Recreation

Comment text: 8) Does BLM have an inventory of routes in the Hubbard Mesa area? State Parks encourages BLM to work closely with local recreationists to ensure that no currently available recreational opportunities are lost due to administrative oversights.

8) BLM has a route map and inventory of Hubbard Mesa (e.g., see Map 3 of the Proposed Plan/Final

Response: EIS, admittedly at a very small scale). BLM intends to continue to work with recreationists to ensure that no currently available opportunities are lost due to administrative oversights.

Garfield County

Topic: Oil and Gas

Comment text: 1) Some areas of analysis and context contained within the EIS are dated. Key among these are regional drilling rates and the available infrastructure for future drilling rates, the workforce in place now, current energy production from the immediate region (western Garfield County), and estimated future rates of exploration and production from that same region.

Response: 1) The Proposed Plan/Final EIS incorporates updated information.

Topic: Oil and Gas

Comment text: 2) FLPMA contains significant sustainability criteria for inventory and analysis. Current context, along with production and drilling rates in the immediate region, suggests that the statement for the need for timing and extent of drilling on the NOSR may need to be re-examined.

2) Based on the combination of the specific language of the Transfer Act, the National Energy Policy, and the demand for natural gas, BLM believes that the need to make the NOSRs available for leasing exists now. Please note that the Proposed Plan/Final EIS (e.g., at Table 4-1) reflects substantial natural

Response: gas development but with reduced levels of ground disturbance due to the requirement for phased and clustered development, using the approach proposed by CDNR in the Consultation and Coordination process.

Topic: General Comment

Comment text: 3) A general discussion about ongoing funding for management options was lacking in the EIS. More detail is needed. Garfield County suggests that unless revenue from monitoring and enforcement can be obtained and stipulated in agreements from potential users, or from some other guaranteed source tied to increased development, no alternatives can be properly evaluated in the refinement process where success hinges on such management and enforcement. Document should show revenue to BLM to assist in management for the designation of continued management of WSRs, ACECs, Areas with Wilderness Characteristics, and WMAs. The document should detail management funding impacts from such designations, or the lack thereof.

Response: 3) The Proposed Plan/Final EIS includes a monitoring program for the Roan Plateau Planning Area (Appendices J and K). This includes details of how the monitoring is to be financed, as well as by whom will it be conducted, and that these details will be developed in a reclamation plan submitted for approval to BLM before permitted activities are initiated. A discussion of the BLM projected budget

for the next 20 years is not possible as Federal budget estimates (and funding levels) are not within BLM control.

Topic: Oil and Gas

Comment text: 4) Can the BLM stipulate "rates" of drilling as part of a lease or stipulations to that lease? It also isn't clear if the BLM has the right to substantially modify or change that lease in the future: a) Once granted a lease, during the life of this RMP, is that lease subject to any substantial changes made in a future RMP or by an RMP Amendment? b) Does the BLM have the ability to control or 'cap' the rate and pace of development through lease stipulations?

Response: 4) This was considered in developing the Proposed Plan. a) BLM cannot interfere with valid existing rights once leases are granted. However, BLM can apply restrictions to development, typically as COAs identified through site-specific NEPA reviews. b) BLM has attempted to control the drilling rate atop the plateau under the Proposed Plan through the cap on disturbed area allowable at any one time and restriction of drilling to only one development area. BLM can also limit drilling rates if the result would be exceed a State or Federal standard or otherwise violate some legal requirement or policy under which BLM must manage the site.

Topic: Oil and Gas

Comment text: 5) Royalty and Severance taxes were not adequately covered in the EIS. Garfield County suggests that public revenue streams from extractive activity on BLM lands be detailed with diagrams showing cash flow from extractive activity to the federal, state, and local governments. Projections from revenue sources should be provided based on probable levels of leasing and development. Revenue streams from current leasing and funds accumulated to date should be clearly discussed. Projects and cost estimates should be made clearer. One time 'Bonus' lease payments were not addressed.

Response: 5) Oil and gas royalties and other revenues are estimated and analyzed in the updated socioeconomic analysis at Section 4.4.3 and in Appendix M of the Proposed Plan/Final EIS.

Topic: Socioeconomics

Comment text: 6) The final document should use population projections currently being modified between Garfield County and the State Demographer's Office.

Response: 6) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS uses these population forecasts as were available at the end of 2005.

Topic: Other Minerals

Comment text: 7) The EIS should address oil shale research and production on or in the Roan Plateau.

Response: 7) No oil shale research or production is occurring in the Roan Plateau Planning Area, although several research proposals have been approved farther northwest in the Piceance Basin. BLM's ability to address any future oil shale research and production in the Planning Area is limited, since the technology to develop oil shale is still evolving. BLM does not anticipate any research or production proposals during the 20-year planning period. Any such applications that may be made would be reviewed on a case-by-case basis and would be subject to the same restrictions on surface use as other ground-disturbing activities under the Proposed Plan.

Topic: General Comment

Comment text: 8) Garfield County requests that projection methodologies include sensitivity analyses for projecting overall impacts (as opposed to using flat rates, extended over the 20 year life of the plan).

Response: 8) Socioeconomic analysis methodologies follow BLM guidance and are discussed in Section 4.4.3 of the Proposed Plan/Final EIS.

Topic: Transportation and Access

Comment text: 9) The final alternative analysis needs to have a more in depth inventory of intersections and road segments.

Response: 9) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS includes a detailed review of the transportation plans for Garfield County and the City of Rifle and the potential impact of oil and gas development traffic on local traffic levels. This analysis is described in Sections 3.4.4 and 4.4.4.

Topic: Transportation and Access

Comment text: 10) The EIS made no real attempt to look at cumulative impacts including various levels of activity on the NOSR and activity generated on surrounding BLM and private lands, in terms of roads and bridges.

Response: 10) The Proposed Plan provides for non-motorized, mechanized, and motorized travel as opportunities allow, while limiting off-road vehicle use to minimize habitat loss or fragmentation. The plan also provides for responsible use by limiting travel to designated routes or areas throughout the Planning Area. Travel in areas affected by oil and gas development or other uses, may be limited, restricted, or closed to resolve conflicts, provide for public safety, and provide for orderly oil and gas operations. New routes associated with oil and gas or other uses will be designated administrative access only, unless specific objectives for other resources (e.g., recreational travel routes or access to recreational areas) are present that warrant other designations on a case-by-case basis. Impacts to roads and bridges would be addressed in Geographic Area Plans as part of the permitting process.

Topic: Transportation and Access

Comment text: 11) No attempt is made to estimate costs to local, state, or other federal agencies or institutions to remedy the impacts to road segments and intersections. Sharing of such costs could be rightfully allocated to various development scenarios on the NOSR.

Response: 11) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS includes a detailed review of the transportation plans for Garfield County and the City of Rifle and the potential impact of oil and gas development traffic on local traffic levels. This analysis is described in Sections 3.4.4 and 4.4.4. Also see Appendix M for a discussion on allocating Federal mineral severance funds to local governments to mitigate potential transportation impacts.

Topic: Transportation and Access

Comment text: 12) There is no definitive explanation of ownership, or maintenance responsibility, for key road segments in the EIS (JQS Trail, Rim Road). The County recognizes and appreciates that the BLM has initiated discussions of this set of issues, and will assist the BLM in coming to closure prior to entering into final alternative discussions.

Response: 12) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS includes a detailed review of the transportation plans for Garfield County and the City of Rifle and the potential impact of oil and gas development traffic on local traffic levels. This analysis is described in Sections 3.4.4 and 4.4.4. BLM would assure maintenance of the BLM roads. Maintenance of County roads would be left to the appropriate County.

Topic: Transportation and Access

Comment text: 13) Charts and graphs relating to traffic projections and narrative should be sourced. The BLM needs to correct narrative on page 4-181 where the 20 year projection date should probably read "2023" rather than "2003", and correct assumptions about trip generation rates in Table 4-34 where trips estimated from drilling are off by a factor of 10, reducing the number from 3,093 to 309.

Response: 13) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS corrects the assumptions made in previous analysis and updates the information with latest CDOT data and data from transportation plans for Garfield County and the City of Rifle. This analysis is described in Sections 3.4.4 and 4.4.4.

Topic: Transportation and Access

Comment text: 14) The County supports efforts by the BLM to work with industry and private property owners to develop alternative access routes that are sensitive to the values and constraints identified in the EIS, where traffic impacts may be mitigated, and such mitigation strategies as busing, carpooling and seasonal closures.

Response: 14) BLM looks forward to working with industry, private property owners, the County, and other entities (e.g., the affected towns) in developing a transportation plan under the selected alternative. This would occur at such time as lessee(s) of currently unleased tracts, areas where drilling will be initiated, and suitable access routes have been identified.

Topic: Transportation and Access

Comment text: 15) The County's longstanding position on the JQS trail is that it shall remain open, but that it not be upgraded to accommodate anything heavier than pick-up truck sized traffic.

Response: 15) The BLM portion of the JQS Road will not be available for use by oil and gas equipment or vehicles larger than a pickup truck—i.e., heavy truck traffic or long loads (see Section 2.3, Table 2-1). Management of the County road section, including any restrictions that may be placed on types and levels of use, will remain with Garfield County.

Topic: Transportation and Access

Comment text: 16) It should be noted that any upgrading made necessary by scenarios within the EIS that cause additional traffic on existing access points on County Roads, intersection improvements, construction and maintenance of new roads, and enforcement of road closures and uses, should be the responsibility of the BLM, or its lessees, unless otherwise negotiated.

Response: 16) Regarding who should bear the costs for maintenance of County roads used for access by oil and gas companies, BLM would be pleased to participate with the County and industry in developing a formula for calculating, and a system for allocating, some sort of user fee or other cost-sharing method. BLM returns 50 percent of the royalties to the State of Colorado to provide for local infrastructure needs.

Topic: General Comment

Comment text: 17) Garfield County supports and encourages continuation of recreation activities, and historic cultural and economic utilization of the NOSRs and suggests any alternative chosen respect those historic uses and minimize impacts to historic grazing practices and back country recreation and hunting activity that currently exist now and are likely to be developed as a future resource.

Response: 17) BLM believes that the Proposed Plan would maintain the historic recreational, cultural, and economic uses of the NOSRs. While opening the BLM lands atop the plateau to oil and gas development would change the character of the area, BLM also believes that the requirement for phased and clustered development, combined with the numerous and extensive other resource protections, would limit the impacts overall while also keeping large portions relatively untouched at any given time.

Topic: General Comment

Comment text: 18) The interests of private land owners, both where there are in-holdings and lands abutting, need to be given the highest consideration. Management decisions should incorporate their future desires and result in mutually beneficial decision making.

Response: 18) While it is not possible to avoid all undesirable future consequences, BLM fully intends to work with private property owners potentially affected by management actions or decision. The goal is to attaining mutually beneficial outcomes whenever possible and, at a minimum, to ensure that adverse impacts kept to the lowest practicable level.

Topic: General Comment

19) Garfield County supports and endorses the current management efforts by BLM to promote and enhance the unique qualities of the Roan Plateau: WSR designation; enhancement of native fish populations; management of stream health, grazing, and water development improvements; ACECs; incorporation of areas with Wilderness Characteristics; and incorporation of Biological Inventory findings into current and future management practices. All of the inventory work and analysis, in all of these important areas, need to be applied as "screens" and factored in any final alternative analysis.

19) BLM appreciates the County's comment. Please note, however, that BLM has decided not to including special management for "areas having wilderness character" as in the Preferred Alternative.

Response: Nonetheless, the requirement for phased and clustered development under the Proposed Plan, combined with numerous and extensive other protections, is expected to retain most or all of the wilderness values in large portions of the area atop the plateau.

Topic: Special Status Plants and Significant Plant Communities

20) The highest levels of protection should be applied to sensitive areas that support globally rare and significant plant species and significant associations of plants and habitat.

20) The Proposed Plan will manage listed, proposed, or candidate threatened or endangered species to comply with the provisions of the Endangered Species Act (ESA). The plan will manage special status plants and BLM recognized significant plant communities consistent with the Colorado Standards for Public Land Health and with BLM policy on Special Status Species Management (BLM Manual 6840), which directs BLM to prevent the need for listing of proposed, candidate and sensitive species under the ESA and improve the condition of special status species and their habitats to a point where their special status recognition is no longer warranted.

Response:

Topic: Recreation

21) Garfield County supports further intensive focus on Hubbard Mesa as a SRMA. We recognize that Hubbard Mesa represents a troublesome "Urban Interface Zone" for the BLM, where increasing urbanization and traffic make it difficult to manage an area for traditional land values.

21) While the Proposed Plan does not designate Hubbard Mesa as an SRMA, it would manage it as an OHV riding area designated "open" (i.e., cross-country travel permitted). The entire area would also have an SSR/CSU stipulation to allow BLM to better regulate locations and/or timing of ground-disturbing activities in relation to impacts on recreational use.

Response:

Topic: Visual Resources

22) Garfield County affirms its longstanding position that the highest possible values be placed on visual protection for the Roan Cliffs, and foreground intrusion along the I-70 and Highway 13 corridors, and where possible along the Rim Road on top of the Plateau, should any activity be allowed there.

22) The Proposed Plan will allow only limited changes and retain the visual values in areas with high visual sensitivity, high scenic quality, or relevant and important resource values to maintain a natural appearing landscape. The Proposed Plan/Final EIS will emphasize protection and/or mitigation for lands that receive the greatest amount of public viewing within the I-70 viewshed. All developments, land alterations, and vegetation manipulations within the I-70 viewshed will be designed to limit visual impacts.

Response:

Topic: Water Resources

23) The highest levels of protection should be given to watershed values where either the protection of the Cutthroat Trout populations is at risk or the Town of Parachute water supply might be impacted by any action.

Response: 23) The Proposed Plan will meet all State and Federal water quality standards and will include

designation of two stream-based ACECs and the Parachute Creek Watershed Management Area (WMA). All high-value areas for Colorado River cutthroat trout—expanded under the Proposed Plan to include both “high-risk” and “moderate-risk” ecosystem processes as well as occupied or potential stream habitats—would be protected by and NGD/NSO. Similar protections would result from the NGD/NSO for riparian/wetland vegetation and the SSR/CSU for riparian/wetland buffers and the entire WMA. Please refer to Tables 2-1, 2-2, 2-3, and C-1.

Topic: General Comment

Comment text: 24) Garfield County supports the broad concept of multiple use, and suggests that values are both qualitative and quantitative in looking at options for the utilization of any public land or resource. The preservation of culture, custom, and tradition, and the recognition of both existing and potential future uses, all need to be given prominent consideration in land use decisions. As a result, Garfield County will look for a final alternative to incorporate traditional outfitting and guiding, hunting and fishing opportunities, grazing, informal backcountry non-motorized utilization, motorized use of appropriate roads and trails, seasonal use for winter sports, and appropriate accommodation for recreational events.

Response: 24) BLM believes that the Proposed Plan, with its requirement for phased and clustered development atop the plateau, combined with its various measures to protect visually, ecologically, hydrologically, and recreationally sensitive resources, will accomplish what Garfield County is seeking. Please see Section 2.3, Tables 2-1, 2-2, and 2-3, and Tables 4-1 and 4-3 of the Proposed Plan/Final EIS for summaries of how the Proposed Plan would facilitate the attainment of these desired outcomes.

Topic: General Comment

Comment text: 25) While emergency management and fire issues may be covered in individual lease stipulations, the final alternative should lay the groundwork for determining the range and extent of those stipulations and responsibilities for the BLM, lessees, and other agencies to prepare for, and respond to, emergencies created by any more intensive use of the NOSRs.

Response: 25) The Proposed Plan will provide appropriate management responses based on a Fire Management Plan and Fire Management Zone (FMZ) classification that considers firefighter and public safety and social, economic, and environmental values. FMZs for the Planning Area have been modified somewhat to reflect a decreased desirability for wildland fire (whether prescribed or allowed to burn) given the anticipated increased amount of oil and gas development under the Proposed Plan.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 26) Weed control measures must be given the highest consideration for any alternative that allows further intrusion into the NOSR. Garfield County urges that such a weed control plan include, but not be limited to, regular road and shoulder maintenance on all BLM roads and access roads to be permitted, well pad area maintenance provisions, vehicle treatments, reclamation and restoration stipulations and ongoing monitoring and enforcement.

Response: 26) The Proposed Plan will emphasize prevention, inventory, detection, and monitoring and project actions as part of an integrated weed management program (which includes mechanical, biological, and chemical control techniques). The Proposed Plan will promote natural processes and healthy native plant communities to deter noxious weeds. And finally, the plan will expand public education efforts.

City of Glenwood Springs

Topic: General Comment

Comment text: 1) City Council did not agree on supporting a specific alternative but voted to oppose any drilling, now or in the future, on top of the plateau. Council does not oppose extraction below the cliffs. Council requests being added to the group of Cooperating Agencies.

Response: 1) BLM is pleased to add the City of Glenwood Springs City Council as a Cooperating Agency. Regarding drilling on top, it is BLM’s position that the Transfer Act requires making that area available for oil and gas leasing and development, subject to multiple use concepts under FLPMA and BLM

policies and to appropriate levels of resource protection. However, BLM believes that the Proposed Plan would provide ample protection of sensitive ecological, hydrological, and recreational resource values. Specifically, the Proposed Plan includes a requirement of phased and clustered development atop the plateau, extensive areas of NGD/NSO and SSR/CSU restrictions, designation of four ACECs and the Parachute Creek Watershed Management Area, restriction of motorized and mechanized travel to designated routes (except over-snow travel by snowmobile), more comprehensive weed control and range improvement actions, and performance-based reclamation.

City of Rifle

Topic: Oil and Gas

Comment text: 1) The City of Rifle requests that the plan be updated to clearly indicate all available types of potential NSOs, specific to the resources they would apply to, and where those NSOs are anticipated to occur under the various proposed alternatives.

Response: 1) The location of each of the NGD/NSO areas under the Proposed Plan is provided in Appendix C of the Proposed Plan/Final EIS. These are also listed, by resource, in Table C-1.

Topic: Recreation

Comment text: 2) The City of Rifle requests that the plan should be adjusted to more accurately reflect anticipated recreational opportunities while recognizing that activity on private land is likely to evolve and changes will affect recreational opportunities within public lands.

Response: 2) The Proposed Plan designates no Special Recreation Management Areas. Instead, the Planning Area will be managed as part of Glenwood Springs Extensive Recreation Management Area. An OHV open riding area will be managed on Hubbard Mesa, with a SSR/CSU restriction. Route closures, realignment, and signage will be used as needed to protect adjacent private property.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 3) The City of Rifle requests that the plan calculate and present impacts to current mule deer population levels as well as the desired population levels for GMU32.

Response: 3) The Proposed Plan/Final EIS includes an expanded discussion of impacts to mule deer, as well as information on desired population levels in Game Management Unit 32 (Section 4.3.2),

Topic: Oil and Gas

Comment text: 4) The City of Rifle requests that further analysis be conducted and presented with the assumption that private lands surrounding public lands will develop differently in response to different levels of land use regulations and management on BLM land.

Response: 4) As stated at multiple places in Chapter 4 of the Draft (and Final) RMPA/EIS—i.e., in sections discussing cumulative impacts—the impact analyses included the assumption that development on private lands will not include the same levels of protection as on Federal lands.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 5) The City of Rifle requests that Timing Limitation alternatives also include a limitation that would more accurately reflect when big game populations would potentially be forced to migrate into winter range areas. Timing Limitations in winter range areas should apply to all activity, not just oil and gas.

Response: 5) The dates for the big game winter range TL were established by the Colorado Division of Wildlife and are meant to reasonably include the entire season of critical use. Under the Proposed Plan, the TLs would apply to all major sources of disturbance, such as construction for purposes other than oil and gas (e.g., a communications tower, a new stock pond, etc.).

Topic: General Comment

Comment 6) The City of Rifle asserts that the Draft RMPA/EIS should place an emphasis on the distinction of

text: public versus private land within the Planning Area or should refine the Planning Area to only include public lands.

Response: 6) BLM recognizes that including private land within the Planning Area may create some confusion but believes that failure to include these adjacent and commingled lands would have created greater issues for planning. While BLM does not manage private lands (except as pertains to development of underlying Federal minerals), many of the access roads and surface facilities associated with oil and gas development on Federal lands are also used for development on the private lands. Therefore, BLM concluded, and continues to believe, that the distinct geographic boundaries represented by the creeks/streams and major roads on the east, south, and west, and by the drainage divide atop the plateau (Parachute Creek versus Piceance Creek) are appropriate. Nonetheless, BLM understands the underlying sensitivity and has attempted in the Proposed Plan/Final EIS to clarify some text where this point may have been confusing.

Topic: Other Minerals

Comment text: 7) The City of Rifle feels that the issue of oil shale development is needed in the planning document. Please include an analysis of the effects that the oil shale and natural gas industries may have on each other and how both may be accommodated within the Planning Area if the oil shale industry is introduced during the life of this plan.

Response: 7) BLM continues to believe that oil shale development during the 20-year planning period is very unlikely. This is reinforced by recent research proposals, none of which was for the Planning Area. If, or when, oil shale development occurs in the Planning Area, a separate NEPA analysis and documentation would be required, based on the specific proposal (location, technology, etc.). In the meantime, BLM will require that oil and gas development on top of the plateau (i.e., overlying the oil shale resource in the Planning Area) employ vertical wells to a depth below the oil shale resource before diverging diagonally. With a minimum of 0.5 mile of separation between pads under the Proposed Plan, this would represent minor and surmountable interference with future oil shale development.

Topic: Socioeconomics

Comment text: 8) The City of Rifle requests that the amount of local economic benefits generated by activity within the Planning Area be clarified, preferably with data more recent than 1995.

Response: 8) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS uses the most recent data available (generally 2003 or later) for the analysis.

Topic: Oil and Gas

Comment text: 9) The City of Rifle requests that analyses of impacts (in terms of natural gas development) be based on the actual total potential for impact, discounting restrictive assumptions. The absolute range of potential impacts, regardless of assumptions, should be included in the planning document.

Response: 9) Since unconstrained development is not reasonable or realistic, given the mandates of FLPMA, other Federal laws, and BLM policies regarding multiple-use management, BLM believes that speculative conclusions about impacts associated with unconstrained development would be inappropriate.

Topic: Oil and Gas

Comment text: 10) The City of Rifle believes that the Draft RMPA/EIS is deficient in that it does not consider or analyze drilling at surface spacing greater than 20 to 40 acres. In order to better analyze a sufficient scope of development opportunities and potential impacts, please include an analysis of potential impacts to all resources while considering surface spacing of 160 acres and 640 acres.

Response: 10) BLM believes that the Proposed Plan represents a high degree of environmental protection while allowing recovery of a reasonable amount of the underlying natural gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a

reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

Topic: General Comment

Comment text: 11) The City of Rifle requests that traffic impacts to roadways in surrounding jurisdictions that may result from BLM land use plan decisions be evaluated in terms of type and level of traffic, degradation in levels of service, public safety in crossing areas near schools, and average daily traffic numbers. The final edition of the RMPA/EIS should incorporate a thorough analysis of these impacts.

Response: 11) The Proposed Plan/Final EIS includes additional information on transportation impacts. However, given the unavoidable uncertainties about exactly where, in what manner, at what pace, and by what access routes future oil and gas development will occur, BLM believes that detailed quantitative analysis of the type indicated in the comment is not practicable.

6.3.2.4 Other Governmental Entities

U.S. Department of the Interior – Fish and Wildlife Service

Topic: Areas of Critical Environmental Concern

Comment text: 1) Alternative II provides the highest level of ecological protection. All four ACECs should be incorporated into the final alternative.

Response: 1) While BLM identified Alternative II as the environmentally most protective alternative in the Draft RMPA/EIS, please note that the Proposed Plan of the Final would result in fewer pads, fewer miles of access roads, and fewer total acres of surface disturbance than any of the alternatives analyzed previously, including No Action and Alternative II. Additionally, the Proposed Plan would incorporate all four of the ACECs (although with somewhat reduced total area) and establish the Parachute Creek WMA for the entire upper plateau. While the four ACECs would occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area. Perhaps most importantly, the requirement for phased and clustered development atop the plateau under the Proposed Plan would limit well pads to a minimum spacing of 0.5 mile (one per 160 acres) and limit development to one specific area at any one time.

Topic: Special Status Plants and Significant Plant Communities

Comment text: 2) Known locations of listed, proposed, and candidate threatened/endangered plants should be inventoried every 3 years and the results reported to USFWS. A monitoring plan methodology should be included in the RMP.

Response: 2) Known locations of these plots are monitored annually by BLM (Section 3.3.3 in the Proposed Plan/Final EIS).

Topic: Special Status Plants and Significant Plant Communities

Comment text: 3) All areas geologically suitable for the DeBeque phacelia should be assumed to contain this plant until a survey has been conducted. The species is an ephemeral annual and does not flower in very dry years.

Response: 3) The Proposed Plan comprises a number of protective surface-use restrictions specific to special status plants and significant plant communities. These restrictions are listed in Table 2-1 and detailed in

Table C-1. These include an NGD/NSO for known occupied habitat of the two candidate species, DeBeque phacelia and Parachute penstemon. Occurrence of the DeBeque phacelia is dependent several factors in addition to soil type and geology.

Topic: Special Status Fish and Wildlife	
Comment text:	4) The RMP should specify no loss of Colorado River cutthroat trout habitat in areas of moderate-risk habitat (NGD/NSO-5) and no ground-disturbing activities with a duration longer than 2 years in areas of high value watershed processes (NGC/NSO-6).
Response:	4) The NGD/NSO restrictions under the Proposed Plan specifically prohibit long-term ground-disturbing activities (i.e., with a duration lasting longer than 2 years) in these areas. Any temporary disturbances in these areas would be allowed only if not a risk to the trout or their habitat. The Proposed Plan also establishes SSR/CSU restrictions for the entire Parachute Creek WMA, which allows BLM to manage activities in portions of the watershed besides those supporting the trout (e.g., upslope and upstream areas). Additionally, note that the areas of “high-risk” and “moderate-risk” watershed processes have been combined into a “high-value” category to be protected with an NGD/NSO.

Topic: Special Status Fish and Wildlife	
Comment text:	5) BLM must incorporate changes in grazing management to protect and help restore Colorado River cutthroat trout habitat.
Response:	5) Varying levels of protection of natural resources, as related to livestock grazing, are incorporated into the range of alternatives analyzed in the Draft RMPA/EIS. Protection and restoration of Colorado River cutthroat trout habitat is a stated goal of the Proposed Plan and is specifically addressed in Grazing and Rangeland Management actions (Section 2.3 and Table 2-1)

Topic: Oil and Gas	
Comment text:	6) All oil and gas reserve and permanent pits must be netted to exclude birds, enclosed within an 8-foot-high fence to exclude ungulates, enclosed within a 2-foot solid barrier buried 6 inches into the soil to exclude small mammals and reptiles, and lined to prevent infiltration to groundwater.
Response:	6) If the need for, or efficacy of, any such measures can be demonstrated with regard to a special status species, BLM can require their implementation during the permitting process in conjunction with project-specific or site-specific plans.

Topic: Special Status Plants and Significant Plant Communities	
Comment text:	7) BLM should maintain the current oil shale withdrawal in occupied habitat of Parachute penstemon, avoid land disposals or exchanges of lands containing suitable habitat for this and other special status species until a survey has been conducted and accepted by USFWS, and not allow communication or other facilities in areas of occupied habitat.
Response:	7) The Proposed Plan includes an NGD/NSR restriction for occupied Parachute penstemon habitat. Use authorizations would be required to meet this restriction, including communication or other facilities. No land exchanges or disposals would occur within proposed ACECs, which contain much of the potential habitat for special status plant species.

Topic: Oil and Gas	
Comment text:	8) USFWS supports limiting surface spacing to 160 acres and requiring a Geographic Area Plan for the final alternative.
Response:	8) The Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. A goal of 160 acre spacing below the rim is also

included in the Proposed Plan (Section 2.3 and Table 2-1). The phased development areas on top of the Plateau under the Proposed Plan are illustrated in Figure 2-1.

Topic: Special Status Plants and Significant Plant Communities

Comment text: 9) USFWS supports no-lease for the Anvil Points Mine area where Parachute penstemon is found. The Service also supports NGD/NSO stipulations and no entry for other minerals in areas that support special status plants.

Response: 9) The Proposed Plan includes NGD/NSR restrictions for occupied Parachute penstemon, and all other special status plant species habitat. All use authorizations would be required to meet these restrictions (Section 2.3 and Table 2-1).

Topic: Special Status Plants and Significant Plant Communities

Comment text: 10) USFWS supports the management prescriptions presented for the Anvil Points ACEC. All revegetation projects should require a site-specific plan in areas of special status species, with the goal of not introducing competitive species.

Response: 10) Under the Proposed Plan, all revegetation efforts will be implemented using described reclamation standards (Appendix I) and will be subject to regular monitoring against defined success criteria (Appendix J). In addition, controlling introduction and spread of noxious and other undesirable vegetation species is a stated goal of the Proposed Plan (Section 2.3 and Table 2-1).

Topic: General Comment

Comment text: 11) Each ACEC should have a plan of how the resources within the ACEC will be protected.

Response: 11) Table 2-2 of the Draft RMPA/EIS and Proposed Plan/Final EIS presents this information.

Topic: Special Status Fish and Wildlife

Comment text: 12) Provide a citation for the importance of "well-developed riparian vegetation" to Colorado River endangered fishes. Historically, these species required bare gravel bars.

Response: 12) The statement was not aimed at the issue of cobble bars and shallows used for spawning, but at overbank areas that provide a buffer from inflow of pollutants. Since scouring flows have been reduced by the construction of reservoirs on the Colorado River and its tributaries, accumulation of sediments in these overbank areas is more of an issue than was historically the case. To avoid confusion, the statement has been deleted from the Proposed Plan/Final EIS.

Topic: Special Status Fish and Wildlife

Comment text: 13) The RMP should discuss the "Colorado River Cutthroat Trout Conservation Agreement and Conservation Strategy" to which BLM is a signatory and describe the actions that BLM has committed to undertake under that agreement. Additionally, BLM should review and incorporate into the RMP the measures identified in the programmatic biological assessment for RMPs.

Response: 13) Additional language has been incorporated into the Proposed Plan/Final EIS.

Topic: Special Status Fish and Wildlife

Comment text: 14) The RMP should describe current habitat conditions for all streams containing Colorado River cutthroat trout, including habitats degraded by overgrazing.

Response: 14) Section 3.3.1.2 of both the Draft RMPA/EIS and Proposed Plan/Final EIS describe the current condition and trend of riparian habitat as of the most recent Land Health and PFC Assessments. For reaches not attaining PFC, causal factors are identified and described.

Topic: Special Status Fish and Wildlife

Comment text: 15) BLM should revise the language regarding depletions and provide depletion estimates for activities under each alternative. Depletions in the Colorado River Basin require Section 7 (of the Endangered Species Act) consultation with the Service.

Response: 15) BLM does not anticipate depletions in the Colorado River Basin to cause permanent effects because depletions are expected to be small and ephemeral. The Proposed Plan/Final EIS provides an estimate of the depletions associated with future oil and gas development on BLM lands under the Proposed Plan.

Topic: General Comment

Comment text: 16) USFWS recommends no exceptions to the NGD/NSO surface use stipulations.

Response: 16) BLM has concluded that it cannot reasonably preclude granting of exceptions to NGD/NSO or other restrictive stipulations if the proponent can demonstrate that the exception would not cause injury to the resource being protected by the stipulation. However, the Proposed Plan/Final EIS attempts to clarify this point by incorporating situations under which an NGD/NSO might not apply. In such a situation, a decision by BLM not to require application of the NGD/NSO on a site-specific or project-specific basis would require documentation that the resource value being protected by the stipulation would not be adversely affected.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 17) BLM should require that topsoil be salvaged, stored, and replaced separately in areas of temporary disturbance to improve reclamation success by preserving the seedbank and facilitating mycorrhizal activity.

Response: 17) Requirements for topsoil salvage and direct-haul/placement or storage are specifically addressed in the Proposed Plan in the Proposed Plan/Final EIS (Appendix I - BMPs and Standard Reclamation Practices).

U.S. EPA, Region 8

Topic: Climate and Air Quality

Comment text: 1) Visibility. Table 4-10 shows cumulative visibility impacts and combines results of screening analyses with results of refined analysis. BLM conducted a refined analysis in cases where the screening analysis showed impacts. Section 4.2.5.7 explains that the visibility analysis showed no reduction in visibility at Class I areas due to BLM sources alone. The technical support document supports this statement; however, in some Class I or sensitive Class II areas, days of cumulative visibility impact greater than 1.0 deciview (dv) resulted when emissions from BLM sources were added to those of the inventory sources. In these cases, the potential impact of the BLM sources tipped the balance and caused potential cumulative impacts to exceed 1.0 dv. As shown in table 5-65 of the technical support document, this occurred on one modeled day at Black Canyon of the Gunnison National Park (Class I), one day at the West Elk Wilderness (Class I), and one day at Colorado National Monument (Class II). (Additional days of reduced visibility were modeled for sources in the Vernal planning area.) The refined analysis for the West Elk Class I area showed no days of impact exceeding 1.0 dv; however, one day with impact over 1.0 dv remained after the refined analysis for the Black Canyon Class I area. It is not possible to determine from information in the DEIS or the Technical Support Document the extent to which BLM sources contributed to this remaining day or reduced visibility. (Class II areas did not receive the refined analysis; consequently it is not possible to determine whether BLM sources would have contributed marginally to any remaining days with impact over 1.0 dv in those areas.) We recommend conducting a refined analysis at least for the Colorado National Monument.

Response: 1) In the screening visibility analysis for the Black Canyon of the Gunnison, Roan Plateau sources contributed 7.04% to visibility reduction under the maximum development alternative, while inventory sources contributed 22.06%. For the Colorado National Monument, BLM sources contributed 3.15% to the modeled maximum screening visibility of 24.19% for the maximum development alternative. BLM

will provide a refined visibility analysis for the Class II Colorado National Monument in the FEIS, with the understanding that Class II areas do not have any legal protection for visibility.

Topic: General Comment

Comment text: 2) In order to fully consider all alternatives, BLM should consider an alternative that would provide leasing for oil and gas development on the base area (NOSR 3) and no leasing on the top of the plateau (NOSR 1).

Response: 2) BLM realizes that this would have been one of many potential other alternatives that could have been analyzed. The impacts probably would have been intermediate between No Action and one of the other alternatives, depending on the amount of drilling allowed on new leases below the rim. However, since much of the portion of the NOSRs below the rim is already under lease, the difference between the EPA scenario and the No Action alternative could be slight. The Proposed Plan developed during the Consultation and Coordination process following publication of the Draft RMPA/EIS is also intermediate, because the approach of phased and clustered development under a non-contracting Federal Unit would substantially limit the amount of development on top compared to the other alternatives (except No Action).

Topic: Transportation and Access

Comment text: 3) Under current management of the Roan Plateau, access to the top is essentially closed during the winter months. Improved access to the top for oil and gas activities will potentially allow year-round access. Although for recreational activities, this could be considered a benefit, increased access during the winter could mean additional stress for wildlife. This change has not been analyzed and discussed in the wildlife section of the DEIS. BLM may wish to consult with the USFW and/or the Colorado Fish and Game Department (sic) on this issue.

Response: 3) The proposed transportation and travel management action for the Proposed Plan will stipulate that travel in areas affected by oil and gas development, or other uses, may be limited, restricted, or closed to resolve conflicts, provide for public safety, and provide for orderly oil and gas operations. New routes associated with oil and gas or other uses will be designated administrative access only, unless specific objectives for other resources (e.g., recreational travel routes or access to recreational sites) are present that warrant other designations on a case-by-case basis.

Topic: Recreation

Comment text: 4) During other periods, access improvements may also encourage additional visitor and recreational interest in the plateau. Further analysis in the FEIS should focus on what the potential increase in activity would entail. Please consider additional hunting, OHV, backpacking, mountain biking, and equestrian uses that may be increased by improved access.

Response: 4) The transportation and travel management action also provides for non-motorized, mechanized, and motorized travel as opportunities allow, while limiting off-road vehicle use to minimize habitat loss or fragmentation.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 5) The land that surrounds the base of the plateau, federal and private, is considered critical habitat for mule deer. Continued development of federal and private land will further reduce the area available for mule deer. BLM should incorporate Colorado Fish and Game mule deer management and population goals for the area.

Response: 5) BLM works with the Colorado Division of Wildlife on a continuing basis.

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 6) Although BLM asserts that it cannot designate new Wilderness Study Areas (WSAs), under FLPMA Section 603, BLM acknowledges the authority to protect natural values on public lands, including the management authority to protect lands in a manner which maintains their wilderness characteristics.

BLM should also consider management actions such as no mineral leasing decisions or the use of NSO stipulations to preserve these values. Therefore, EPA encourages BLM to protect all lands that have been inventoried and shown to contain wilderness values. The wilderness inventories conducted by BLM in 1998, 1999, and 2000, determined that 21,382 acres met the necessary standards for wilderness characteristics. The preferred alternative proposes to protect only 9,006 acres of the qualifying 21,382 acres.

Response: 6) Under the Proposed Plan, no areas will be managed specifically to maintain roadlessness and naturalness. However, numerous and extensive protections for various resources, in combination with the phased and clustered development approach for the area atop the plateau, are expected to maintain some wilderness characteristics in substantial portions of the Planning Area.

Topic: Oil and Gas

Comment text: 7) As BLM points out with the NSO stipulations for the 9,006 acres, this approach would not preclude leasing and production of the associated mineral estate. If leasing is ultimately considered for areas on top of the plateau, BLM could determine at that time if the NSO stipulation is still necessary to protect these areas or a waiver could be considered, if absolutely necessary, and with special conditions requiring a reduced footprint. In addition, prior to future leasing on the plateau, new drilling technologies may be developed to enable construction and production without any surface disturbance within these areas. The DEIS should at least provide an analysis that would determine how much of the fluid minerals within the 21,382 acres with wilderness characteristics could be developed with current directional drilling technologies including additional costs to develop the resource.

Response: 7) The Proposed Plan incorporates a concept of phased and clustered development atop the plateau as recommended by CDNR during the Consultation and Coordination process (see Section 2.3). This uses clustering of up to seventeen wells per pad, with 10-acre downhole spacing and a minimum of 0.5 mile between pads. Also, drilling would be limited to only one area at a time. The number of pads and miles of new or upgraded access roads under the Proposed Plan would be lower than any of the previous alternatives, including Alternative I (No Action), while accommodating a reasonable amount of natural gas recovery.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 8) Sediment. The DEIS states that closing the top of the plateau to open motorized travel per the preferred alternative will result in a benefit to aquatic life, especially to the Colorado River Cutthroat Trout. However, the preferred alternative will allow an increase in roads and well pads to develop gas resources. The DEIS indicates that this could impact sedimentation and aquatic life. EPA suggests that BLM provide best management practices that would reduce impacts from building, using, and maintaining gas industry roads.

Response: 8) The Draft RMPA/EIS did not suggest that the restriction of motorized travel to designated routes would offset other, negative impacts but merely that it would be beneficial in an of itself. Regarding BMPs, the Proposed Plan includes various BMPs and mitigation measures to protect water quality and aquatic life as well as other resources (see Appendix I of the Proposed Plan/Final EIS). Note also that the Proposed Plan, with its requirement for phased and clustered development atop the plateau, emphasis on ridgetop development, and multiple additional restrictions on ground-disturbing activities would result in less total long-term ground-disturbing activities from pads, roads, and associated sources than any of the previous alternatives except No Action (see Table 4-2), while recovering a reasonable amount of the oil and gas resource.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 9) Introduction of non-native trout. Increasing the roads under the preferred alternative will increase access to habitat and as a result could increase the potential for introductions of non-native trout. Proposals to increase the number of roads on top of the plateau should analyze for the potential for non-native trout introductions and special management practices may be necessary to protect the remaining populations of Colorado River cutthroat trout. EPA recommends that BLM consult with USFWS

and/or the Colorado Fish and Game Department on this issue.

Response: 9) Section 4.3.4 mentions this potential, although it is difficult to analyze because of a lack of data on the relationship between miles of roads, numbers of vehicle trips, and potential for ad-hoc releases of trout. The distance of the upper plateau streams from other fishable waters probably reduces this potential. Also, note that under the Proposed Plan, the miles of new roads would be significantly reduced and, atop the plateau, more than offset by road closures. BLM consults with the Colorado Division of Wildlife regarding Colorado River cutthroat trout and other wildlife on a continual basis.

Topic: Climate and Air Quality

Comment text: 10) Visibility Impact at Mount Zirkel. The last paragraph of the visibility portion of section 4.2.5.7 indicates that Black Canyon of the Gunnison National Park was the only Class I area where modeled cumulative impacts greater than 1.0 dv remained after the refined visibility analysis. However, table 4-10 shows a maximum impact of one day over 1.0 dv remaining at Mount Zirkel. EPA requests that the discrepancy be resolved in the FEIS.

Response: 10) The EPA is correct. The text of section 4.2.5.7 has been changed in the Proposed Plan/Final EIS.

Topic: Climate and Air Quality

Comment text: 11) Ozone. The DEIS does not address the potential of ozone impacts from the project. Table 3-9 shows background concentrations of the criteria pollutants, but does not include ozone. The model used by the BLM for the air quality analysis (i.e., CALPUFF) lacks the capability to accurately represent chemical transformations and thus is not suitable for estimating ozone impacts. Running a regulatory ozone model such as RPM-IV for purposes of the DEIS is impractical, and we understand that BLM's National Science & Technology Center may be reluctant to estimate potential ozone impacts with a conservative method such as VOC/NO point source screening tables. Nevertheless, development in the project area includes sources of volatile organic compounds (VOCs) and oxides of nitrogen (NO), which are ozone precursors, and the additional development proposed in the DEIS might increase these emissions significantly. In lieu of using a regulatory model, we recommend that BLM estimate potential ozone impacts using a screening table or other non-regulatory method. The FEIS should also disclose estimated VOC and NO emissions.

Response: 11) The EPA is correct that conducting an ozone modeling analysis for this RMPA/EIS is impractical. Further, BLM NSTC Air Quality staff believes that the "screening" ozone methodology (a.k.a the Scheffe method) is too conservative to provide results of any real value.

Topic: Climate and Air Quality

Comment text: 12) Class II Increment for Prevention of Significant Deterioration, PM. Section 5.2 of the technical support document states, "The comparisons to the PSD Class I and II increments were intended to evaluate a threshold of concern for potential impacts, and does not represent a regulatory PSD Increment Consumption Analysis." Furthermore, BLM compared results of the air quality analysis to the Class II increment for PM only in sensitive Class II areas in the far field (such as the Holy Cross Wilderness Area). Section 4.2.5 of the DEIS, under PM discloses the modeled near-field particulate concentrations. The results indicate that the potential impact of fugitive dust from roadways and construction would meet the National Ambient Air Quality Standards (NAAQS). The BLM analysts used background concentrations of PM of 54u/m as a 24-hour average and 24 u/m as an annual average, which exceed the corresponding Class II increments for Prevention of Significant Deterioration of 30 u/m and 17 u/m. Consequently, adding modeled concentrations to the background concentrations also gave results over the increments. We recommend that BLM explain in the FEIS the rationale for not estimating potential in-field impacts on PM increments.

Response: 12) First, by regulation and practice, background concentrations are not added to modeled concentrations to determine compliance with PSD increments. Therefore, such information will not be presented in the FEIS. Second, the near-field (and far-field) modeling analysis were not intended to be, and should not be interpreted as a regulatory PSD Increment Consumption Analysis (ICA). Third, background air concentration data are provided by the Colorado DPHE, to which BLM defers for these

data.

Topic: Climate and Air Quality

Comment text: 13) Background Concentrations-Hazardous Air Pollutants. Table 4-8 presents background concentrations of hazardous air pollutants. It does not identify the source of the data as Table 4-7 does for the criteria pollutants. EPA recommends the source of the information be identified in the FEIS.

Response: 13) These values were recommended by CDPHE and were taken from the EPA's Urban Air Toxics Pilot Project site in Grand Junction, Colorado. As stated previously, BLM defers the selection of background air quality data to the appropriate State air quality agency. A footnote has been added to Table 4-8 in the Proposed Plan/Final EIS.

Topic: Climate and Air Quality

Comment text: 14) National Park Service Reference. Please correct the date in the footnote to Table 3-24.

Response: 14) The footnote has been changed in the Final TSD.

Topic: Climate and Air Quality

Comment text: 15) Increment Comparison Results, SO₂. The value for the three-hour SO₂ under "GMA BLM Sources Only" (Glenwood Springs Management Area) in table 5-12 differs by order of magnitude from the corresponding values in tables 5-13 through 5-16 and might be a typographical error. EPA recommends this discrepancy be resolved in the FEIS.

Response: 15) This value has been changed in the Final TSD.

Mesa County

Topic: General Comment

Comment text: The Mesa County Board of Commissioners supports Alternative III.

Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The Proposed Plan includes many of the basic components of Alternative III (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). However, the concept of deferred drilling atop the plateau was not

Response: retained in the Proposed Plan, owing to a general lack of support. Instead, the Proposed Plan would require phased and clustered development, along with other resource protections, to provide ample protection of sensitive ecological, hydrological, and recreational values while accommodating a reasonable amount of natural gas recovery without a deferral period.

Moffat County

Topic: General Comment

Comment text: The Moffat County Commissioners do not endorse a particular alternative. Rather, they support multiple-use and balancing natural gas extraction, oil shale exploration, and mining and environmental protection on the Roan Plateau.

The Proposed Plan emphasizes balance in managing for a variety of multiple resource uses incorporating outcome-based adaptive management, a requirement for systematic phased and clustered

Response: oil and gas development atop the plateau, and numerous and extensive areas with NGD/NSO and SSR/CSU restrictions to protect ecologically, hydrologically, recreationally, and/or visually sensitive resource values. See Section 2.3 and Table 2-1 of the Proposed Plan/Final EIS.

Pitkin County

Topic: General Comment

Comment text: Resolution supports the Community Alternative. Urges the BLM to adopt as its final plan one that reflects this community supported alternative.

Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS.

Response: However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 of the Proposed Plan/Final EIS).

Summit County

Topic: Oil and Gas

Comment text: The Summit County, Colorado, Board of Commissioners supports what is commonly called the "Community Alternative" for management of this special place.

Thank you for your interest in the BLM land use planning process. The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic

Response: components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 of the Proposed Plan/Final EIS).

Town of New Castle

Topic: Oil and Gas

Comment text: 1) The New Castle Town Council unanimously adopted a resolution in support of protecting lands at the top and cliffs of the Roan Plateau by allowing no drilling in these areas.

1) The Proposed Plan emphasizes balance in managing for a variety of multiple resource uses incorporating outcome-based adaptive management, a requirement for systematic phased and clustered oil and gas development atop the plateau, and numerous and extensive areas with NGD/NSO and

Response: SSR/CSU restrictions to protect ecologically, hydrologically, recreationally, and visually sensitive resource values. See Section 2.3 and Table 2-1 of the Proposed Plan/Final EIS. Although this does not meet Council's preference for no drilling atop the plateau, the result is a high level of resource protection while accommodating a reasonable amount of natural gas recovery.

Topic: General Comment

Comment text: 2) The New Castle Town Council supports many of the ideas found in the Community Alternative.

2) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were

Response: incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Hazardous Materials

Comment text: 3) Request that the WORC Review of Inspection/Enforcement Program study done November 2004 be incorporated into the Proposed Plan/Final EIS.

3) BLM has not specifically included the WORC review into the Proposed Plan/Final EIS but retains

Response: the ability to incorporate specific results during preparation of Geographic Area Plans during the permitting process.

Topic: Socioeconomics

Comment text: 4) Concerned that there is a real threat of a net loss of jobs, economic activity, and tax income from drilling on top of the Roan, rather than an economic benefit.

4) The updated socioeconomic analysis in Section 4.4.3 of the Final includes a detailed analysis of the potential impacts to employment, economic activity, and tax revenues associated with drilling on top of the plateau. The analysis does not indicate the types of negative outcomes about which Council has

expressed concerns, but it does acknowledge some localized impacts on infrastructure and housing, for example, associated with the ongoing human population growth of the region—to which oil and gas under the Proposed Plan would be only one contributor.

Topic: Oil and Gas

Comment text: 5) BLM has not done enough to explore the benefits of directional drilling and has not applied the industry's present knowledge to its analysis of the Roan Plateau Planning Area.

5) The Proposed Plan represents a high degree of environmental protection while accommodating a reasonable amount of natural gas recovery. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between

Response: pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

City of Aspen

Topic: General Comment

Website Comment ROAN PLATEAU DRAFT COMMENTS Attn: Greg Goodenow Bureau of Land Management Glenwood Springs Field Office PO Box 1009 Glenwood Springs, CO 81602 The Aspen City Council would like to request the Bureau of Land Management (BLM) develop an alternative that protects the wildlife and spectacular beauty of the Roan Plateau by prohibiting mineral leasing on the top of the plateau. More and more, the areas near Aspen including the Roan Plateau, are valued for recreation, sightseeing, and their natural beauty. This is important to the long-term economy of this area. The Aspen City Council supports the Community Alternative as a reasonable compromise, by allowing drilling and development around the base of the plateau and delaying leasing on the sensitive top and cliff areas. The Aspen City Council supports requiring use of Best Management Practices and technologies, a reasonable approach consistent with what local, state and federal governments require of industries and builders in other areas. It is also crucial to limit motorized vehicle use to designated roads to protect nearby sensitive areas. The City of Aspen believes that this alternative allows for the vast majority of the resource recovery possible, while protecting the long-term economic engine of the area by preserving the environment, beautiful scenery, and air and water quality for residents and visitors both today and in the future. The plateau is a unique and spectacular area with wildlife, scenic, and geologic values of great importance to this area of Colorado. We will all benefit by a reasonable compromise that allows development and drilling in the base area while protecting the unique values of the plateau. Thank you for your consideration. On behalf of the Aspen City Council, Helen Kalin Klanderud, Mayor of Aspen

Response: The lands of the Naval Oil Shale Reserves No. 1 and 3 atop and below the Roan Plateau were transferred to the Department of Interior in 1997 with specific direction to develop a Resource Management Plan and enter into leases for the exploration, development, and production of petroleum resources "as soon as practicable," consistent with multiple use management. Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details.

Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments.

Topic: General Comment

Comment text: The Aspen City Council supports the Community Alternative.

Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS.

Response: However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Northwest Resource Advisory Council

Topic: General Comment

1) The Northwest Resource Advisory Council, after two years of information gathering including hosting a public meeting to hear from the affected public and tours of the area, make the following recommendation for future management of the Roan Plateau.

Comment text: The Northwest Resource Advisory Council unanimously supports the orderly and responsible development of the resource. In that development, we support the recommendation of the Cooperators to endorse the Department of Natural Resources proposal.

1) BLM appreciates the public involvement efforts, support, and direction it received from the Northwest Resource Advisory Council (NW RAC) during preparation of the Roan Plateau Resource Management Plan Amendment. BLM has taken this support into consideration in development of the Proposed Plan, has adopted the Colorado Department of Natural Resources proposal, and has worked closely with them to refine and clarify the Proposed Plan.

Topic: General Comment

2) The NW RAC supports a final decision that would not materially affect the historic recreational, grazing and other uses of the Roan Plateau.

Response: 2) Historic uses of the Roan Plateau were considered in development of the Proposed Plan, and mitigating measures were developed to protect these uses, while at the same time allowing for responsible development of natural gas resources.

Topic: General Comment

3) The Northwest Resource Advisory Council supports a Resource Management Plan for the Roan Plateau that focuses on outcome-based management that utilizes objectives and best management practices to achieve the desired outcomes.

Response: 3) BLM has refocused the management prescription narratives in Table 2-1 and stipulations in Appendix C to more clearly articulate objectives, employ best management practices, and focus on outcome-based adaptive management.

6.3.2.5 Groups and Organizations

A total of 20 letters were received from groups and organizations. A summary of the comments and BLM responses is found below.

American Gas Association

Topic: Oil and Gas

Comment 1) The deferral of development atop the plateau, in an area of rich natural gas resources, seems short-

text: sighted and fails to take into consideration the policy of promoting domestic, environmentally sound, and clean-burning fuel resources.

Response: 1) The purpose of the deferral was to allow diagonal drilling technology to advance farther so that a greater degree of clustering could be used to reduce surface impacts in this portion of the Planning Area. The Proposed Plan does not incorporate deferred leasing but instead requires phased and clustered development atop the plateau, with up to seventeen wells per pad and with a minimum of 0.5 mile between pads, based on reports by industry that a lateral reach of 2,500 feet was technologically and economically feasible at the present time.

Topic: Oil and Gas

Comment text: 2) Alternative IV and, especially, Alternative V more appropriately recognize the need for more immediate and intensive gas development while also providing for recreational and wilderness values.

Response: 2) The Proposed Plan would result in essentially the same number of wells as Alternative V, but with substantially fewer pads, causing substantially less long-term surface disturbance. Consequently, BLM believes that the Proposed Plan represents an appropriate balance between natural gas production and sensitive resource protection.

Associated Governments of Northwest Colorado

Topic: General Comment

Comment text: 1) The plan should be managed under the guiding principle of Multiple Use Management.

Response: 1) BLM conducts all land use planning under the principles of multiple use and sustained yield, as mandated by FLPMA, including the Proposed Plan of the Proposed Plan/Final EIS.

Topic: General Comment

Comment text: 2) Protection should be provided for areas identified for sensitive environmental concern.

Response: 2) The Proposed Plan designates four Areas of Critical Environmental Concern (ACECs) in which special management is applied to protect and prevent irreparable damage to relevant and important scenic, fisheries, wildlife, and botanical/ecological values. Additionally, it designates nearly the entire top of the plateau as the Parachute Creek Watershed Management Area, establishes numerous and extensive NGD/NSO and SSR/CSU restrictions to protective sensitive resources, limits motorized and mechanized travel to designated routes (except the Hubbard Mesa OHV riding area and over-snow travel by snowmobile), and emphasized weed control and performance-based reclamation monitoring.

Topic: General Comment

Comment text: 3) Wildlife management activities should be coordinated or shared with the Colorado Division of Wildlife.

Response: 3) As a division of the Colorado Department of Natural Resources, Colorado Division of Wildlife is a Cooperating Agency in development of the Proposed Plan and an ongoing participant in planning activities involving wildlife and habitats.

Topic: Oil and Gas

Comment text: 4) Regulations and incentives should be provided for industry utilization of natural gas drilling techniques that would limit surface area disturbance.

Response: 4) BLM believes that the Proposed Plan accomplishes this objective. Specifically, it would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Additionally, the Proposed Plan would limit the amount of land that could be in a disturbed

condition due to oil and gas activities at any one time to 350 acres, or approximately 1 percent of the top of the plateau.

Topic: Other Minerals

Comment text: 5) Management activities should be coordinated with the Department of Energy to retain future access to oil shale resources.

Response: 5) Section 3.5.6.1 in the Proposed Plan/Final EIS expands on the discussion of oil shale development. Development of oil shale in areas with a Federal mineral estate would be regulated by BLM and subject to the same restrictions/stipulations regarding surface activities. However, BLM does not believe that oil shale development is realistic in the Planning Area during the 20-year period of analysis. If oil shale development does arise as a desired use during the planning period, impacts would be considered in a separate NEPA document prepared in response to specific proposals.

Topic: Socioeconomics

Comment text: 6) Management objectives should recognize the importance to local governments in the area for their share under state law of federal mineral royalties as a source of energy impact assistance (an AGNC analysis of the potential state revenue distribution of Mineral Leasing of NOSR lands is attached).

Response: 6) The updated socioeconomic analysis in Section 4.4.3 and Appendix M of the Final includes these potential revenues in the analysis as well as includes a detailed discussion of how these funds can be distributed to local governments.

Audubon Society of Greater Denver

Topic: General Comment

Comment text: Supports adoption of the Community Alternative.

Response: Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Bill Barrett Corporation

Topic: Oil and Gas

Comment text: The Bill Barrett Corporation incorporates by reference the comments submitted by the Colorado Oil and Gas Association, the Independent Petroleum Association of the Mountain States, and the Public Lands Advocacy.

Response: BLM has reviewed all comments submitted on the Draft RMPA/EIS. The Proposed Plan incorporates some number of comments and current data from the referenced associations and agencies in the development of the Proposed Plan/Final EIS (Section 2.3 and Table 2-1).

Californians for Western Wilderness

Topic: Oil and Gas

Comment text: We strongly support the plan developed by local citizens who have drafted the Community Alternative.

Response: Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Colorado Environmental Coalition Campaign to Save Roan Plateau

Topic: General Comment

Comment text: 2) Maintain public lands atop the plateau for uses besides oil and gas.

Response: 2) All of the alternatives analyzed in the Draft RMPA/EIS allow for multiple use atop the plateau. In the Proposed Plan, the natural resource values and uses of the Planning Area have been given special consideration within the context of multiple uses, as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3.2 and summarized in Table 2-1 and are reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. Key among these are the requirement for phased and clustered oil and gas development atop the plateau, resulting in a density of one pad per 160 acres (at least 0.5 mile between pads) and limiting drilling activities to only one portion of the upper plateau at any one time. BLM believes that this approach, in combination with numerous and extensive other protective measures, will ensure that current types and, in many or most cases, current levels of the existing uses will continue.

Topic: Areas of Critical Environmental Concern

Comment text: 3) Designate four ACECs.

Response: 3) The Proposed Plan designates four ACECs (Section 2.3.2 and Tables 2-1 and 2-2 in the Proposed Plan/Final EIS). While the four ACECs occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area.

Topic: General Comment

Comment text: 4) Safeguard habitat for fish, wildlife, and rare and important plants.

Response: 4) All of the alternatives in the Draft RMPA/EIS, as well as the Proposed Plan, include measures to safeguard and manage habitat specifically for terrestrial and aquatic wildlife and special status plant species and significant plant communities (see Section 2.3.2 and Table 2-1 in the Proposed Plan/Final EIS). These include designation of four ACECs and the Parachute Creek Watershed Management Area in addition to numerous and extensive NGD/NSO and SSR/CSU restrictions and TLs to protect seasonally important wildlife uses. The Proposed Plan also limits motorized and mechanized travel to designated routes (except for the Hubbard Mesa OHV riding area and over-snow travel by snowmobile) and places an emphasis on weed control and performance-based reclamation,

Topic: Recreation

Comment text: 5) Designate two SRMAs -- one above and one below the rim.

Response: 5) The comment does not specify what type of recreation a SRMA above the rim would address. The Proposed Plan will provide for dispersed recreation activity opportunities throughout the Planning Area, which will be managed as part of the Glenwood Springs Extensive Recreation Management Area (ERMA). The Hubbard Mesa OHV riding area will be managed as open to cross country travel with SSR/CSU restrictions.

Topic: General Comment

Comment text: 6) The current alternatives do not include a sufficient "environmentally preferred" alternative. Without one, the draft does not comply with the law and supplementation would be required.

Response: 6) BLM believes that Alternative II is a sufficient "environmentally preferred alternative." However, note that the Proposed Plan would result in less impact in terms of numbers of pads, acres of long-term ground-disturbing activities, and miles and acres of new or upgraded oil and gas access roads than even Alternative II (see Table 4-2 of Proposed Plan/Final EIS). This increased protection would result from

the requirement for phased and clustered oil and gas development and designation of the Parachute Creek WMA in addition to four ACECs and other changes.

Topic: General Comment

Comment text: 7) BLM should select a final remedy that incorporates the elements of the community-supported Alternative F.

Response: 7) While the preliminary alternative designated as Alternative F was not retained as an alternative for detailed analysis, BLM included many of the basic components of that alternative in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan. Please see Chapter 2 of the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 8) BLM has underestimated the amount of oil and gas development within the Planning Area and has failed to adequately consider the large amount of oil and gas resources and development outside the Planning Area.

Response: 8) The assumed levels of development are based on the RFD, but constrained based on current drilling rates, assumed availability of drill rigs, seasonal constraints, and extensive areas not available for oil and gas surface facilities. Therefore, BLM believes that the development rates are realistic and reasonable. However, the Draft RMPA/EIS and Proposed Plan/Final EIS acknowledge that actual drilling rates may differ due to changes in economics, geopolitical considerations, technologies, and so forth. Regarding the large amount of oil and gas resources outside the Planning Area, BLM believes that these are irrelevant given the specific direction under the Transfer Act to make the NOSRs available for oil and gas leasing and development, consistent with multiple-use concepts of FLPMA and BLM policies.

Topic: Oil and Gas

Comment text: 9) BLM should create incentives for the oil and gas energy to use the latest and most innovative technologies to reduce impacts to other resources and uses.

Response: 9) BLM believes that the Proposed Plan accomplishes this objective. Specifically, it would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Additionally, the Proposed Plan would limit the amount of land that could be in a disturbed condition due to oil and gas activities at any one time to 350 acres, or approximately 1 percent of the top of the plateau.

Topic: Oil and Gas

Comment text: 10) BLM should defer leasing on top of the plateau for the entire duration of the Plan or until technologies advance to the point that drilling can occur without disturbing the resources there.

Response: 10) BLM does not envision a situation in which technologies would eliminate the need to drill on top of the plateau without making most of the underlying resources unavailable for development—an action which BLM believes is inconsistent with the intent of the Transfer Act. However, the Proposed Plan requires phased and clustered development atop the plateau, with a minimum of 0.5 mile between pads, up to seventeen wells per pad, and location of surface facilities primarily along ridgetops with existing roadways. The result is to accommodate substantial recovery of the underlying gas resource while providing a greater level of environmental protection than all of the previous alternatives, except for some aspects of No Action.

Topic: General Comment

Comment text: 11) BLM should strengthen the protective stipulations to better protect ecological and recreational values.

Response: 11) The Proposed Plan includes more areas with protective stipulations than the Preferred Alternative and, through a requirement for phased and clustered development above the rim, would result in less impact than any of the five previous alternatives analyzed in the Draft RMPA/EIS.

Topic: Oil and Gas

Comment text: 12) Support the Colorado Mule Deer Association comments about well spacing, technologies, and resource/reclamation monitoring.

Response: 12) The Proposed Plan would reduce well surface densities to one pad per 160 acres atop the plateau through a minimum spacing of 0.5 mile and manage for a similar average density below the rim, through reliance on directional drilling (Chapter 2 of the Proposed Plan/Final EIS). Additionally, the Proposed Plan would include stringent, performance-based reclamation requirements and monitoring (Appendix J of the Proposed Plan/Final EIS).

Topic: Oil and Gas

Comment text: 13) BLM should set performance-based reclamation standards and require a reclamation bond that would stay with a well, regardless of ownership.

Response: 13) The Proposed Plan (Section 2.3.1 in the Proposed Plan/Final EIS) includes requirements for integration of extensive potential mitigation measures and BMPs (Appendix I) into the phased and clustered oil and gas development plan. The Proposed Plan also includes performance-based revegetation success criteria and monitoring, as well as the supporting bonding formula and structure for oil and gas leases (Appendix J).

Topic: General Comment

Comment text: 14) As written, the Draft RMPA/EIS does not comply with the law. BLM should either develop an alternative that embodies the concepts of the Community Alternative or prepare a supplemental EIS with a new set of alternatives.

Response: 14) BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS comply with NEPA, FLPMA, and BLM policies.

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 15) The Draft provides inadequate discussion, and the alternatives inadequate protection, of wilderness values.

Response: 15) BLM believes that the discussion in Section 4.5.8 of the Draft RMPA/EIS is more than adequate regarding wilderness values, and that the levels of protections under the various alternatives represent a reasonable range for the purposes of NEPA. Please note that the Proposed Plan does not specifically manage for, or protect, wilderness values, but that the four ACECs, the WMA for the entire top of the plateau, the extensive NGD/NSO restrictions, and the phased and clustered development with a focus on ridgetop development under the Proposed Plan (see Chapter 2) will provide considerable and adequate levels of protection. BLM expects that some wilderness characteristics will be maintained in large portions of the Planning Area.

Topic: General Comment

Comment text: 16) The Draft does not adequately analyze impacts to air, water, ecological resources, socioeconomics, and other resources.

Response: 16) BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS are adequate under NEPA, FLPMA, and BLM policies with regard to the analysis of impacts to all environmental resources.

Topic: General Comment

Comment text: 17) The Draft does not adequately address cumulative impacts or irreversible and irretrievable commitment of resources associated with full field development and connected actions.

Response: 17) BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS are adequate with regard to cumulative impacts, which are discussed in the individual resource sections of Chapter 4, and to irreversible and irretrievable commitment of resources, which is summarized in Section 4.6. With regard to full field development, it is BLM policy that impacts beyond the 20-year planning horizon are too speculative for a detailed or quantitative assessment. This is due to a variety of economic, technological, geopolitical, environmental, and other conditions that could change in ways to substantially affect future conditions. General information on potential full field development is provided in the RFD (Appendix H) and Table 4-3.

Topic: General Comment

Comment text: 18) BLM should devise a plan that provides local governments and affected communities with full participation in future decisions affecting the Roan Plateau and adjacent or other nearby lands.

Response: 18) BLM includes opportunities for local governments to provide input in developing land use planning decisions.

Topic: General Comment

Comment text: 19) As written, the Draft RMPA/EIS does not comply with the law. BLM should either develop an alternative that embodies the concepts of the Community Alternative or prepare a supplemental EIS with a new set of alternatives.

Response: 19) Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments.

Topic: General Comment

Comment text: 20) We support the Community Alternative.

Response: 20) Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments.

Colorado Mule Deer Association

Topic: Oil and Gas

Comment text: 1) BLM violated BLM handbooks and CEQ guidelines when it limited impact assessment to 20-year timeframe.

Response: 1) It is BLM's policy that impacts beyond the 20-year planning horizon are too speculative for a detailed or quantitative assessment. This is due to a variety of economic, technological, geopolitical, environmental, and other conditions that could change in ways to substantially affect future conditions. General information on potential full-field development is provided in the RFD (Appendix H) and Table 4-3.

Topic: Oil and Gas

Comment text: 2) BLM violated FLPMA by not requiring use of best available drilling technologies to limit impacts.

Response: 2) While BLM disagrees with this assertion, note that the Proposed Plan requires phased and clustered development atop the plateau, with up to seventeen wells per pad and a minimum of 0.5 mile between

pads (one pad per 160 acres). Below the rim, BLM would manage toward an average of one pad per 160 acres. These components of the Proposed Plan (Chapter 2) are possible because of directional drilling with a lateral reach of up to 2,500 feet. As technologies continue to improve further, BLM will work with industry to reduce surface densities further.

Topic: General Comment

Comment text: 3) BLM appears to be in serious violation of the Data Quality Act. The document is deliberately slanted to minimize all impacts from the development of natural gas.

Response: 3) BLM disagrees with the conclusion regarding the Data Quality Act. BLM has attempted to be fair, balanced, and objective in its description of impacts under all of the alternatives. Because of a lack of certainty about some aspects of future oil and gas or other activities—e.g., the precise number, location, drilling rate, and duration of pads or road improvements—BLM had to make a number of assumptions. The intent was to be conservative in the assumptions so as not to underestimate impacts. In formulating the Proposed Plan, BLM reevaluated its assumptions and impact assessments in light of the most current information and data available.

Topic: Rangeland Management and Health

Comment text: 4) BLM has not adequately described methods of weed monitoring and management.

Response: 4) BLM believes that the description of weed monitoring and management was adequate in the Draft RMPA/EIS (Sections 4.3.1 and 4.5.4). The Proposed Plan would emphasize implementation of an integrated weed management program (which included mechanical, biological, and chemical methods) to deter and control noxious weeds. This would include promoting healthy native plant communities as well as prevention, inventory, detection, monitoring, and specific project and control actions.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 5) BLM has not adequately described revegetation success criteria, monitoring, or remedial measures if unsuccessful. Furthermore, BLM has not addressed whether existing bonding will be adequate.

Response: 5) The Proposed Plan (Section 2.3.2 in the Proposed Plan/Final EIS) includes requirements for integration of extensive potential mitigation measures and BMPs (Appendix I) and revegetation success criteria and monitoring, as well as the supporting bonding formula and structure for oil and gas leases, in Appendix J.

Topic: Oil and Gas

Comment text: 6) Will BLM require the use of state-of-the-art directional drilling to reduce impacts? Since directional drilling is a BMP, why is it not required? Surface densities of one pad per 640 acres are easily achievable with directional drilling.

Response: 6) The Proposed Plan would require phased and clustered development atop the plateau, with a minimum spacing of 0.5 mile (one pad per 160 acres), and would manage toward an average of one pad per 160 acres below the rim. These measures rely on using directional drilling to allow clustering of up to seventeen wells per pad. BLM does not believe that lower surface densities are current practicable. However, if technologies evolve in ways that would allow lower densities, potentially including one pad per 640 acres, BLM would work with industry to achieve the lowest practicable density.

Topic: Oil and Gas

Comment text: 7) What criteria will BLM use to define when "clustering, collocation, or consolidation" of surface facilities is "feasible and appropriate?"

Response: 7) The Proposed Plan would require phased and clustered development atop the plateau, with a minimum spacing of 0.5 mile (one pad per 160 acres), and would manage toward an average of one pad per 160 acres below the rim. These measures rely on using directional drilling to allow clustering of up

to seventeen wells per pad. BLM does not believe that lower surface densities are current practicable. However, if technologies evolve in ways that would allow lower densities, potentially including one pad per 640 acres, BLM would work with industry to achieve the lowest practicable density.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 8) There is no discussion on how the percentage reduction in habitat and populations is derived. A prudent person would say that a reduction of one-third (deer winter range) is more than a moderate effect.

Response: 8) The methodology discussion in Section 4.3.2 describes in some detail how the percentages were calculated. Unfortunately, the discussion regarding loss of deer winter range under the Preferred Alternative (Alt. III) of the Draft RMPA/EIS included an error. On page 4-83, the habitat loss was reported correctly as 22.3 percent. This is the amount upon which the impact level of “moderate” was assigned for use in the summary table. The subsequent reference to a 33-percent decline in deer winter range actually applied to Alt. IV, as stated on page 4-92. Compounding the first error was a second error, in that the text for Alt. IV described the 33-percent decline as “moderate to potentially major” while the impact table listed it only as “moderate.”

Please note that the Proposed Plan/Final EIS used a larger zone of disturbance-related habitat impacts for deer winter range, combined with the emphasis on greater clustering of oil and gas wells below the rim. The resultant reanalysis indicates an estimated loss of deer winter range of 18.7 percent (see Table 4-11 of the Proposed Plan/Final EIS) and continues to assign an impact level of “moderate” (Table 4-13).

Topic: Terrestrial and Aquatic Wildlife

Comment text: 9) No discussion is give of what impacts and what species are involved in the "9 percent [reduction] in overall wildlife abundance" and "localized extirpations."

Response: 9) These are not discussed in detail because of unavoidable uncertainties related to exactly where, when, at what rate, and for how long oil and gas drilling, and disturbances from other land uses, would occur. Therefore, these statements are meant at estimates of potential adverse impacts and not specific predictions related to one or more specific species. Also, note that at least one paragraph in the Draft RMPA/EIS inadvertently used the term "exterminations" instead of the intended term "extirpations."

Topic: Terrestrial and Aquatic Wildlife

Comment text: 10) What would be the amount of habitat loss at full development?

Response: 10) Neither the Draft RMPA/EIS nor the Proposed Plan/Final EIS attempts to quantify impacts beyond the 20-year period of analysis due to multiple uncertainties about technological, economic, regulatory, and geopolitical conditions so far into the future.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 11) BLM is arbitrarily selecting levels of impact without following its own vague definitions. Why is a 50 percent decline in mule deer only given a moderate to localized major rating while a 15 percent reduction in vegetation is rated moderate?

Response: 11) No method of summarizing impact levels for the layperson is universally and uniformly "correct." For this reason, and as explained in the methodology discussion in the introduction to Chapter 4, the terms negligible, minor, moderate, and major were defined differently for different resources. Obviously, a 10-percent reduction in a common species would be of much less significance than a similar reduction in a rare species, for example. The more detailed discussions of impacts, frequently using relative numbers and percentages, are provided for readers with more knowledge in a subject or who want or need a more quantitative assessment. Regarding the deer and vegetation ratings of Alternative V, note that deer winter range impact is actually rated "major," that the "moderate" rating

for vegetation is 6 to 15 percent, and that anything over 15 percent is rated "major."

Topic: Oil and Gas

Comment text: 12) How will locked gates be funded and enforced? How can a gate keep anyone from driving around it?

Response: 12) It is assumed that a locked gate would be attached to a fence or that some other barrier would be constructed to prevent someone from merely driving around it.

Topic: Water Resources

Comment text: 13) Will cuttings be disposed offsite, in onsite lined pits, or in onsite unlined pits? Existing water quality data are too old to provide a basis for assessing current water quality or determining if there has been an impact. How would this be monitored? Why does BLM not describe surface water or groundwater monitoring?

Response: 13) Cuttings may be disposed onsite in burial pits. These are usually 8 to 10 feet deep and may be lined where infiltration is undesirable (e.g., in relative proximity to a drainage). See Section 4.5.5. BLM does not currently anticipate surface water or groundwater monitoring because of the low likelihood or injury to these resources and the need to focus BLM resources on other issues for which impacts are more likely to be significant. Nonetheless, operators are required to report spills or discharges and to implement cleanup and remedial measures [check this and add text on what is required]

Topic: Oil and Gas

Comment text: 14) Who will determine when use of radiotelemetry to monitor whether production is practical?

Response: 14) Since industry would use the radiotelemetry, and is incentivized to do so because of increased efficiency and reduced personnel costs, industry would make the determination.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 15) What would be the effect on Colorado River cutthroat trout of 99 barrels of 26,000 TDS water going down Trapper Creek?

Response: 15) The effect would depend on the rate at which the discharge occurred and flows in the creek at the time of the discharge. Under most situations, the result would be to exceed the acute salinity tolerance of trout (and other aquatic organisms on which they feed) for a considerable distance downstream. However, note that such incidents are rare, that they would be even rarer at creek crossings that constitute a very small fraction of the total road length in the Planning Area, and that BMPs and mitigation measures such as culverted crossings of streams are intended to reduce the potential for a tanker truck to overturn. Also, note that the Proposed Plan, with its phased and clustered development atop the plateau and focus on ridgetop development (see Chapter 2 of the Proposed Plan/Final EIS), would further reduce this potential compared to all alternatives except Alternative I (No Action).

Topic: Climate and Air Quality

Comment text: 16) Why didn't the Draft use actual existing well pads for monitoring? If five pads cause an impact, wouldn't 100? What about more than 1,000 wells? Why was 20-acre surface density used instead of the 40-acre density assumed elsewhere in the document?

Response: 16) BLM used 25 well pads arranged in a 5 x 5 matrix, with 300-meter spacing between the center of each pad, which is approximately equivalent to 20-acre well spacing (the midpoint of possible well spacing values provided; 10, 20, and 40-acre spacing)(Section 4.2.5 of the Draft RMPA/EIS).

Topic: Climate and Air Quality

Comment text: 17) Did the particulate modeling consider the very fine "talcum powder" texture of roads atop the plateau, which was an issue during previous drilling on private lands there?

Response: 17) The emission factors used to calculate particulate matter emissions were assumed to be representative of the activities under consideration and did include a fine texture.

Topic: Climate and Air Quality

Comment text: 18) Why is an air quality monitoring plan, in a cooperative effort with Garfield County and the Colorado Air Quality Control Commission, not included to determine if BLM is actually in compliance with its own laws and regulations?

Response: 18) Modeling results showed that the air quality impact of BLM development was well below the regulatory thresholds, therefore mitigation measures were not required.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 19) BLM should more clearly define what is meant by "intensive monitoring." How will BLM determine if roadside dust deposition is adversely affecting plants?

Response: 19) The Proposed Plan includes an emphasis on monitoring, with detailed information presented in Appendix J of the Proposed Plan/Final EIS. However, the monitoring is currently anticipated to be limited to enforcement (to ensure that development and other land uses conform to the lease or permit terms and the conditions of approval), reclamation success (including how it relates to restrictions on the amount of surface allowed to be disturbed at any one time atop the plateau [i.e., 350 acres]), and vegetation and range conditions (because of their importance to soil, water quality, wildlife, and livestock). Management objectives for vegetation resources are presented in Table 2-1 of the Proposed Plan/Final EIS.

Topic: Onsite Travel Management

Comment text: 20) How will BLM decide which roads will be closed versus left open? How will BLM manage, and fund the management of, the great increase in road miles? Why not have a central road system down the ridges with spur roads to stock watering facilities? The spur roads could then be reclaimed, with overland travel for future rancher trips to the facilities.

Response: 20) BLM has identified route segments to be closed under the various alternatives (see alternative-specific management maps in Appendix A of the Draft RMPA/EIS and Proposed Plan/Final EIS). Regarding the "increase in road miles" and a "central road system," note that the Proposed Plan is estimated to result in many fewer miles of new or upgraded access roads due to the phased and clustered development atop the plateau and management toward similar clustering below the rim (e.g., see Table 4-2 of the Proposed Plan/Final EIS). The Proposed Plan concept of focusing development on ridgetops would approximate the system advocated in the comment.

Topic: Transportation and Access

Comment text: 21) Since the base right-of-way on Cow Creek Road is held by CDOW, what effect will this have on heavy truck traffic?

Response: 21) BLM looks forward to working with CDOW, local communities, counties, and industry on transportation management issues outside the Planning Area.

Topic: Rangeland Management and Health

Comment text: 22) Nowhere does the Draft state what allotments are below Proper Functioning Condition. Is it safe to say that, due to oil and gas development, some or all of the existing permittees will be required to take a reduction in their grazing permit? The impact tables do not assign a numerical value in terms of permit reduction to the terms minor and moderate. Are they the same as for vegetation?

Response: 22) Proper Functioning Condition (PFC) only refers to riparian systems. Therefore, only allotments that contain such features would reference this condition. Current conditions of allotments, in terms of results of land health assessments and monitoring, are discussed in detail in Section 3.5.4.3 in the Draft RMPA/EIS. Impacts to permittees from all other management actions under all five alternatives are

discussed in Section 4.5.4 and are summarized in Table 4-37 in the Draft RMPA/EIS. As the location of oil and gas facilities is not known at the time of the impact analysis, numerical values in terms of potential permit reductions can not be calculated. Definitions for the impact level terms used in this discussion are presented in Section 4.5.4. Definitions for the impact level terms as applied to vegetation are located in Section 4.3.1.

Topic: Recreation

Comment text: 23) It appears that BLM is violating FLPMA by placing such a low value on recreation uses because they don't involve payment of a fee. There appears to be no thought to developing Hubbard Mesa as an SRMA except on paper. Is that true?

23) The level of emphasis given to recreation in the Draft RMPA/EIS was unrelated to the lack of a fee but rather reflected BLM's conclusion regarding the appropriate balance between the various multiple uses being considered. BLM views the Transfer Act as requiring that the lands of NOSRs 1 and 3 be made available to oil and gas leasing, within the context of FLPMA, BLM policies, and environmental laws. Also, the National Energy Policy places an emphasis on development of domestic sources of oil and gas. Because of the relatively limited development atop the plateau under any of the alternatives during the 20-year planning period, BLM believes that most of the current types and levels of

Response: recreational use will continue (Section 4.5.3). This is especially true under the Proposed Plan because of the requirement for phased and clustered development, further reducing impacts on top and limiting development to one area at a time. Regarding the SRMA, BLM does not understand what "except on paper" means. However, it is true that BLM has received considerable input indicating the desire for managing Hubbard Mesa to be used to meet the demand for off-route travel (open travel play). Consequently, the Proposed Plan would not designate a Hubbard Mesa SRMA but instead would designate a Hubbard Mesa OHV Riding Area. BLM recognizes that any management scenario for Hubbard Mesa needs to include steps to protect adjacent private property owners.

Topic: Recreation

Comment text: 24) What will be the long-term effects on Garfield County of a shift from back-country to front-country/rural recreation? Will the long-term recreation consist of driving on dirt and gravel roads?

24) The effect is not expected to be significant in terms of economics, because uses may shift in location and participants but are not expected to diminish in intensity. Regarding road surfaces, the major access roads on top of the plateau may have some type of improved surface to reduce dust

Response: generation and improve all-weather travel. However, those determinations will not be made until specific lessee(s) have been identified, the area to be developed initially has been identified, and a transportation plan has been developed. While some users would not like to travel on improved roads, others probably would prefer the better accessibility.

Topic: General Comment

Comment text: 25) The Colorado Mule Deer Association supports the "Community Alternative" but would support leasing on top of the plateau if it includes: 640-acre surface density; phased development starting at one end and working systematically across; a limit of three active pads at any one time atop the plateau and four at any one time below the rim; leasing of new blocks only as other blocks are being drilled out; active drilling year-round with no timing limitations; piping of drilling water rather than hauling; a monitoring program implemented for surface water, groundwater, air quality, vegetation, and big game; a study on the effectiveness of cementing a well when it is abandoned; a guarantee (bonding) system that follows the well regardless of ownership; revision of the EIS to show true impacts; revision of the EIS to explain how BLM will control noxious weeds; establishment of four ACECs; establishment of the Hubbard Mesa SRMA; establishment of the Parachute Creek Watershed Management Area; and reduction in the steep slope maximum from 50% to 30%.

Response: 25) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many

of these components are also reflected in the Proposed Plan. Please see Section 2.3.2 and Table 2-1 of Proposed Plan/Final EIS, which addresses most of the specific details noted in this comment.

BLM believes that the Proposed Plan represents a high degree of environmental protection while allowing recovery of a reasonable amount of the underlying natural gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts.

Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

Colorado Native Plant Society, Plateau Chapter

Topic: Special Status Plants and Significant Plant Communities

Comment Prohibit surface disturbance from new roads and drill pads to prevent direct loss of rare plant
text: populations and unique natural communities and to prevent invasion of exotic species.

BLM believes that the Proposed Plan represents a high degree of environmental protection while accommodating a reasonable amount of natural gas recovery. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Special status plants and significant plant communities have been afforded special

Response: management considerations and protective surface use restrictions under all five previously analyzed alternatives as well as the Proposed Plan. The Proposed Plan comprises the same, including NGD/NSO restrictions for occupied Candidate plant species and riparian/wetland habitat; SSR/CSU restrictions for occupied habitat for special status plant species populations and significant plant communities, hanging garden habitat, and the Parachute Creek High Value Watershed (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). In addition, special management for these resources is included in the ACEC management prescriptions (Table 2-2) and the Parachute Creek WMA objective (Table 2-3). The Proposed Plan would emphasize implementation of an integrated weed management program (which includes mechanical, biological, and chemical methods) to deter and control noxious weeds. This would include promoting healthy native plant communities as well as prevention, inventory, detection, monitoring, and specific project and control actions.

Colorado Natural Heritage Program

Topic: General Comment

Comment 1) The scale of the provided maps makes it difficult to adequately evaluate the alternatives for impacts,
text: in particular no map shows all of the roads present in the planning area, including the top.

Response: 1) The maps (31 through 34 of the Draft RMPA/EIS and 27 of the Proposed Plan/Final EIS) are necessarily at a small scale and hence difficult to read. Regarding impacts, please note that it is not currently known precisely which road segments would need to be upgraded, or new ones built, to provide access for oil and gas development.

Topic: Transportation and Access

Comment text: 2) The RMP is vague in the area of road reclamation. We were unable to find any criteria that the BLM will use to make the decision about which oil and gas roads will remain open for administrative or public use, rather than be reclaimed.

Response: 2) The Proposed Plan stipulates that travel in areas affected by oil and gas development or other uses may be limited, restricted, or closed to resolve conflicts, provide for public safety, and provide for orderly oil and gas operations. New routes associated with oil and gas or other uses will be designated administrative access only, unless specific objectives for other resources (e.g., recreational travel routes or access to recreational sites) are present that warrant other designations on a case-by-case basis.

Topic: General Comment

Comment text: 3) It is unclear to the CNHP why the RMPA does not include a wilderness study and a wild and scenic river suitability assessment.

Response: 3) The Roan Plateau Wilderness Inventory findings (BLM 2002) and the Roan Plateau eligibility report for the National Wild and Scenic River System (BLM 2002e) were incorporated by reference to both the Draft RMPA/EIS and Proposed Plan/Final EIS.

Colorado Trout Unlimited

Topic: Oil and Gas

Comment text: Supports the Community Alternative.

Response: Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Special Status Fish and Wildlife

Comment text: 1) Under Alternative III, potential moderate and major impacts to Colorado cutthroat trout populations, are unacceptably severe and contradict and ignore ACEC management prescription goals stated in Table 2-2d.

Response: 1) The Proposed Plan manages special status fish and wildlife consistent with the Colorado Standards for Public Land Health and implements the strategy outlined in the "Conservation Agreement and Strategy for Colorado River Cutthroat Trout" in the States of Colorado, Utah, and Wyoming. Specifically, the plan designates the Parachute Creek WMA to protect ecosystem integrity and function related to the Colorado River cutthroat trout and supporting factors through management actions and SSR/CSU. The Proposed Plan also provides NGD/NSO protections for areas of high-value watershed processes, including both "high-risk" and "moderate-risk" areas as those terms were used in the Draft RMPA/EIS. Furthermore, the requirement for phased and clustered development atop the plateau would also include an emphasis on location of surface facilities along ridgetops with existing roadways as another means of reducing impacts to streams. Additionally, the designation of two stream-based ACECs (East Fork Parachute Creek and Trapper/Northwater Creek) for which the trout is one of the relevant and important values provides additional management emphasis. A variety of BMPs and mitigation measures (Appendix I) would be implemented to protect aquatic habitat from unnecessary impacts.

Topic: Special Status Fish and Wildlife

Comment text: 2) It seems unlikely that the overall impacts on Special Status Fish and Wildlife would be less severe from the oil and gas development management action than from the management actions for protection of WSR-eligible streams and Watershed Management Areas (Alternative III).

Response: 2) The estimated impact levels to special status fish and wildlife species were summarized in Table 4-19 of the Draft RMPA/EIS indicated positive (beneficial) impacts for the management actions but

negative (adverse) impacts for oil and gas development. This may have confused the commenter.

Topic: Special Status Fish and Wildlife

Comment text: 3) Colorado Trout Unlimited believes that the conservation and protection of the habitat and populations of Colorado River cutthroat trout on the Roan Plateau remains among the highest priorities of the RMPA. We strongly urge the BLM to keep all oil and gas activity off the top of the Plateau.

Response: 3) BLM does not believe that the Transfer Act allows continued unavailability of Federal lands atop the plateau for oil and gas development. However, the Proposed Plan includes a variety of measures intended to provide ample protection of sensitive resources while accommodating a reasonable level of oil and gas development. For example, the plan designates the Parachute Creek WMA to protect ecosystem integrity and function related to the Colorado River cutthroat trout and supporting factors through management actions and SSR/CSU. The Proposed Plan also provides NGD/NSO protections for areas of high-value watershed processes, including both “high-risk” and “moderate-risk” areas as those terms were used in the Draft RMPA/EIS. Furthermore, the requirement for phased and clustered development atop the plateau would also include an emphasis on location of surface facilities along ridgetops with existing roadways as another means of reducing impacts to streams. Additionally, the designation of two stream-based ACECs (East Fork Parachute Creek and Trapper/Northwater Creek) for which the trout is one of the relevant and important values provides additional management emphasis. A variety of BMPs and mitigation measures (Appendix I) would be implemented to protect aquatic habitat from unnecessary impacts.

Topic: Water Resources

Comment text: 4) Oil and gas development in the Roan Plateau RMP must be required to conform to basic water quality standards. The Draft RMPA/EIS does not go into any detail as what these BMPs or other sediment control requirements might be.

Response: 4) The Proposed Plan would manage the Planning Area to meet all State and Federal water quality standards (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS) and apply appropriate BMPs (Appendix I) to protect these resources.

Topic: Onsite Travel Management

Comment text: 5) The use of OHVs and snowmobiles, except on designated routes, is unacceptable, given the erosive and fragile soils of the area.

Response: 5) The Proposed Plan would provide for responsible use by limiting travel to designated routes throughout the Planning Area, excluding the Hubbard Mesa OHV riding area and over-snow travel by snowmobile (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 6) Proper reclamation and monitoring are vital. The simple, vague, and inadequate requirements define in the RMPA/EIS are inadequate.

Response: 6) The Proposed Plan incorporates a number of specific management actions (Section 2.3.1 in the Proposed Plan/Final EIS), as well as BMPs, reclamation standards (Appendix I), regular monitoring requirements, and reclamation success criteria (Appendix J) intended to reduce long-term physical impacts of oil and gas development and other ground-disturbing activities, as well as encourage more successful reclamation and revegetation of these areas.

Topic: Rangeland Management and Health

Comment text: 7) Proper range management will help maintain and improve water quality. Fencing and otherwise protecting fragile riparian vegetation and important upland springs is extremely important.

Response: 7) The Proposed Plan implements grazing systems (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS), as well as a rangeland resource monitoring plan (Appendix K) and grazing guidelines

specific to riparian areas (Appendix L) that would result in riparian areas achieving or exceeding PFC.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 8) Noxious weed control and eradication must be fully integrated into all aspects of the RMPA.

Response: 8) The Proposed Plan emphasizes prevention, inventory, detection, and monitoring and project actions as part of an integrated weed management program (which includes mechanical, biological, and chemical control techniques). The action will promote natural processes and healthy native plant communities to deter noxious weeds (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Water Resources

Comment text: 9) Dust control from any development is also very important.

Response: 9) BLM recognizes the importance of dust control for a variety of reasons. The transportation plan to be developed in concert with successful new lessees (if any) following completion of the RMPA process will address methods of dust suppression that balance efficacy with a goal of avoiding or minimizing adverse impacts on other resources from the suppressant material (e.g., transport of magnesium chloride to streams).

Topic: Water Resources

Comment text: 10) Colorado Trout Unlimited is very concerned that the surface water quality assessment for the RMPA/EIS is based largely on data that is 23 years old.

Response: 10) Because of the very limited amount of activity atop the plateau over the interim—mostly consisting of recreational, ranching, and administrative travel--BLM does not believe that water quality is likely to have changed to a degree that would warrant a new sampling program.

Topic: Hazardous Materials

Comment text: 11) Concerned that the EIS essentially dismisses the idea that there could be any significant impact to either ground or surface water from accidental spills or releases of hazardous materials because they have clauses in their planning documents against it.

Response: 11) Regarding surface water, BLM believes that the potential for such an incident in a location that would affect streams is very low. Further, the unavoidable uncertainties about the exact location, scale, and pace of oil and gas development, of the access route(s) to be used, and final determinations regarding haulage of chemical products or produced water associated with oil and gas development make a more detailed analysis of a spill of an unknown quantity in an unknown stream segment at a point with unknown surface flows would make the impact analysis highly speculative. On the other hand, BLM recognizes that such a spill could result in severe impacts to aquatic life, both at the point of the spill or discharge and for an unknown distance downstream. As described in Section 4.2.4.1 of the Draft RMPA/EIS and Proposed Plan/Final EIS, no alternative would allow development within 200 meters of a stream, and in most cases the setbacks would be much greater because of the extensive NGD/NSO restrictions. The Proposed Plan, with its requirement for phased and clustered development atop the plateau, and a focus on ridgetop development, would further reduce the risk of contamination of streams, as would the BMPs and mitigation measures described in Section 4.2.4.1 and presented in Appendix I of the Final. Regarding groundwater, BLM believes that the design requirements for gas wells, combined with the existing low quality and limited use of the underlying groundwater, would minimize the risk of injury to aquifers and any existing or reasonably foreseeable water wells.

Topic: General Comment

Comment text: 12) The Draft RMPA/EIS gives only cursory consideration of the extremely important problems of monitoring, mitigation, and enforcement.

Response: 12) BLM recognizes the importance of monitoring, mitigation, and enforcement, and the Proposed Plan/Final EIS provides appendices addressing BMPs and mitigation (Appendix I) and monitoring (Appendices J through L). However, some aspects of these issues, and especially that of enforcement, are more appropriate as implementation criteria than as planning criteria.

Topic: Wild and Scenic Rivers

Comment text: 13) Streams eligible for WSR designation should be fully protected until a final determination, with full public participation, can be made. No leasing should be made in these watersheds as any leasing prior to a decision could preclude an appropriate designation.

Response: 13) The Proposed Plan protects rivers and corridors totaling 7,883 acres along more than 20 miles of stream length within the Resource Area that are found to be eligible under the WSRA by not allowing any surface disturbing activities that might impair values, until a suitability analysis has been completed.

Topic: Areas of Critical Environmental Concern

Comment text: 14) Contradictions between the Draft RMPA/EIS and the 2002 ACEC report, in terms of the width of estimated buffer zones versus protecting entire watersheds.

Response: 14) The Proposed Plan incorporates four ACECs as well as the Parachute Creek Watershed Management Area (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). Management prescriptions and actions for both special designation areas are detailed in Tables 2-2 and 2-3, respectively. While the four ACECs occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area.

Topic: General Comment

Comment text: 15) CTU supports and incorporates by reference comments submitted by the Colorado Wildlife Federation, and Colorado Mule Deer Association as well as collective comments submitted by the Wilderness Society and the Colorado Environmental Coalition.

Response: 15) The Proposed Plan has addressed all such comments, often by incorporation, as well as by utilizing current and up-to-date data received during the development of the RMPA.

Colorado Wildlife Federation

Topic: General Comment

Comment text: 1) While the descriptions of resources and impacts are generally good, the document is very confusing, and the alternatives are particularly difficult to compare and contrast. For example, deferred drilling is included as an environmentally protective measure in Alternative III but is not part of Alternative II, which is the environmentally most protective alternative.

Response: 1) Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. BLM regrets that the high degree of environmental and management complexity under any of the alternatives makes a simple document impossible to achieve without sacrificing needed detail. Tables S-2, 2-1, and 4-2, among others, were included specifically to help compare and contrast the alternatives, and the text of Chapter 2 provides specific comparisons. Please note that the Proposed Plan/Final EIS is shorter and simpler due to its emphasis on the Proposed Plan, with selected comparisons to the other alternatives.

Topic: General Comment

Comment text: 2) Some of the terms used are very misleading. For example, No Ground Disturbance (NGD) actually allows ground disturbance of up to 2 years. The entire area of an NGD should be protected from ground disturbance, with only rare and fully justified exceptions.

Response: 2) Blanket prohibitions on ground disturbance in NSO areas (and NGD areas under this RMPA/EIS) are inconsistent with BLM policies, which recognize that temporary disturbances (effects lasting up to 2 years) do not necessarily compromise the resource values being protected by the NGD/NSO. NGD/NSO restrictions only apply to specific resources and do not apply where the resource value being protected is either not present at a specific area or would not be affected by a specific activity. The Proposed Plan/Final EIS attempts to clarify the situations under which NGD/NSO restrictions might not apply. However, note that any such situation would require documentation that the resource value being protected by the NGD/NSO would continue to be adequately protected.

Topic: General Comment

Comment text: 3) There were no criteria for identifying the circumstances in which resource protection measures would be applied. The resultant uncertainty about how, when, and where the measures would be applied, combined with the statements that the preferred alternative could differ substantially from any of the five analyzed, may not provide the specificity required by NEPA.

Response: 3) BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS provide the specificity required by NEPA. Regarding criteria for identifying circumstances in which resource protection measures would be applied, the Draft and Final describe two general types of protections: (a) restrictions on surface use, such as NGD/NSO, SSR/CSU, and TL, which apply to activities (Appendix C), and (b) BMPs, management prescriptions, and mitigation measures, which apply when BLM determines that these are required by law or regulation, required by BLM policies, or involving long-term surface disturbing activities, or are necessary to provide adequate protection of identified resource values (Appendix I).

Topic: General Comment

Comment text: 4) During scoping, the public clearly expressed a strong desire to preserve the natural resource, hunting, recreation, and scenic values of the lands above the rim. The Draft fails to consider an alternative that would close the area atop the plateau to oil and gas. An alternative that fully protects these lands with an NSO/NGD designation should be considered.

Response: 4) Alternative I (No Action) would include almost all of the area on top of the plateau in a “no-lease” area for oil and gas (see Section 2.3.1 of the Draft RMPA/EIS). For the other alternatives, BLM does not believe that an NGD/NSO on the entire upper plateau is either (a) consistent with the Transfer Act, which specifies that the NOSRs are to be made available for oil and gas leasing and development within the context of multiple-use management under FLPMA and BLM policies or (b) needed to provide appropriate levels of protection of the natural resource, hunting, recreation, and scenic values. Additionally, the Proposed Plan, with its requirement for phased and clustered development, would reduce impacts atop the plateau to levels lower than under any of the five alternatives in the Draft RMPA/EIS, including No Action. Please see Table 4-2 of the Proposed Plan/Final EIS.

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 5) It is unclear why the Draft does not include a wilderness study and a wild and scenic river suitability assessment.

Response: 5) The Roan Plateau Wilderness Inventory findings (BLM 2002) and the Roan Plateau eligibility report for the National Wild and Scenic River System (BLM 2002e) were incorporated by reference to both the Draft RMPA/EIS and Proposed Plan/Final EIS.

Topic: General Comment

Comment text: 4) The DEIS does not adequately explain how Alternative III was selected as the preferred alternative, and the assumption that the 80% threshold would not be reached for perhaps 16 years or more is not realistic given current drilling rates.

Response: 4) BLM selected Alternative III as representing the best balance between multiple allowable uses and, due to the deferred drilling, as providing an opportunity for drilling technologies to evolve in ways that

would reduce the amount of surface disturbance and other impacts from oil and gas development. BLM believed that the estimate of 16 years was reasonable, given current development rates and the assumptions used, although the Draft RMPA/EIS also noted that the threshold could be met sooner or later than that timeframe (see Section 2.3.3). As part of Consultation and Coordination process following publication of the Draft RMPA/EIS, it became evident that sufficient technology already exists to allow BLM to rely on directional drilling as a basis for requiring phased and clustered development atop the plateau. Thus, the Proposed Plan of the Proposed Plan/Final EIS would minimize impacts to sensitive resources through a resultant surface density of one pad per 160 acres, with up to seventeen wells per pad, and with location of surface facilities primarily along ridgetops with existing roadways. BLM believes that this approach will achieve an appropriate balance between protection of sensitive resources and recovery of the underlying natural resource, without the need for deferral.

Topic: General Comment

Comment text: 5) Impacts are underestimated because of unrealistic assumptions about drilling rates and surface densities.

Response: 5) BLM believes that the assumptions about drilling rates are realistic and reasonable. These were derived from current drilling rates and from the assumptions used in the RFD, modified by applying restrictions on surface use, other environmental protections, seasonal limitations, and the availability of drill rigs.

Topic: General Comment

Comment text: 6) The Draft does not adequately address cumulative impacts. For example, the White River planning area is almost totally leased.

Response: 6) Cumulative impacts are discussed in connection with overall impacts for most of the resource sections in Chapter 4. The Proposed Plan/Final EIS includes some additional information on cumulative impacts, such as with regard to wildlife. See Section 4.3.2.

Topic: General Comment

Comment text: 7) The Draft does not adequately consider slant (diagonal) drilling.

Response: 7) The Draft RMPA/EIS used assumptions about directional drilling available through the RFD process at the time of its initial preparation. However, the revised RFD (Appendix H of the Proposed Plan/Final EIS) and the Proposed Plan specifically rely on a high degree of clustering through directional drilling. The Proposed Plan would reduce well surface densities to one pad per 160 acres atop the Plateau through a minimum spacing of 0.5 mile and would manage toward a similar average density below the rim.

Topic: General Comment

Comment text: 8) The Draft does not adequately consider restriction on the number of pads in operation at any one time or the use of pipelining rather than hauling of water.

Response: 8) The Proposed Plan requires phased and clustered development atop the plateau, and manages toward a high degree of clustering below the cliffs, to reduce the number of pads compared to the other alternatives (e.g., see Table 4-2 of the Proposed Plan/Final EIS). Whether a pipeline or hauling of water will be used to deliver water to drilling operations remains an uncertainty and will depend in part on the lessee(s) atop the plateau—assuming future development there—and specifics of where drilling will be initiated.

Topic: General Comment

Comment text: 9) Because of the deficiencies, none of the alternatives is acceptable with regard to fish and wildlife conservation. BLM should release a revised document that includes components of the "Roan Plateau Community Alternative" including: (1) deferred leasing on top of the Plateau, (2) expansion of

permanent protective stipulations including no ground disturbing activities on certain lands, (3) protection of the Hubbard Mesa SRMA for recreational use with drilling NSO stipulations and addition of a 32,639 acre SRMA on top of the Plateau for protection of backcountry opportunities, and (4) use of BMPs to protect important public and natural resources.

Response: 9) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). The Proposed Plan emphasizes balance in managing for a variety of multiple resource uses incorporating outcome-based adaptive management, including a systematic, phased and clustered oil and gas development within a Federal Unit. As described in the Proposed Plan/Final EIS, this approach would include a minimum of 0.5 mile between well pads, with up to seventeen wells per pad and the placement of most oil and gas facilities along existing ridgetop roadways. It also would include extensive areas of NGD/NSO and SSR/CSU restrictions to protect a variety of resources, designation of four ACECs and the Parachute Creek Watershed Management Area, restriction of motorized and mechanized travel to designated routes (except for over-snow travel by snowmobile), use of BMPs and mitigation measures, and application of weed control and performance-based reclamation standards. BLM believes that, taken together, these measures and actions would provide ample protection of sensitive ecological, hydrological, and recreational resources atop the plateau while accommodating a reasonable level of natural gas production.

Topic: General Comment

Comment text: 10) The map scale is too small to allow adequate evaluation by the reader. All maps should have the rim line on them.

Response: 10) BLM realizes that the necessarily small scale of the maps presents some difficulties. While adding the rim line to every map might be beneficial to some readers, BLM was concerned about making the maps too cluttered, given their small scale. Hopefully, most readers can estimate the rim's location by the drainage patterns or other features or by comparison with maps showing the rim line.

Topic: Oil and Gas

Comment text: 11) BLM should require clustered drilling and directional drilling to reduce impacts, prohibit new roads on slopes greater than 30 percent, close and reclaim all closed or upgraded roads as soon as they are no longer used for oil and gas, and require drilling methods that don't result in disposal pits.

Response: 11) The Proposed Plan (see Section 2.3 of the Proposed Plan/Final EIS) would require phased and clustered development atop the plateau, with clustering of up to seventeen wells per pad by the use of directional drilling, and would manage toward a comparable surface density (one pad per 160 acres) below the rim. Regarding disposal pits, BLM believes that, in most instances, burial of the cuttings is environmentally safe. Where questions about safety exist—such as in relative proximity to a drainage—BLM can require that the pits be lined or, in other situations, transported to a different location for disposal. No hazardous materials may be buried in disposal pits (see Section 4.5.5 regarding offsite disposal of these materials). Regarding roads, all of the alternatives would prohibit roads on slopes steeper than 30 percent in areas subject to severe erosion. Road alignment and design (including stabilization and revegetation of temporarily disturbed areas) are subject to BLM review and approval. Note that one aspect of the Proposed Plan for the area atop the plateau is to focus development on ridgetops with slopes of 20 percent or less.

Topic: Areas of Critical Environmental Concern

Comment text: 12) The three areas having wilderness characteristics and four ACECs should be protected.

Response: 12) The Proposed Plan incorporates the four ACECs under Alternative II of the Draft RMPA/EIS, although with slightly different footprints. While the four ACECs occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific

areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area. Regarding wilderness characteristics, BLM has concluded that special management for areas having these characteristics is not warranted. However, please note that the Proposed Plan (see Section 2.3 of the Proposed Plan/Final EIS) uses phased and clustered development atop the plateau, and focuses development on ridgetops. These measures, recommended by CDNR during the Consultation and Coordination process, limit impacts during the 20-year planning period to a relatively small part of the upper plateau, thereby helping to maintain wilderness character in other areas.

Topic: Wild and Scenic Rivers

Comment text: 13) Wild and Scenic Rivers should be fully protected until a suitability decision is made.

Response: 13) BLM is required to continue that level of protection under all alternatives, including the Proposed Plan. Alternative V assumes that a determination of unsuitability will be made, for the purposes of impact analysis only.

Topic: Onsite Travel Management

Comment text: 14) BLM should evaluate the road system and aim for the minimum road length necessary. This would entail closing redundant routes, routes with no purpose, illegal routes, and roads in sensitive areas.

Response: 14) The Proposed Plan (Section 2.3 of the Proposed Plan/Final EIS) would result in much less construction of new or upgraded access roads due to its requirement for phased and clustered development, as well as the focus on development along ridgetops where most existing roads are located. The Proposed Plan would also result in closure of 28 miles of existing routes above the rim, versus an estimated 16 miles of new or upgraded oil and gas access roads.

Topic: Other Minerals

Comment text: 15) More details are needed on the process for determining when sales of other minerals would be made. This should be a public process.

Response: 15) This information is presented in Section 3.5.6 in the Proposed Plan/Final EIS.

Topic: Recreation

Comment text: 16) BLM should adopt a "closed unless posted open" policy for the planning area. Trails designated as open should be clearly marked, BLM should monitor and enforce adequately, and sensitive habitats (wetlands and riparian areas) should be protected. All mechanized travel, including snowmobiles, should be limited to designated routes.

Response: 16) For the Proposed Plan, BLM has retained the limitation under Alternatives II through V of the Draft RMPA/EIS restricting motorized and mechanized travel to designated routes, except that (a) over-snow travel by snowmobiles would be allowed with a minimum of 12 inches of snow cover and (b) the Hubbard Mesa OHV riding area would be designated as "open" for cross-country travel. If off-route travel by snowmobiles should become an environmental issue, BLM can reevaluate that travel limitation.

Topic: Special Status Fish and Wildlife

Comment text: 16) Colorado River cutthroat trout habitats should be protected by no surface disturbance in watershed containing conservation populations, and BLM should cooperate with CDOW in eliminating brook trout from streams where they are also present.

Response: 16) The Proposed Plan includes protective stipulations and other restrictions that apply to sensitive resource values in the two stream-based ACECs (East Fork Parachute Creek and Trapper/Northwater Creek) and the Parachute Creek Watershed Management Area, as well as NGD/NSO restrictions for both occupied and high-value habitat for Colorado River cutthroat trout. Note that the last item

includes areas described as “high-risk” and “moderate-risk” watershed process. Please see Tables 2-1, 2-2, and 2-3 of the Proposed Plan/Final EIS. BLM has already implemented removal of brook trout from Colorado River cutthroat trout habitat in accordance with Colorado River Cutthroat Trout Conservation Agreement and Conservation Strategy.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 17) BLM should be committed to implementing an integrated weed management program regardless of the alternative selected and should maintain grasslands to retain mid- to late-seral stages.

17) The Proposed Plan would emphasize implementation of an integrated weed management program (which includes mechanical, biological, and chemical methods) to deter and control noxious weeds.

Response: This would include promoting healthy native plant communities as well as prevention, inventory, detection, monitoring, and specific project and control actions. Vegetation management objectives are described, by community, in Table 2-4.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 18) The discussion of Ecological Condition Rating is confusing. What is the difference between 50% and 70% ECR? If 70% is the best level achievable, then that should be the goal for the entire planning area.

18) Ecological Condition Rating (ECR) values refer to an estimated percent of potential an area represents as compared to a baseline or reference area. This is further explained in Section 2.3.3 in the Proposed Plan/Final EIS. Under the Proposed Plan, vegetation would be managed to achieve a diverse native species composition and productivity, characterized by specific objectives for the ten-most extensive plant communities in the Planning Area (Table 2-4) and be maintained at, or restored to, at least a 70 percent Ecological Condition Rating (ECR). Ecological Site Inventories (ESIs) (or an equivalent ecological condition monitoring system) would be established to support assessments against these objectives and condition rating, based on Natural Resource Conservation Service (NRCS) procedures and standards. These inventories would incorporate existing and new soils and vegetation data to represent these vegetation communities. Activity siting decisions, project proposals, and mitigation requirements for approving permits and COAs would take into account these vegetation standards and objectives.

Response: Ecological Site Inventories (ESIs) (or an equivalent ecological condition monitoring system) would be established to support assessments against these objectives and condition rating, based on Natural Resource Conservation Service (NRCS) procedures and standards. These inventories would incorporate existing and new soils and vegetation data to represent these vegetation communities. Activity siting decisions, project proposals, and mitigation requirements for approving permits and COAs would take into account these vegetation standards and objectives.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 19) Frankly, BLM and the oil and gas industry have a terrible record of reclamation success. BLM must commit to full reclamation of all disturbed sites. All of the reclamation requirements for the most sensitive areas should be applied throughout the planning area. BLM should set reclamation standards comparable to the Corps of Engineers standard of 80% native canopy cover after 3 years. Reclamation should require adequate soil preparation and testing and use only locally adapted and weed-free native seeds. A reclamation plan should be prepared for the planning area. The best time to seed on the west slope is late summer/early fall (Aug-Sep-Oct) due to summer monsoons. The Draft suggests seeding methods more appropriate for the east slope.

Response: 19) Fall and early winter reclamation seeding was considered an impact analysis assumption in Section 4.3.1 in the Final. This is an appropriate technique for the entire Roan Plateau Planning Area, which experiences very diverse revegetation conditions depending on whether a disturbed site is located atop the Plateau or below the rim. The Proposed Plan incorporates a number of specific management actions (Section 2.3.1 in the Proposed Plan/Final EIS), as well as BMPs and standard reclamation practices (Appendix I), regular monitoring requirements, and reclamation success criteria (Appendix J) intended to reduce the area of long-term physical impacts of any ground-disturbing activities, including oil and gas development, as well as encourage more successful reclamation and revegetation of these areas.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 20) The BLM reclamation bond of \$150,000 is woefully inadequate for a site with several thousand wells and associated surface disturbance, and in an area of notably difficult reclamation. BLM should

clarify how it will ensure that the necessary money is available for reclamation and should consider site-specific bonding funded by the industry.

Response: 20) A number of components of the Proposed Plan address reclamation. Several are discussed in the answer to comment #19. These also include limiting surface disturbance from oil and gas due to the phased and clustered development within the Undivided Federal Unit on top of the Plateau. In addition, development within the Undivided Federal Unit stipulates that total unreclaimed lands that have not met the 5-year reclamation standard (see Appendix J for reclamation monitoring standards and success criteria) would be limited to 1 percent of the area atop the plateau. (This standard may be met in less than 5 years with a variety reclamation measures, but must be met within a 5-year time limit.)

Topic: Water Resources

Comment text: 21) The document erroneously indicates the same impact levels to surface water under Alternatives III and IV, which limit NGD/NSO areas to the drainage floors, as under Alternative II, which protects much farther up the slopes of the watershed. This should be corrected, and the greater protection of Alternative II should be included in the final alternative.

Response: 21) Without disagreeing with the comment, BLM continues to believe that an impact level above moderate (“major”) would be too high a rating for those alternatives. This is because of the various protections for drainage floors and watershed slopes not necessarily limited to NGD/NSO restrictions – e.g., SSR/CSU restrictions and various mitigation measures such as culverted crossings described in Sections 2.3, 4.3.2, 4.3.4.2, and elsewhere. Also, please see Tables 2-1, 2-2, and 2-3 of the Proposed Plan/Final EIS.

Topic: Special Status Plants and Significant Plant Communities

Comment text: 22) A high level of protection should be given to rare plants. There should be no ground-disturbing activities near these plants or within unique plant communities. All areas should be surveyed for rare plants prior to allowing any ground disturbance. Livestock and hiking trails should not be allowed near these plants.

Response: 22) Special status plants and significant plant communities have been afforded special management considerations and protective surface use restrictions under all five previously analyzed alternatives as well as the Proposed Plan. The Proposed Plan comprises the same, including NGD/NSO restrictions for occupied Candidate plant species and riparian/wetland habitat; SSR/CSU restrictions for occupied habitat for special status plant species populations and significant plant communities, hanging garden habitat, and the Parachute Creek High Value Watershed (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). In addition, special management for these resources is included in the ACEC management prescriptions (Table 2-2) and the Parachute Creek WMA objective (Table 2-3).

Topic: Special Status Fish and Wildlife

Comment text: 23) Abandoned mine shafts and caves used by bats for roosting, nesting, or hibernation should be protected from disturbance.

Response: 23) All of the alternatives protect the caves and mine shafts and adits. While these may be closed off in the future for public safety, that would be accomplished in a manner that allows continued access by bats (e.g., a grate closure rather than a solid closure at the mine or cave entrance).

Topic: Terrestrial and Aquatic Wildlife

Comment text: 24) The projected 33% reduction in the deer population under Alternatives III and IV and the 50% reduction under Alternative V are unacceptable. BLM must carefully weigh whether resultant impacts on hunting due to deer reductions or closures in areas of active drilling are justifiable considering the severe impacts to the local economy.

Response: 24) Regrettably, as explained in Section 4.3.2 of the Proposed Plan/Final EIS, the 33% reduction under Alternative III was a typographical error. The Draft RMPA/EIS, on page 4-83, correctly reports the decrease at 22.3%. Also, note that the projected decline is in the amount of winter range, or carrying

capacity, and not to existing deer populations. Further, please note that the Proposed Plan is projected to result in an 18.7% decline in winter range. This number reflects revised estimates of the amount of effective habitat loss due to reduced wildlife use in areas near oil and gas operations (using the results of studies recommended by CDOW), combined with the management emphasis under the Proposed Plan regarding clustering of wells to reduce the number and surface density of well pads.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 25) The winter range TL should be 5 months and have no exceptions. The habitat in Magpie Gulch must be protected from surface disturbance, not just a TL.

Response: 25) The Proposed Plan includes a 5-month TL for deer and elk winter range and includes NGD/NSO restrictions for most of Magpie Gulch through protections for wildlife security areas, steep slopes, old-growth Douglas-fir forest, visually sensitive viewsheds, etc. Please see Table 2-2.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 26) The fawning and calving areas atop the plateau should be protected, including livestock grazing adjustments, and the six main passageways through the cliffs should be protected from disturbance.

Response: 26) The cliff passages on BLM lands would be protected with prohibitions on long-term ground-disturbing activities under the Proposed Plan (see Maps 18 and 19 of the Proposed Plan/Final EIS). Since fawning and calving occur as dispersed activities across essentially the entire top of the plateau and portions of the areas below the rim, rather than in specific and discrete “production areas” as sometimes mapped by CDOW, “protection” is impracticable in the sense of no impacts. However, the amount of habitat loss, including both direct and effective, under any alternative would be relatively minor compared to the entire area available. More importantly, the deferred development aspect of the Preferred Alternative was intended to avoid development in that area until technologies could evolve further to minimize impacts. The Proposed Plan approaches the same issue by requiring phased and clustered development atop the plateau, with the result of reducing habitat loss and areas subject to development and traffic at any one time to only one part of the upper plateau at a time. Please see Section 4.3.2 and Table 4-2 of the Draft RMPA/EIS and Proposed Plan/Final EIS.

Topic: Rangeland Management and Health

Comment text: 27) The document should note that the 20-acre surface density preferred by industry will practically eliminate grazing due to the area of pads and roads.

Response: 27) Well surface densities of 20-acres are not included in any of the Planning Area under the Proposed Plan. Surface densities would be required to be 160 acres atop the plateau and would be managed toward a comparable density below the rim, but with a minimum of 40-acre density. Areas of long- and short-term disturbance due to projected oil and gas development are summarized in Table 4-2 in the Proposed Plan/Final EIS and are discussed throughout the impact analysis in Chapter 4, including impacts to rangeland management and health in Section 4.5.4.

Topic: Recreation

Comment text: 28) The document must address how the 97% decrease in backcountry and middle country recreational opportunities can be minimized and mitigated.

Response: 28) The Proposed Plan does not assign specific Recreational Opportunity Spectrum (ROS) classes to specific areas (see Section 4.5.3 of the Proposed Plan/Final EIS), nor would recreation be specifically managed for. Instead, the recreational experiences and outcomes are assumed to derive from the character of existing oil and gas development at any one time. Under the Proposed Plan, a requirement for phased and clustered development atop the plateau, and a focus on ridgetop development, would limit areas of active exploration or development to essentially only one part of the upper plateau at any one time, leaving the remainder available for current types of recreation. Even in areas of active development, the ridgetop focus would keep the more remote and natural stream valleys relatively unaffected. Because of uncertainties about where oil and gas development on top would be initiated—

assuming that the selected alternative includes drilling there—and of the scale, pace, and locations at which it would proceed, BLM has determined that managing for ROS classes in specific areas is impracticable. Again, however, note that the large areas in which long-term ground-disturbing activities would be prohibited (e.g., see Map 2 under the Proposed Plan) have the effect of maintaining current types of recreational opportunities at across most of the upper plateau.

Topic: Special Status Fish and Wildlife

Comment text: 29) The 0.125-mile buffer radius for nesting raptors and 0.25-mile radius for peregrine falcon cliff nesting areas does not seem sufficient. Powerlines should either be underground or, if above ground, designed to minimize the electrocution hazard to raptors.

Response: 29) CDOW was consulted in establishing the raptor buffers. The buffer widths recommended by CDOW or USFWS differ depending on site-specific conditions and the anticipated types of activities. More topographic separation or vegetational screening and less intensive activity may translate to narrower buffers than situations where the nest is more exposed or subject to more intensive disturbance. All powerlines across BLM lands are required to incorporate “raptor-proof” design features to minimize or reduce the potential for electrocutions of birds of prey.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 30) Wetlands and adjacent areas should be protected for waterfowl nesting and brood rearing.

Response: 30) The primary area of waterfowl and shorebird nesting and brood rearing at Fravert Reservoir would be protected by a seasonal restriction (TL) under all alternatives. The NGD/SNO restriction prohibiting long-term ground-disturbing activities in the Colorado River corridor and similar restrictions for perennial stream segments atop the plateau would also provide protections for these species.

Topic: Climate and Air Quality

Comment text: 31) A statistically sound air quality monitoring plan should be included in the document. The operators should be required to implement site-specific measures to eliminate or minimize air quality impacts, including visibility impacts related to road dust and haze.

Response: 31) No air quality monitoring is proposed for any of the analyzed alternatives, including the Proposed Plan, because the impact analysis projects impacts well below any risk level to human health and the environment (Section 3.2.5 and 4.2.5 in the Proposed Plan/Final EIS).

Topic: Water Resources

Comment text: 32) BLM must develop and implement a statistically sound monitoring program for surface water and groundwater.

Response: 32) BLM does not currently anticipate surface water or groundwater monitoring because of the low likelihood of injury to these resources and the need to focus BLM resources on other issues for which impacts are more likely to be significant. Nonetheless, operators are required to report spills or discharges and to implement cleanup and remedial measures.

Topic: Water Resources

Comment text: 33) BLM failed to analyze the option of using closed-loop drilling programs instead of disposal of cuttings in lined or unlined pits.

Response: 33) Although the option of using closed-loop drilling was not specifically addressed, it remains an option at the discretion of the operator. Some closed-loop drilling is currently being used. By assuming disposal of cuttings, the impact analysis is less likely to underestimate impacts than if closed-loop drilling were assumed.

Topic: Water Resources

Comment text: 34) The entire portion of the Parachute Creek watershed atop the plateau should be protected in terms of both water quality and survival of Colorado River cutthroat trout.

Response: 34) Occupied Colorado River cutthroat trout habitat, upslope watershed areas, and upstream or tributary reaches critical to water quality would be given special management emphasis, including extensive areas closed to long-term ground disturbing activities. For example, refer to Map 2 for the Proposed Plan in the Proposed Plan/Final EIS. Also see Tables 2-1 and 2-3. As examples, the Proposed Plan includes the designation of two stream-based ACECs (East Fork Parachute Creek and Trapper/Northwater Creek) and the Parachute Creek Watershed Management Area, as well as NGD/NSO restrictions for both occupied and high-value habitat for Colorado River cutthroat trout and additional NGD/NSOs related to other stream-related resource values atop the plateau.

Topic: Water Resources

Comment text: 35) Any existing roads that pose a threat to water quality should be obliterated and the land restored, and no new roads should be created in areas that could create a problem for water quality or aquatic life.

Response: 35) The various NGD/NSO and SSR/CSU protections for streams and areas of important watershed process, as well as the management emphasis under the two stream-based ACECs and Parachute Creek WMA, include restrictions or requirements for careful consideration and special design of road construction across or near streams. Appendix I describes BMPs and mitigation measures related to protection of surface waters, among others.

Ferdinand Hayden Chapter of Trout Unlimited

Topic: General Comment

Comment text: 2) The BLM EIS has inadequate reporting on the cumulative impacts to the watersheds and Colorado river cutthroat trout habitat, including in terms of water quality and aquatic life.

Response: 2) Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The Proposed Plan/Final EIS provides a more extensive assessment of cumulative impacts (Sections 4.2.4 - Water Resources and Section 4.3.4 - Special Status Fish and Wildlife). However, it is important to note that unavoidable uncertainties regarding future development and impacts on BLM lands in the Planning Area are compounded when attempting to predict future conditions on private lands inside and outside the Planning Area, over which BLM has no control, and on BLM outside the Planning Area, which are not affected by decisions contained within this RMPA/EIS.

Topic: General Comment

Comment text: 1) The Ferdinand Hayden Chapter of Trout Unlimited is supporting the Community Alternative for the Roan Plateau.

Response: 1) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Grand Valley Citizens Alliance Grassroots Community Action

Topic: General Comment

Comment text: 1) BLM's alternatives do not adequately reflect the wishes of the community. The Grand Valley Citizen's Alliance supports the "Community Alternative."

Response: The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: General Comment

Comment text: 2) BLM does not have the resources available to adequately oversee drilling or to monitor environmental protection measures and compliance, including air and water quality.

Response: 2) BLM is developing a monitoring program, the basics of which are included in Appendix J of the Proposed Plan/Final EIS. BLM believes that it has sufficient resources to ensure that permitting, inspection and enforcement, and monitoring of reclamation achieve the goals of avoiding or minimizing impacts to sensitive resources.

Topic: Socioeconomics

Comment text: 3) The Draft plan would put the local economies at risk by harming recreation (including hunting) and agriculture (grazing) and by enriching some segments of the economy while placing undue burden on other parts ("haves" vs. "have nots").

Response: 3) This issue is addressed in Section 4.4.3 of the Proposed Plan/Final EIS. Note, however, that the socioeconomics analysis does not indicate an economic impact related to hunting or other recreational uses. While uses and participants may shift as development occurs, levels of use and of monetary expenditures are not expected to decline.

Topic: General Comment

Comment text: 4) All of the alternatives fail to ensure sustainability of the health, diversity, and productivity of the Roan Plateau for present and future generations. The alternatives do not provide a correct balance.

Response: 4) The natural resource values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3, summarized in Table 2-1, and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. BLM believes that the Proposed Plan, with its requirement of phased and clustered development atop the plateau, management emphasis on clustering below the rim, and numerous and extensive other environmental protections achieves an appropriate balance between protection of sensitive resources and historic uses while accommodating a reasonable level of oil and gas development.

Members and Attendees of the Community United Church of Christ

Topic: General Comment

Comment text: 1) BLM should select an alternative that defers drilling atop the plateau until drilling can be accomplished with no impacts; provides non-changeable protections for important habitat, backcountry recreation, and natural areas; uses Best Management Practices to minimize resource damage; keeps motorized uses, including snowmobiles, on designated routes; and prioritizes natural resource protection.

Response: 1) Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. BLM believes that the Proposed Plan represents a high degree of environmental protection while accommodating a reasonable amount of natural gas recovery. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative as well as the use of BMPs, reclamation standards (Appendix I), regular monitoring requirements, and reclamation success criteria (Appendix J) intended to reduce the area of long-term physical impacts of oil and gas development as well as encourage more successful reclamation and revegetation of these areas.

Topic: General Comment

Comment text: 2) Current monitoring and inspection/enforcement in the Planning Area by BLM is inadequate. Some

text: of the problems resulting from inadequate inspections are not necessarily violations of laws but result in conditions that cause unnecessary harm to wildlife (e.g., excessive noise, toxins in disposal pits, etc.). The final plan should address how BLM will ensure sufficient resources for adequate oversight of drilling operations and other land uses.

2) The natural resource values of the Planning Area have been given special consideration in the Proposed Plan within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3, summarized in Table 2-1, and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Members of Colorado School of Mines Circle K International

Topic: Oil and Gas

Comment text: We do not feel it is beneficial to the local community and the environment for you to decide to lease oil and gas drilling on the top of the Roan Plateau.

Thank you for your interest in the BLM land use planning process for the Roan Plateau Planning Area. The natural resource values of the Roan Plateau Planning Area have been given special consideration

Response: within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Public Lands Advocacy, Colorado Oil and Gas Association, and Independent Petroleum Association of Mountain States

Topic: General Comment

Comment text: 1) The Plan does not comport with FLPMA, NEPA, the National Energy Policy, and related BLM regulations, policies, and guidelines, nor does it comply with the Transfer Act, which mandated immediate leasing of the former NOSRs for oil and gas exploration and development.

Response: 1) Without knowing the specifics of why the commenter believes that the Plan is inadequate, BLM cannot reply specifically. However, BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS comply with FLPMA, NEPA, the National Energy Policy, and related BLM regulations, policies, and guidelines, as well as the Transfer Act.

Topic: Oil and Gas

Comment text: 2) Deferred leasing atop the plateau (Alternative III) is unlawful and would make BLM open to a "takings" claim.

Response: 2) BLM does not agree that a deferral period for leasing atop the plateau would be unlawful, and the commenter provides no support for such an assertion. Without knowing the specifics of why the commenter believes that an Alternative would constitute a "takings" claim or be unlawful, BLM cannot reply more specifically. However, please note that the Proposed Plan does not include a deferral period. See Section 2.3 of the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 3) BLM failed to develop a sufficient RFD, failed to analyze directional drilling above the rim, and failed to consider alternatives that do not involve deferred leasing. Therefore, BLM failed to consider a reasonable range of alternatives, and the DEIS is therefore insufficient.

Response: 3) BLM considers the RFD as contained in the Draft RMPA and Proposed Plan/Final EIS to be sufficient. Alternatives I, II, IV, and V do not include deferred leasing.

Topic: Oil and Gas

Comment 4) BLM failed to use the least restrictive stipulations that would provide adequate resource protection to

text: meet management objectives.

4) BLM disagrees with this assertion and believes that the alternatives analyzed represent a reasonable

Response: range of balance between restrictive stipulations and resource protection. This includes the Proposed Plan of the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 5) BLM failed to assess cumulative impacts adequately, specifically the cumulative impacts of drilling restrictions on the ability of the lessee to develop its leases.

5) BLM disagrees with this assertion and believes that none of the alternatives analyzed, including the Proposed Plan of the Proposed Plan/Final EIS, would impede oil and gas development to a degree that represents a cumulative adverse impact on development. Oil and gas development on BLM-

Response: administered Federal leases is always subject to restrictions under FLPMA, BLM policies, and various environmental laws (e.g., the Endangered Species Act, Clean Water Act, Clean Air Act, etc.) that result in less than unfettered drilling. BLM’s analysis indicates that the amount of drilling and development during the 20-year period of analysis is more likely to be constrained by the number of drilling rigs available than by the protective stipulations.

Topic: Oil and Gas

Comment text: 6) BLM failed to analyze the effects of mitigation measures on potential impacts. The DEIS must acknowledge that oil and gas impacts are mitigated and are actually compatible with other resource uses, including those in sensitive areas.

6) As explained in Chapter 4, and in conformance with NEPA, the Draft RMPA/EIS and Proposed Plan/Final EIS impact analyses assumed “mitigation” (in the broad sense) in situations where included as a lease stipulation (e.g., a seasonal TL for deer winter range) or required by Federal or other laws and regulations (e.g., to protect threatened or endangered species) but not for “discretionary” mitigation measures. The purpose of this approach is to ensure that adverse impacts are not underestimated. If the discretionary mitigation measures described in Chapter 4 and presented in Appendix I are implemented in appropriate situations and are fully effective, as BLM intends would be the case, the impacts may be less than the “conservative” results presented in Chapter 4.

Response:

Topic: Oil and Gas

Comment text: 7) The DEIS gives only perfunctory reference to the RFD, and the RFD does not include all of the components mandated by BLM policies. For example, the RFD is not unconstrained by restrictions. BLM must therefore revise the DEIS based on a revised and sufficient RFD.

7) The RFD (please see the revised version provided as Appendix H in the Proposed Plan/Final EIS) is unconstrained except for specific conditions such as slopes steeper than 50 percent and limitations on downhole spacings and reasonable surface densities. Assumptions in the RFD regarding numbers of available drill rigs, seasons when drilling is unlikely due to snow accumulation, etc., are part of the “reasonable” and “foreseeable” aspects of the RFD. Additionally, please note that the RFD does not set limits on the amount of development that would occur.

Response:

Topic: Oil and Gas

Comment text: 8) The RFD and DEIS assume artificially low drilling rates, both above and below the rim. The assumed 5-month drilling window on top due to winter weather is unrealistic. Year-round drilling in winter conditions is easily achievable.

8) BLM believes that the assumed drilling rates both above and below the rim and a seasonal limit due to snow cover atop the plateau are reasonable and appropriate. Again, however, please note that the assumed number of wells under any of the alternatives is, as stated in Section 2.3 of the Draft RMPA/EIS and Section 2.2 of the Final, not an absolute number but an assumed number for the purpose of impact assessment. While reasonable and realistic, the assumed number of wells under any alternative is subject to being larger or smaller due to a number of economic, geopolitical,

Response:

technological, and other factors that may change through time.

Topic: Oil and Gas

Comment text: 9) The DEIS and RFD fail to discuss gross and net surface disturbance associated with projected drilling. The Draft must be revised to quantify impacts both pre- and post-mitigation.

Response: 9) Table 4-2 of the Draft RMPA/EIS and Proposed Plan/Final EIS summarize gross and net surface disturbance, although using the terms “long-term” for net and “temporary” for the difference between gross and net (gross = temporary + long-term).

Topic: Oil and Gas

Comment text: 10) The RFD and DEIS fail to address adequately the issue of directional drilling, resulting in artificially low numbers of wells atop the plateau.

Response: 10) The Proposed Plan relies on directional drilling atop the plateau to accomplish the required minimum of 0.5 mile separation between pads while accommodating 10-acre downhole spacing. Below the rim, the Proposed Plan assumes that BLM would work with industry to use directional drilling as much as practicable to reduce surface pad densities. Please see Section 2.3 of the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 11) The RFD and DEIS unrealistically assume that drilling will proceed more slowly atop the plateau due to economics, weather, access, etc. This "naturally phased development" results in a grossly unrealistic assumption of the amount of development and impacts atop the plateau. In reality, with 16 rigs operating year-round throughout the planning area, a total of 3,000 wells would produce more than 80% of the natural gas resources during the life of the RMP.

Response: 11) BLM believes that the assumptions regarding development atop the plateau are reasonable and realistic. However, BLM acknowledges that actual annual drilling may rates differ, depending on conditions such as the depth and persistence of snow cover. The status of the assumptions as bases for analysis of impacts and not as limits on development is described in Chapter 2 of the Draft RMPA/EIS and Proposed Plan/Final EIS.

Topic: General Comment

Comment text: 12) The alternatives development exhibits bias against oil and gas production. For example, Alternative V, which results in the most production, also fails to include a number of mitigation and monitoring measures identified for the other alternatives. This artificially increases the impacts on several resources under Alternative V beyond the levels necessarily associated with the increased drilling.

Response: 12) The structure of Alternative V in the RMPA/EIS is intended to provide an upper bound on the amount of adverse impact resources that hypothetically could occur under one version of an RMP Amendment. Please note that the Proposed Plan of the Proposed Plan/Final EIS assumes nearly the same amount of oil and gas development in 20 years (1,570 versus 1,582 wells) as for Alternative V, but with the lowest amount of associated long-term ground disturbance from pads, roads, and other surface facilities due to the requirement for phased and clustered development atop the plateau and a management emphasis on greater clustering below the rim.

Topic: General Comment

Comment text: 13) As an example of bias against oil and gas, the introduction to the section on wildlife impacts states that oil and gas impacts are likely to be the most important (compared to impacts from other uses and actions) BEFORE the subsequent impact analysis.

Response: 13) The introductory text was written after the impact analysis had been conducted. Even if this were not the case, however, BLM believes that it is reasonable to have stated that impacts from construction

of numerous drill pads and many miles of roads and pipelines, operation of drilling equipment, and increased vehicular traffic associated with development and production would be "LIKELY" (the word used in the text) to be more important than continuation of current activities such as recreational travel and livestock grazing. This does not, in BLM's view, indicate bias, but rather an objective and realistic assessment of comparative impact levels among reasonably anticipated land uses.

Topic: General Comment

Comment text: 14) The impact analysis is extremely confusing, wordy, repetitive, and disorganized, making it difficult to determine the validity of the analysis and conclusions.

Response: 14) BLM recognizes the complexity of the Draft RMPA/EIS, reflecting the complexity of the Planning Area, the resources and values contained therein, and the alternatives analyzed. In an effort to simplify the reader's task in the Proposed Plan/Final EIS, BLM has elected to provide a detailed analysis for only the Proposed Plan, incorporating the five previous alternatives and through selected comparison tables.

Topic: General Comment

Comment text: 15) The impact analysis is highly subjective, and the rationales and conclusions are not well documented. Quantitative and qualitative impact levels are poorly defined and used inconsistently.

Response: 15) BLM was unable to avoid subjectivity (reliance on professional judgment) and the use of qualitative terms instead of strictly objective and quantitative measures due to the uncertainties concerning the exact location, scale, and pace of oil and gas development and the other land uses and management actions. The Proposed Plan/Final EIS has attempted to clarify some sources of confusion.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 16) The impact analysis overestimates negative impacts. For example, the impacts on mule deer use a 3.5 multiplier, which is not applicable to the planning area's habitats. Also, increasing the multiplier to 5.7 and 8.0 based on shortened or no winter range TL is not explained. No calculations are provided to justify the 33% and 50% reductions in deer under Alternatives IV and V. Also, the analysis fails to consider habituation -- especially relevant because most of the roads used for oil and gas development already exist and receive vehicular traffic. Therefore, the mule deer analysis is deeply flawed and must be completely revised.

Response: 16) The basis for the estimates of effective loss of winter deer winter range, and thus the potential decrease in mule deer populations, under Alternatives IV and V are provided in Sections 4.3.2.4 and 4.3.2.5 of the Draft RMPA/EIS, including the rationale for increasing the multiplier due to lack of a winter TL to 5.7 and 8.0, respectively (see pages 4-89 and 4-94). Note, however, that CDOW requested that BLM use a more conservative (greater) estimate of effective habitat loss associated with avoidance of areas of human activity, citing recent studies in Wyoming. See Table 4-11 of the Proposed Plan/Final EIS, and related text in Section 4.3.2 regarding the Proposed Plan.

Topic: General Comment

Comment text: 17) The analysis does not adequately assess cumulative impacts by resource and does not define the specific areas of influence for each resource or define the terms "onsite" and "offsite." Resultant post-ROD litigation likely to result from this failing would delay its approval and the start of oil and gas projects.

Response: 17) BLM has attempted to address cumulative impacts by resource as much as practicable given the uncertainties about the exact location, scale, pace, and character of development on private lands both within the Planning Area ("onsite") and outside the Planning Area ("offsite"). The Proposed Plan/Final EIS provides some additional information on cumulative impacts.

Topic: Socioeconomics

Comment 18) The socioeconomic impact analysis does not adequately describe the benefits of oil and gas

text: development or the adverse impacts of withdrawals and restrictions.

18) The potential impacts of lease stipulations and withdrawals can be estimated by comparing the Proposed Plan to other alternatives such as Alternative I with fewer or less stringent stipulations or withdrawals.

Topic: Socioeconomics

19) The socioeconomic analysis does not adequately describe the positive impacts on marginal gas prices. During the life of the Plan, additions to the natural gas supply will be the only alternative to progressively higher natural gas prices. Gas produced by a single Mesaverde well would save consumers more than \$20 million in gas prices.

19) The updated socioeconomic analysis in Section 4.4.3 of the Final includes detailed analysis of potential natural gas revenues and tax payments associated with natural gas production in the Planning Area during the 20-year planning period.

Topic: Visual Resources

20) The Draft does not correctly analyze visual impacts of oil and gas development in comparison to the socioeconomic benefits. The BLM's assumed drilling levels would involve so few rigs (3 to 5 year-round) that visual impacts could not be considered significant.

20) Regardless of the number of rigs, the visual impacts under the Draft and Final Draft RMPA/EIS analysis were based primarily on well pads, new or upgraded access roads, and associated surface facilities and not on drill rigs, which are a temporary impact.

Topic: Oil and Gas

21) None of the alternatives would produce more than 20% of the recoverable natural gas resource in the planning area during the 20 year life of the plan. Given the current economic and geopolitical environment, and the negative impacts on national security and environmental justice, such a low recovery is not in the Nation's best interest.

21) The rate of recovery of the natural gas resource is dictated by the assumed average annual production rate (see the RFD in Appendix H of the RMPA/EIS), even with 10-acre downhole spacing, and by realistic assumptions about the number of drill rigs operating in the area. The protective stipulations required to protect adequately the sensitive ecological, hydrological, recreational, and visual resource values of the Planning Area are generally not major factors in the rate of gas production. Exceptions to this generalization are the 5-month TL for big game winter range throughout most of the lower portion of the Planning Area and the assumed 6-month drilling window due to snow cover atop the plateau. These do affect projections of gas production from BLM lands significantly. However, note that drill rigs moving off BLM lands during winter merely shift their operations to other areas rather than sitting idle. Thus, a gas production continues, albeit it from other (generally privately owned) areas.

Topic: Oil and Gas

22) The oil and gas industry has repeatedly demonstrated its commitment to environmental protection. To adequately perform its responsibilities under NEPA and FLPMA, BLM must revise flawed portions of the Draft and incorporate a new alternative that is more realistic in terms of levels of oil and gas development (e.g., 16 year-round rigs, 3000 total wells, and 80% resource recovery during the 20-year Plan) and that also applies Best Management Practices and eleven specific stringent mitigation measures identified by industry so that the higher levels of production are not accompanied in the analysis by arbitrarily high impact levels.

22) The Proposed Plan assumes more drill rigs, more total wells, and higher resource recovery than under the Preferred Alternative and, BLM believes, represents an appropriate balance between natural gas production, environmental protection, and other allowable uses (see Section 2.3 of the Proposed Plan/Final EIS).

Rock the Earth

Topic: Oil and Gas

Comment text: 1) BLM has failed to consider adequately extended reach drilling (ERD) and multi-lateral (ML) well technologies. These are proven to be very effective in tight formations with producing zones separated by significant thickness of non-producing zones. BLM should issue a Supplemental EIS addressing ERD/ML technologies.

Response: 1) BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads (Section 2.3.2 in the Proposed Plan/Final EIS).

Topic: Oil and Gas

Comment text: 2) NEPA requires that BLM consider significant alternatives developed by other agencies, communities, and members of the public.

Response: 2) BLM considered alternatives developed by other agencies, communities, and members of the public during the planning phase and in developing the analyzed alternatives. Indeed, the requirement under the Proposed Plan of the Proposed Plan/Final EIS for phased and clustered oil and gas development, with an emphasis on location of facilities along ridgetop with existing roadways, was a specific recommendation by CDNR—a cooperating State agency. Other important aspects of the Proposed Plan were recommended by other Cooperating Agencies as part of the Consultation and Coordination process following publication of the Draft. Since many of the Cooperating Agencies are bodies that represent the public (e.g., local and county governments), members of the public were indirectly included in that process, as well as through their comments directly to BLM.

Topic: Oil and Gas

Comment text: 3) On top of the plateau, the gas produced by 100 vertical wells could be achieved with only 17 ERD wells or 9 ERD/ML wells, and more cheaply. This would allow efficient recovery of the gas resources without disturbing or impacting the vast majority of the surface land.

Response: 3) BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Below the rim, BLM would place management emphasis on greater clustering than at present. An outcome of this approach is a level of gas production comparable to Alternative V, but with environmental protections greater than any other alternative, including most aspects of No Action.

Save Colorado Now

Topic: Oil and Gas

Comment text: Not in favor of any gas drilling or any type of energy extraction processes on top of the Roan Plateau now or in the future.

Response: The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. For example, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum

distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative. BLM believes that this represents an appropriate balance between protection of sensitive resources and recovery of the underlying natural gas resource.

Sonoran Institute

Topic: Socioeconomics

Comment text: 1) Although generally sufficient, the Draft underestimates the potential adverse economic and quality of life impacts associated with the natural, scenic, and recreational qualities of the area.

Response: 1) Potential quality of life impacts are discussed in two ways in the socioeconomic analyses of the Draft RMPA/EIS and Proposed Plan/Final EIS: through interviews with local business owners and residents (Section 3.4.3) and in the impacts analysis (Section 4.4.3).

Topic: Socioeconomics

Comment text: 2) Many of the new residents are baby boomers seeking a more relaxed lifestyle, lower cost of living, lower crime rate, better recreational opportunities, scenic beauty, and other attributes of small Western Slope towns. These new residents are often at or near retirement rather than moving in to seek employment opportunities.

Response: 2) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS considers the potential impacts from the Proposed Plan in the context of demographic and economic trends in the region (especially Garfield County).

Topic: Socioeconomics

Comment text: 3) Although each alternative is predicted to have negligible population growth as a result of the project, the analysis does not address the number of residents (new or long-term) who may leave the area as a result of oil and gas development. The analysis should address the effect on the service and professional sectors as a result of these influences.

Response: 3) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS considers the potential impacts from the Proposed Plan in the context of demographic and economic trends in the region (especially Garfield County).

Topic: Socioeconomics

Comment text: 4) The analysis does not adequately describe how much of the oil and gas work force will be permanent residents or how the number of indirect jobs was calculated. Additionally, the information on where new residents will live covers too wide a range for meaningful analysis.

Response: 4) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS addresses trends in oil and gas employment (permanent and temporary) and includes details on estimates for indirect employment.

Topic: Socioeconomics

Comment text: 5) The Affected Environment section should address educational attainment and the importance of non-labor income, which are not included at all in the Draft.

Response: 5) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS considers the potential impacts from the Proposed Plan in the context of demographic and economic trends in the region (especially Garfield County).

Topic: Socioeconomics

Comment text: 6) The impacts of construction on the local economy would benefit from a more detailed analysis of how oil and gas related construction will be distributed through time. Also, reduced attractiveness of the area to potential new residents due to environmental, scenic, and recreational degradation could affect the construction sector significantly.

Response: 6) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS considers the potential impacts from the Proposed Plan in the context of demographic and economic trends in the region (especially Garfield County).

Topic: Socioeconomics

Comment text: 7) The Draft should include more data on affordability of housing and its influence on where growth is occurring, and information on commuting distances and times within the county. Also, some baseline information on oil and gas royalties and other revenues without the additional wells that would result from the plan should be provided as a basis for comparison.

Response: 7) Potential impacts to housing availability and affordability are addressed in Section 4.4.3 and Appendix M of the Proposed Plan/Final EIS. The updated socioeconomic analysis in Section 4.4.3 and Appendix M includes potential oil and gas revenues in the analysis, as well as a detailed discussion of how these funds can be distributed to local governments. Appendix M also includes oil and gas royalties for 2003.

Topic: Socioeconomics

Comment text: 8) The interviews are not convincing as to general approval by local residents of more oil and gas development. Some ranchers said that recreational travel is a negative, but do they see the connection between more roads for oil and gas and more recreational travel?

Response: 8) The Proposed Plan stipulates that travel in areas affected by oil and gas development or other uses may be limited, restricted, or closed to resolve conflicts, provide for public safety, and provide for orderly oil and gas operations. New routes associated with oil and gas or other uses will be designated administrative access only, unless specific objectives for other resources (e.g., recreational travel routes or access to recreational sites) are present that warrant other designations on a case-by-case basis.

Topic: Socioeconomics

Comment text: 9) The Draft lacks some of the baseline data needed for a thorough and reliable analysis of socioeconomic impacts. The Sonoran Institute comment letter includes a number of tables and references to other sources that would be helpful.

Response: 9) Thank you for supplying these additional data and references. This information was incorporated into the updated socioeconomic analysis where appropriate.

The Wilderness Society, Colorado Environmental Coalition, Sierra Club - Rocky Mountain Chapter, Colorado Mountain Club, Center for Native Ecosystems, Grand Valley Citizen Alliance, and Western Colorado Congress

Topic: General Comment

Comment text: 1) None of the alternatives offers the level of protection these lands warrant or the communities and the public have favored.

Response: 1) While BLM disagrees with this characterization of the levels of resource protection represented by the range of alternatives evaluated for the Draft RMPA/EIS, please note that the Proposed Plan incorporates additional measures for environmental protection, particularly for sensitive resources atop the plateau. See Chapter 2.

Topic: General Comment

Comment text: 2) The loss of recreational opportunities and impacts to a wide range of public land resources require that BLM either select a final plan with adequate protections or prepare a supplemental plan.

Response: 2) The Proposed Plan will provide for dispersed recreation activity opportunities. The Planning Area will be managed as part of the Glenwood Springs Extensive Recreation Management Area (ERMA). The Hubbard Mesa OHV riding area will be managed as open to cross country travel with SSR/CSU restrictions.

Topic: General Comment

Comment text: 3) There should be no drilling on top of the plateau. BLM should adopt the components of the "Community Alternative."

3) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS.

Response: Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). While the Proposed Plan would allow drilling atop the plateau, the requirement for phased and clustered development is assumed to result in only six more pads (thirteen vs. seven) than under the No Action Alternative.

Topic: Oil and Gas

Comment text: 4) The Draft fails to consider current oil and gas development in the region, resulting in an underestimate of oil and gas impacts and skewing the analysis. BLM should correct the flawed RFD, which does not comply with BLM standards.

Response: 4) The Proposed Plan incorporates a revised RFD (Appendix H of the Proposed Plan/Final EIS) which includes the most current oil and gas development data provided by the Colorado Department of Natural Resources.

Topic: General Comment

Comment text: 5) BLM should manage the top of the plateau to protect its unique backcountry and undeveloped habitat values, even in lands not found to have wilderness character per se.

5) Alternatives II and III incorporate several measures to protect these resource values. For Alternative III (Preferred), the purpose of deferred development was specifically to allow drilling technologies to continue to evolve in ways to reduce impacts of these and other resource values.

Response: The Proposed Plan, in lieu of deferred drilling, incorporates mandatory phased and clustered development atop the plateau, with a minimum of 0.5 mile between pads, as well as location of surface facilities along ridgetops with existing roadways. These measures, combined with protections such as four ACECs, the Parachute Creek Watershed Management Area, numerous and extensive NGD/NSO restrictions, and restrictions on motorized travel to designated routes (except over-snow travel by snowmobiles), are expected to maintain most or all of the backcountry and habitat values in large portions of the area atop the plateau.

Topic: General Comment

Comment text: 6) BLM should include a discussion of "connected actions" that are likely to drive additional development throughout the region.

6) Additional development throughout the region, including that in the Planning Area, is largely a function of the ongoing regional growth in human population, only a small portion of which is directly or indirectly related to oil and gas development (see Section 4.4.3 of the Draft

Response: RMPA/EIS and Proposed Plan/Final EIS). Oil and gas development is largely driven by market forces, which in turn are shaped by geopolitical as well as economic factors. The purpose of the RMPA/EIS is to consider a reasonable range of management and land use alternatives, regardless of the outside factors that may be driving development pressures.

Topic: General Comment

Comment text: 7) BLM should strengthen stipulations to safeguard the area's ecological values. This includes all of the related components of the Community Alternative. Additionally, NGD/NSO stipulations should not be subject to modifications, waivers, or exceptions; protected winter range seclusion areas should be expanded to the size used in the 1999 FSEIS; ACECs should be expanded to 40,495 acres to correspond to CDOW's earlier comments; and the Parachute Creek Watershed Management Area should provide protection from all uses, not only oil and gas.

Response: 7) Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Sec 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details. Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). The Proposed Plan incorporates a number of surface use restrictions and stipulations for the protection of natural resources (Appendix C in the Proposed Plan/Final EIS). Wildlife winter range security areas in the Proposed Plan are equivalent to those in the 1999 FSEIS. The Proposed Plan designates four ACECs (East Fork Parachute Creek, Trapper / Northwater Creek, Magpie Gulch, and Anvil Points). While the four ACECs occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area. The Proposed Plan would also designate the Parachute Creek Watershed Management Area to protect water quality and watershed integrity and function, including those related to the Colorado River cutthroat trout.

Topic: Recreation

Comment text: 8) BLM should designate two SRMAs: Hubbard Mesa below the rim and another SRMA atop the plateau. Both SRMAs should have an NSO for oil and gas.

Response: 8) No SRMAs will be designated in the Proposed Plan. The Planning Area will be managed as part of the Glenwood Springs Extensive Recreation Management Area (ERMA) (Section 2.3 in the Proposed Plan/Final EIS). However, Hubbard Mesa will be managed as the Hubbard Mesa OHV riding area, designated "open" for cross-country OHV travel).

Topic: Onsite Travel Management

Comment text: 9) Motorized and mechanized travel should be managed to avoid new roads, routes, and habitat fragmentation. BLM should specify methods and standards for closing administrative, oil and gas, and other selected roads and routes to the public use and for completing closure and reclamation in a manner that will be permanently effective.

Response: 9) The Proposed Plan will require phased and clustered development atop the plateau, with an emphasis on location of surface facilities on ridgetops with existing roadways. As can be seen in Table 4-2 of the Proposed Plan/Final EIS, the result of this approach, combined with a management emphasis on clustering of wells below the rim, is expected to be a much smaller amount of habitat loss (and fragmentation) than the other alternatives.

Response: Regarding road closures, the Proposed Plan/Final EIS discloses segments currently planned for closure, primarily to avoid redundant routes or protect sensitive resources. Decisions about which oil and gas access roads should remain available for public access (if any) or administrative use will be made at the time they are no longer used for active drilling operations. Those decisions will be based on issues such as public safety, recreational value, and protection of sensitive resources. Regarding reclamation, the Proposed Plan will implement innovative reclamation and performance-based monitoring standards (see Appendix J of the Proposed Plan/Final EIS).

Topic: Oil and Gas

Comment text: 10) BLM should set high standards on oil and gas development to respect the communities' and residents' quality of life, including use of BMPs and a creative and innovative use of stipulations. We agree with the related comments by the Colorado Mule Deer Association regarding well pad spacing, limits on the number of active pads, establishment of a monitoring system to allow for adaptive management, use of performance-based reclamation standards, and adequate bonding.

Response: 10) The Proposed Plan emphasizes balance in managing for a variety of multiple resource uses incorporating outcome-based adaptive management, including a systematic, phased and clustered oil and gas development within a non-contracting Federal Unit. As described in Section 2 of the Proposed Plan/Final EIS, this approach would include a minimum of 0.5 mile between well pads, with up to seventeen wells per pad and the placement of most oil and gas facilities along existing ridgetop roadways. It also would include extensive areas of NGD/NSO and SSR/CSU restrictions to protect a variety of resources, designation of four ACECs and the Parachute Creek Watershed Management Area, restriction of motorized and mechanized travel to designated routes (except for over-snow travel by snowmobile), use of BMPs and mitigation measures, and application of weed control and performance-based reclamation standards. BLM believes that, taken together, these measures and actions would provide ample protection of sensitive ecological, hydrological, and recreational resources atop the plateau while accommodating a reasonable level of natural gas production.

Topic: General Comment

Comment text: 11) Area communities, split-estate surface owners, and surface owners adjacent to BLM surface or mineral estates should be notified prior to lease sales or drilling and given an opportunity to comment. Communities, especially, should be given the opportunity to suggest conditions of approval to mitigate impacts on the communities.

Response: 11) Oil and gas leasing will be conducted on leasable lands in accordance with the Mineral Leasing Act and the Federal Onshore Oil and Gas Reform Act of 1987 (Reform Act) and applicable regulations under 43 CFR 3100 and in accordance with the decisions made through application of FLPMA and other laws applicable to public lands. Prior to exploration and/or lease development, the operator must submit a Geographic Area Proposal identifying projected activity (including well locations, pipelines, and facilities) during the next 2 to 5 years and appropriate mitigation.

Topic: Oil and Gas

Comment text: 12) Both the President's National Energy Policy and comments by Secretary Gale Norton require that BLM should take a hard look at requiring emerging technologies to reduce impacts while allowing recovery of its natural gas resource.

Response: 12) The Proposed Plan incorporates emerging technologies to reduce impacts, including a requirement for phased and clustered development atop the plateau, utilizing directional drilling to allow up to seventeen wells per pad. The Proposed Plan also places an emphasis on creative reclamation techniques by limiting expansion of drilling operations into successive development areas until existing surface disturbances are showing satisfactory progress toward achieving stringent, performance-based reclamation criteria (see Appendix J of the Proposed Plan/Final EIS).

Topic: General Comment

Comment text: 13) The Draft inappropriately limits the impact analysis to the life of the plan, even though additional impacts are identifiable and will be irreversibly set in motion.

Response: 13) It is BLM's policy that impacts beyond 20 years are too speculative to allow a meaningful and reliable analysis. For example, changes in drilling technology, development of other energy

sources, and geopolitical or economic factors could result in a much different planning environment than at present.

Topic: General Comment

Comment text: 14) The Draft includes too narrow a range of alternatives and failed to consider reasonable alternatives that would alter the impacts and cost-benefit analysis. This includes an alternative such as preliminary Alternative F. BLM erred in concluding that Alternative F would not comply with the Transfer Act, thus incorrectly setting too narrow a limit on the range of alternatives considered.

Response: 14) Chapter 2 provides a description of what constitutes a “reasonable range of alternatives” under NEPA. BLM concluded, and continues to believe, that Alternative F did not meet the fundamental requirement of the Transfer Act. However, Alternative II, the deferred leasing aspect of Alternative III (to allow technologies to evolve before developing the top of the plateau), and the Proposed Plan (with its requirement for phased and clustered development on top) provide extensive protection of the resource values in that portion of the Planning Area.

Topic: Oil and Gas

Comment text: 15) Additionally, BLM should have included an alternative using creative and innovative stipulations, such as requiring use of emerging technologies and directional drilling and setting limits on the amount of land disturbed at any one time (e.g., see the Otera Mesa lease ROD in New Mexico).

Response: 15) The Proposed Plan incorporates emerging technologies to reduce impacts, including a requirement for phased and clustered development atop the plateau, utilizing directional drilling to allow up to seventeen wells per pad. The Proposed Plan also places an emphasis on creative reclamation techniques by limiting expansion of drilling operations into successive development areas until existing surface disturbances are showing satisfactory progress toward achieving stringent, performance-based reclamation criteria (see Appendix J of the Proposed Plan/Final EIS).

Topic: General Comment

Comment text: 16) Alternative I (No Action) inappropriately differs from some of the protective requirements established in the 1999 FSEIS, thus not really representing "continuation of current management." For example, preliminary Alternative A, also designated No Action, had 0 acres of standard lease terms, while Alternative I has more than 7,000 acres.

Response: 16) While Alternative I was not chosen as the preferred alternative, the following provides an explanation of the details, for the sake of clarity. The overall management objective for Alternative I was to maintain present uses by continuing present management direction and activities. This alternative was "no action" in the sense of "no change from current management," but not in the sense of "no change from current conditions." For example, a portion of the planning area is currently under oil and gas lease and is subject to further development regardless of the outcome of the current planning process. In general, current uses and trends would continue.

Topic: Oil and Gas

Comment text: 17) The amount of oil and gas development contemplated under Alternative V is unreasonable and would likely violate BLM’s duty to avoid unnecessary and undue degradation of the planning area's unique resources and other uses. Alternative V would clearly run contrary to the wishes of a majority of local governments, residents, and public.

Response: 17) Alternative V was not selected as the Proposed Plan.

Topic: Oil and Gas

- Comment text:** 18) The Draft does not adequately address impacts of drilling crews (either permanent camps or regular transport to/from drilling sites), routine inspection and maintenance of wells, and ancillary facilities (e.g., will there be a year-round maintenance/storage facility atop the plateau?).
- 18) Both the Draft RMPA/EIS and Proposed Plan/Final EIS impact analyses assumed year-round impacts associated with operation, inspection, and maintenance activities atop the plateau. The analysis of the Proposed Plan, and the impact summary for the other five alternatives, has been modified to reflect more conservative assumptions about the width of “disturbance zones” along roads and around drill pads and other oil and gas facilities (see Section 4.3.2). These more conservative assumptions, reflecting larger zones of reduced wildlife use, were derived from recent studies regarding the impacts of oil and gas drilling on deer and elk winter range in Wyoming. The results of those studies were recommended by CDOW as a more appropriate basis for estimating effective habitat loss from human disturbance.
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Topic: Oil and Gas

- Comment text:** 19) The spectrum of protective stipulations and management tools is inadequate. BLM has the authority to express more control over oil and gas development. Additionally, some of the stipulations are misleading by providing less protection than indicated (e.g., NGD actually allows ground disturbance). These deficiencies should be corrected.
- 19) BLM regulations and policies regarding NSO, CSU, or TL stipulations recognize that the resource value being protected may not exist throughout an area mapped for application of a specific stipulation, and that conditions may change through time that would make the stipulation either unnecessary or in need of revision. However, in considering a request for exception, waiver, or modification of a protective stipulation, the burden is on the party seeking the change to demonstrate that the resource value being protected would not be adversely affected. Only the Preferred Alternative of the Draft RMPA/EIS included some stipulations not subject to exceptions—i.e., would apply throughout the mapped area of the stipulation regardless of localized situations in which the protected resource value is not present. Please see Appendix C of the Proposed Plan/Final EIS regarding protective stipulations under the Proposed Plan. Specifically, the Proposed Plan places greater emphasis on incorporating the bases under which a stipulation might be applied as part of the description of that stipulation. Note, however, that any situation in which BLM would decide not to apply a stipulation in an area for which it is mapped would require documentation that the resource value(s) being protected by the stipulation would continue to be adequately protected.
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Topic: Rangeland Management and Health

- Comment text:** 20) Oil and gas development must comply with BLM's obligation to range lessees. We endorse the 10-point platform of the New Mexico Cattle Growers Association (page 37 of comments). These deal with more stringent requirements for repair and cleanup, monitoring of impacts, aggressive weed control, stringent reclamation standards, more frequent and stringent inspection and enforcement, and use of innovative technologies to reduce the number and size of surface locations.
- 20) The Proposed Plan incorporates a number of specific management actions (Section 2.3.1 in the Proposed Plan/Final EIS), as well as reclamation standards, regular monitoring requirements, and performance-based reclamation success criteria (see Appendix J in the Proposed Plan/Final EIS) to reduce the area of long-term physical impacts of oil and gas development and to encourage more successful reclamation and revegetation of these areas.
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Topic: Other Minerals

- Comment text:** 21) The Draft does not give adequate attention to oil shale or coalbed natural gas -- in terms of possible impacts from those actions. Unless expanded, the Draft does not allow leasing or development of those resources under NEPA.

Response: 21) Section 3.5.6.1 in the Proposed Plan/Final EIS expands on the discussion of oil shale development. Development of oil shale in areas with a Federal mineral estate would be regulated by BLM and subject to the same restrictions/stipulations regarding surface activities. Since BLM does not believe that oil shale development is realistic in the Planning Area during the 20-year period of analysis, the cumulative impacts would be speculative and hence not considered in the RMPA/EIS. Moreover, the type and extent of cumulative impacts would depend on the process used and the scale of development. If oil shale development does arise as a desired use during the planning period, impacts would be considered in a separate NEPA document prepared in response to specific proposals, and that development would be constrained by the restrictions on surface uses that apply to other activities.

Topic: Rangeland Management and Health

Comment text: 22) The Draft does not adequately address impacts of grazing under the effects of ongoing drought. This is a perfect time for BLM to evaluate whether to permanently close long-vacant allotments.

Response: 22) The Proposed Plan incorporates a number of specific management actions intended to better regulate and monitor livestock grazing impacts on other natural resource values. This includes actions to address livestock management in response to drought conditions (Section 2.3.2 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Special Status Fish and Wildlife

Comment text: 23) The Draft must more clearly define "high risk" and "moderate risk" areas for sensitive ecological resources and take a harder look at impacts to, and management of, all special status species. These should include Colorado special-concern species. The midget faded rattlesnake may be a separate species elevated to ESA protection. This also includes a harder look at whether lynx use the area and would be affected.

Response: 23) Those terms have been replaced with "high value" to more clearly describe their role, and clarifying text has been added to Section 4.3.4. BLM took a hard look at impacts to, and management of, special status species (discussed in Section 4.3.4). The Proposed Plan/Final EIS addresses Colorado special-concern species and expands on the discussion for lynx.

Topic: Special Status Plants and Significant Plant Communities

Comment text: 24) BLM should be using Reveal's revised taxonomy of the "Roan Cliffs blazing star." BLM should assess cumulative impacts to all special status species.

Response: 24) Roan Cliffs blazingstar (*Mentzelia rhizomata*) is a recent taxonomic reclassification (Reveal 2002) for the species formerly referred to as Roan Cliffs blazingstar (*Nuttallia argillosa*) (Weber and Wittman 2001) in Roan Plateau vicinity of Colorado and in the Draft RMPA/EIS. Under this new classification, the species is considered a Colorado endemic, widely distributed but edaphically restricted to steep, shale talus or scree slopes derived from the Parachute Creek member of the Green River Formation, in the general vicinity of the Roan Plateau, north of DeBeque and Parachute. It also occurs in the ridge and plateau north of the Book Cliffs and the city of Grand Junction (Reveal 2002). This revised taxonomy is incorporated into the Proposed Plan. For analysis purposes, it is assumed, consistent with Reveal (2002), that the BLM sensitive species status and CNHP rank of G3/S2 for this species will not change with the reclassification (Section 3.3.3.1 in the Proposed Plan/Final EIS). Reveal, J.L. 2002. *Mentzelia rhizomata* (Loasaceae: Mentzelioideae), a new species from western Colorado. Systematic Botany 27:763-767. Weber, W. A. and R.C. Wittmann. 2001. Colorado flora: Western slope. University Press of Colorado. Boulder.

Topic: Forest Products

Comment text: 25) BLM must take a harder look at forest management.

text:

25) BLM believes that it did take a hard look at these issues in both the Draft RMPA/EIS and

Response: Proposed Plan/Final EIS analyses and that the analyses meet the requirements of NEPA and BLM planning policies.

Topic: Areas of Critical Environmental Concern

Comment 26) BLM must disclose which resources in nominated ACECs would not be protected in

text: alternatives other than Alternative II.

26) The Proposed Plan includes designation of the four ACECs discussed under Alternative II and special management of the relevant and important resources each contains (Section 2.3.2, Table 2-1, and Table 2-2 in the Proposed Plan/Final EIS). While the four ACECs occupy a

Response: somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area.

Topic: Rangeland Management and Health

Comment 27) BLM should use both active and passive restoration. Alternative II sometimes precludes

text: active restoration.

27) The Proposed Plan includes active and natural (passive) processes for reclamation and restoration (Section 2.3.2 in the Proposed Plan/Final EIS).

Response:

Topic: Terrestrial and Aquatic Wildlife

Comment 28) Timing Limitations do not protect against loss, degradation, or fragmentation of critical

text: habitats.

28) The BLM recognizes this fact, which is why the assessment of impacts to terrestrial and aquatic wildlife (Section 4.3.2) and special status species (Section 4.3.4) analyzed impacts of direct habitat loss as well as indirect habitat loss from reduced wildlife use in proximity to human activity (including oil and gas development). Habitat fragmentation, such as associated with increasing road densities, is also discussed in these sections. The year-round (versus seasonal) limitations on habitat impacts afforded by NGD/NSO and SSR/CSU restrictions, incorporated at varying levels for all of the alternatives, were developed specifically to “protect against loss, degradation, or fragmentation of critical habitats.”

Response:

Topic: General Comment

29) Where ground disturbance allowable under an NGD would significantly impact special status

Comment species or other sensitive resources, BLM should also apply an SSR or otherwise disallow the
text: disturbance. A mineral withdrawal should be considered if BLM is unable to prohibit disturbance causes by development of locatable minerals using NGD designation.

29) The Proposed Plan implements NGD/NSO restrictions for protection for all occupied Candidate plant species habitat as well as SSR/CSU restrictions for occupied habitat for special status plant species, significant plant communities, and a number of supporting ecological processes (Section 2.3.2 and Appendix C in the Proposed Plan/Final EIS).

Response:

Topic: General Comment

Comment 30) BLM must properly manage all of its lands, not just those currently released.
text:

30) BLM recognizes this fact. Land use plans, such as resulting from the current RMPA/EIS process, are primary mechanisms for guiding BLM activities and management. In the meantime, BLM has been managing currently released areas under existing land use plans for the Glenwood

Response:

Springs Resource Area. The description of Alternative I (No Action) in Chapter 2 and throughout Chapters 3 and 4 presents the existing management of currently unleased lands.

Topic: Special Status Plants and Significant Plant Communities

Comment text: 31) BLM must not dispose of habitat for special status species.

Response: 31) The Proposed Plan implements NGD/NSO restrictions for protection for all occupied Candidate plant species habitat as well as SSR/CSU restrictions for occupied habitat for special status plant species, significant plant communities, and a number of supporting ecological processes (Section 2.3.2 and Appendix C in the Proposed Plan/Final EIS). In making any determinations about future disposal of lands, BLM would certainly consider whether the subject lands contain NGD/NSO or SSR/CSU restrictions related to special status species.

Topic: Special Status Fish and Wildlife

Comment text: 32) Mitigations for raptors (buffer zone widths), Colorado River cutthroat trout (including recovery as well as protection), midget faded rattlesnakes, and spadefoot toads are inadequate. WMA guidelines should be mandatory and applied to all alternatives.

Response: 32) BLM believes that the various protective measures described in the Draft RMPA/EIS—including both seasonal restrictions and limits on long-term ground-disturbing activities—are adequate. While the potential level of impacts differs somewhat among alternatives due to differing levels of oil and gas development and other factors, protective restrictions would apply under all of the alternatives, including the Proposed Plan (Section 4.3.4). Additionally, with regard to the Colorado River cutthroat trout, the Proposed Plan offers some additional protection by combining “high-risk” and “moderate-risk” areas of watershed processes into a single “high-value” category and protecting it with an NGD/NSO. Additionally, the designation of the Parachute Creek WMA for the entire top of the plateau, and the retention of both stream-based ACECs from Alternative II (although with somewhat smaller footprints) are aimed specifically at improving protections for the trout compared to the Preferred Alternative. WMA guidelines would be incorporated as BMPs and mitigation measures to be applied where appropriate to protect the resource values (see Appendix I of the Proposed Plan/Final EIS).

Topic: Special Status Plants and Significant Plant Communities

Comment text: 33) Mitigations for special status plants and plant communities are inadequate. Proposed grazing management is inadequate, and reclamation should be held to a higher standard, including use of only native species under all alternatives. BLM should attempt to acquire rare plant habitat on Mt. Callahan.

Response: 33) The Proposed Plan implements NGD/NSO restrictions for protection for all occupied Candidate plant species habitat as well as SSR/CSU restrictions for occupied habitat for special status plant species, significant plant communities, and a number of supporting ecological processes (Section 2.3.2 and Appendix C in the Proposed Plan/Final EIS). The Proposed Plan incorporates a number of specific management actions (Section 2.3.1 in the Proposed Plan/Final EIS), as well as reclamation standards, mitigation activities, regular monitoring requirements, and reclamation success criteria (Appendix J in the Proposed Plan/Final EIS) intended to reduce the area of long-term physical impacts of all ground-disturbing activities as well as encourage more successful reclamation and revegetation of these areas. This includes using only native plant species, in most instances, for revegetation.

Topic: Special Status Fish and Wildlife

Comment text: 34) Managing native nongame fish as food for stocked natives is unacceptable and shocking.

Response: 34) The document does not imply that the native fishes are managed as food for stocked

gamefishes. It merely discloses that this is one of their ecological and recreational qualities, which is inarguable.

Topic: Special Status Fish and Wildlife

Comment text: 35) The document must more thoroughly address lynx and prohibit cross-country snowmobile travel in lynx habitat. BLM must take a harder look at potential impacts to this listed species.

Response: 35) The Proposed Plan/Final EIS addresses the lynx in greater detail and is less negative about its potential for occurrence (Section 4.3.4). If evidence of use by lynx is discovered—either within the Planning Area or in nearby areas that suggest the potential for occurrence onsite—the BLM can place restrictions on cross-country snowmobile travel at that time. Until then, BLM believes that allowing cross-country travel with a minimum of 12 inches of snow is an appropriate balance with the desired winter recreational use of the area. Please note that the Proposed Plan would reduce impacts to the potential lynx habitat atop the plateau to a greater degree than any of the five previous alternatives, except for Alternative I (see Table 4-2).

Topic: Special Status Fish and Wildlife

Comment text: 36) The DEIS does not incorporate a Biological Assessment or Biological Opinion, making it impossible to assess compliance with the Endangered Species Act, Migratory Bird Treaty Act, or Bald and Golden Eagle Protection Act, nor does it document consultation and coordination with the US Fish and Wildlife Service.

Response: 36) A Biological Assessment being prepared by BLM will be submitted to the U.S. Fish and Wildlife Service following completion of the Proposed Plan/Final EIS. The Proposed Plan/Final EIS includes additional discussion of compliance with the Endangered Species Act, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act.

Topic: Special Status Fish and Wildlife

Comment text: 37) BLM should incorporate the USFWS Utah Field Office's guidelines for raptor protection.

Response: 37) BLM believes that the approaches to raptor protection embodied in both the Draft RMPA/EIS and Proposed Plan/Final EIS are adequate. These approaches include seasonal restrictions on human activity and restrictions on long-term ground-disturbing activities around nest sites (Sections 4.3.2 and 4.3.4).

Topic: Special Status Fish and Wildlife

Comment text: 38) BLM's sensitive species stipulation does not satisfy Section 7 ESA obligations regarding oil and gas leasing, nor does it address many sensitive species obligations. This includes identifying needed restrictions; establishing objectives for habitat maintenance, improvement, and expansion; identifying priority areas for Habitat Management Plans; establishing priority habitat monitoring objectives; and determining affirmative conservation measures to improve habitat conditions and resolve conflicts.

Response: 38) BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS adequately address these topics. Specific management of special status species and significant plant communities is discussed in Section 2.3.2 and summarized in Table 2.1. Impacts to these resources under the Proposed Plan are discussed in Section 4.3.3 and 4.3.4 in the Proposed Plan/Final EIS.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 39) The Draft's information on big game habitat, movements, and numbers is not adequate for projecting and mitigating impacts under the various alternatives. Because it does not accurately project gas drilling activity, it significantly underestimates impacts to big game and other wildlife.

39) BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS adequately address these topics and specifically disagrees that the analysis underestimates impacts to big game and other wildlife, since assumptions used were very conservative. The Proposed Plan incorporates

Response: comments and current data from the Colorado Division of Wildlife, which participated as a division of the Colorado Department of Natural Resources as a Cooperating Agency (Section 3.3.2). In addition, the RFD used as a basis for analysis in the Final Draft RMPA/EIS has been revised and updated (Appendix H).

Topic: Terrestrial and Aquatic Wildlife

Comment text: 40) Some big game protective stipulations under the 1999 FSEIS are not carried through at the same level to the Draft RMPA/EIS. An example is the acre amount of seclusion zones. This decrease in protection is not adequately analyzed.

Response: 40) The Proposed Plan incorporates the wildlife seclusion (security) areas atop the plateau under the 1999 FSEIS and protects them with SSR/CSU restrictions, while the seclusion areas below the rim are maintained and protected with NGD/NSO restrictions (Section 4.3.2).

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 41) Trapper Creek is inappropriately left out of the alternative proposals for protecting lands with wilderness character. The livestock fence to protect and restore riparian habitat is not an appropriate basis for disqualifying Trapper Creek. It is not substantially noticeable, and it is there for purposes that enhance the area's ecological quality. Impacts in the southeastern portion of the Trapper Creek unit also are not substantially noticeable. Also, the cherry-stemmed route TC-13 is not an "old roadbed" as claimed by BLM.

Response: 41) Trapper Creek was not included as an area to be managed specifically to maintain wilderness values because it did not meet all wilderness characteristics (see Section 3.5.8.2 and 4.5.8 in the Draft RMPA/EIS). Even so, however, BLM believes that the management prescriptions under the ACEC designation in Alternatives II, III, IV, and the Proposed Plan, the Watershed Management Area designation in Alternatives III, IV, and the Proposed Plan, and the various restrictions on ground-disturbing activities provide appropriate levels of protection for these resource values. Please see Tables 2-1, 2-2, and 2-3 of the Proposed Plan/Final EIS.

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 42) The "no-lease" designation for lands having wilderness character should be applied to all alternatives.

Response: 42) BLM believes that the range of resource protections—instead of relying on a no-lease designation—is more appropriate for evaluating different alternatives in the Draft RMPA/EIS. For the Proposed Plan in the Proposed Plan/Final EIS, BLM has elected not to apply the no-lease designation but instead to rely on the stringent restrictions under the concept of phased and clustered development and extensive areas where no long-term ground-disturbing activities would be allowed. These measures would help maintain the existing character of the upper plateau while accommodating oil and gas development, as specified by the Transfer Act.

Topic: Areas of Critical Environmental Concern

Comment text: 43) All four ACECs should be designated in the final alternative and managed accordingly. This should include withdrawal from mineral leasing, no coal development, no new timber roads, no mechanical means of vegetation management, NSO stipulations throughout, and restriction of OHV travel to designated routes.

Response: 43) Four ACECs will be designated (East Fork Parachute Creek, Trapper / Northwater Creek, Magpie Gulch, and Anvil Points). While the four ACECs occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of

management emphasis on, and protection of, those values would also apply despite the smaller area. Management prescriptions for these areas are found in Table 2-2. Travel would be limited to designated routes except for the Hubbard Mesa OHV riding area and over-snow travel by snowmobile. Coal development or timbering are not anticipated but would be required to adhere to the surface restrictions that apply to other land uses.

Topic: Wild and Scenic Rivers

Comment 44) These streams and their watersheds should be fully protected until a final determination, with **text:** full public participation, has been made.

Response: 44) The Proposed Plan includes management of eligible streams as WSRs until suitability is decided (Section 2.3.2 in the Proposed Plan/Final EIS).

Topic: Water Resources

Comment 45) BLM must develop and implement statistically sound surface water and groundwater **text:** monitoring plans.

Response: 45) Because of the many measures included to protect water quality (see Section 4.2.4) and what the impact analysis concludes is a low potential for adverse impacts, BLM does not currently plan to implement groundwater or surface water monitoring. However, the oil and gas lease terms specify that spills must be reported to BLM and corrective actions implemented.

Topic: Water Resources

Comment 46) In assessing new road construction and other impacts that may affect water quality, BLM **text:** must be realistic about the resources available for adequate maintenance and rehabilitation.

Response: 46) BLM believes that the impact analyses in Chapter 4 regarding water quality reflect a realistic assessment of the resources available for adequate maintenance and rehabilitation.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment 47) BLM should incorporate the Riparian-Wetland Initiative into the Plan, particularly the **text:** objective of restoring 75% of riparian areas to "proper functioning condition."

Response: 47) The Proposed Plan includes management of riparian communities to achieve proper functioning condition (PFC) and late seral-stage plant community development (Section 2.3.2 in the Proposed Plan/Final EIS).

Topic: Water Resources

Comment 48) The Draft does not adequately describe a method(s) for treating and disposing of condensate **text:** and produced water from wells on top of the plateau. The Draft should also analyze trends in pH.

Response: 48) The Proposed Plan specifies adherence to all State and Federal water quality standards for management actions within the Planning Area (Section 2.3.2 of the Proposed Plan/Final EIS). It also states that produced waters will either be trucked and disposed offsite, treated and used beneficially onsite, or reused in subsequent drilling activities. BLM does not believe that tracking the long-term trend in pH of surface waters or groundwater is warranted.

Topic: Climate and Air Quality

Comment 49) Air quality analyses and modeling in the Draft appear incomplete and do not comport with currently accepted standards. Specific problems are: the analysis assumes flat terrain; the analysis underestimates particulates, especially dust from roads and construction areas; the **text:** analysis does not consider pollution from construction vehicles and drill rigs; the number of compressor engines and the emissions from them need to be estimated; and the analysis considers only impacts from construction and use of new roads without considering increased traffic on

existing roads. Also, the analysis did not consider VOCs related to emissions from condensate tanks.

49) The near-field analysis generally followed the accepted methodology from a previous analysis for the Glenwood area (NPS, 1998) performed for BLM. The near-field analysis was intended to look at impacts in the vicinity of a representative set of sources, and was not intended to be a cumulative analysis. The cumulative impacts analysis was performed with the CALPUFF model and the appropriate BLM and inventory sources.

Flat terrain was chosen because the level of information available for the location of sources was insufficient to do otherwise. Further, modeled results in complex terrain would not necessarily result in higher concentrations. This would depend on several factors including: location of sources relative to the terrain; shape, height, and location of terrain; meteorology, source characteristics, etc.

Response: The construction activities included in the near-field analysis are temporary in nature and thus, the comparison to the EPA SILs is not applicable. Construction and construction vehicle traffic were included in the analyses but tailpipe emissions were not. The drill rig engines were excluded based on preliminary emissions calculations performed by NSTC Air Quality staff. Compressors were considered point source and the parameters included 6 compressors, equally spaced within a 5 x 5 well matrix.

Flare modeling was conducted as a separate exercise using the SCREEN3 model with a pre-determined matrix of meteorological conditions. Emission factors were taken from EPA's AP-42, volume 1, chapter 13.5, and did not include VOCs. The model is also linear with respect to emission rate. Therefore, a doubling of the modeled emission rate gives a doubling of the resulting concentrations. Examining the flare modeling results and the maximum concentrations listed in Table 5-73, an increase in emissions by a factor of eight, assuming such an exercise is valid, still yields extremely small concentrations. Therefore, further modeling is not required.

Topic: Climate and Air Quality

Comment text: 50) The Draft fails to satisfy three basic duties prescribed by law: the duty to fully characterize cumulative impacts under NEPA; the duty to satisfy the requirement under FLPMA that an RMP must ensure compliance with all applicable pollution control laws; and the duty of the Secretary of the Interior to protect the air-quality related values under the Clean Air Act.

Response: 50) A cumulative air quality analysis was performed. Please see Section 4.2.5 of the Proposed Plan/Final EIS. BLM believes that the near- and far-field analyses satisfy the letter and intent of FLPMA and the CCA. Additional site-specific air quality analyses may be required by State and local agencies during permitting processes.

Topic: Climate and Air Quality

Comment text: 51) The Draft must be revised to provide adequate monitoring to ensure compliance with regulatory standards. The amendments should not be approved until a quantitative impact analysis has been performed.

Response: 51) An extensive air quality impact analysis was performed and is described in Section 4.2.5 of the Proposed Plan/Final EIS. The modeling results showed that the air quality impact of oil and gas development on BLM lands under the Proposed Plan would be well below the regulatory thresholds. Therefore mitigation measures were not required as a component of the plan. Nonetheless, relevant BMPs and potential mitigation measures are described in the Proposed Plan/Final EIS.

Topic: Climate and Air Quality

Comment text: 52) The Draft is arbitrary and capricious and otherwise inconsistent with law because it fails to fully disclose for the decision maker and the public the adverse impacts of air pollutants and fails

to identify the magnitude of emissions reductions needed to prevent or avoid these adverse impacts.

Response: 52) Impacts are fully described in Section 4.2.5 of the Proposed Plan/Final EIS. The modeling results showed that the air quality impact of oil and gas development on BLM lands under the Proposed Plan would be well below the regulatory thresholds. Therefore, mitigation measures were not required as a component of the plan. Nonetheless, relevant BMPs and potential mitigation measures are described in the Proposed Plan/Final EIS.

Topic: Recreation

Comment text: 53) The Draft makes it clear that recreation is subservient to management for oil and gas and will therefore not be adequately protected. All of the alternatives will result in reductions to backcountry opportunities and increases in front country environments.

Response: 53) No Special Recreation Management Areas (SRMAs) will be designated under the Proposed Plan. The Planning Area will be managed as a part of the Glenwood Springs Extensive Recreation Management Area (ERMA). Oil and gas development activities will be phased and clustered in ways to minimize impacts to all multiple uses within the Planning Area, including recreational values.

Topic: Recreation

Comment text: 54) The Affected Environment section does not provide quantitative data regarding population, demographic, and recreation trends in western Colorado. This information should be provided (see p. 72 of comments for sources).

Response: 54) BLM used the best recreation visitor use information available at the time and believes that this information is adequate for assessing impacts and selecting an alternative. Additional data from the Colorado Division of Wildlife on hunting use in the Planning Area, as well as traffic/road use data from Garfield County, were also used in the analysis to supplement available recreation data. A complete list of data sources is provided in the references section (Chapter 5) of the Proposed Plan/Final EIS.

Topic: Recreation

Comment text: 55) Analysis of impacts of oil and gas on recreation is inadequate. The Draft should include an analysis of how well each alternative complies with the Recreation Management Guidelines and Public Land Health Standards.

Response: 55) Actions in all five alternatives in the Draft RMPA/EIS were analyzed in terms of Recreation Management Guidelines (Appendix E) and Standards for Public Land Health (Appendix F). No Special Recreation Management Areas (SRMAs) will be designated under the Proposed Plan. The Planning Area will be managed as a part of the Glenwood Springs Extensive Recreation Management Area (ERMA). Oil and gas development activities will be phased and clustered in ways to minimize impacts to all multiple uses within the Planning Area, including recreation. Impacts to recreation are discussed in Section 4.5.3 in the Proposed Plan/Final EIS.

Topic: Recreation

Comment text: 56) The Draft should provide a more detailed and description explanation of each recreation alternative. This should include the goals and objectives; current recreational settings, experiences, and activities; and describe the recreational settings, experiences, activities, and required management that would exist under each alternative and within each sub-area.

Response: 56) Management actions designed to maintain recreation resources are described in Table 2-1 and in Section 4.3.5 of the Proposed Plan/Final EIS. Note that the Proposed Plan would not specifically manage for recreational opportunities and outcomes, except for the Hubbard Mesa OHV riding area. Instead, recreation would be dictated by the type, intensity, and location of oil and gas activities being developed or operated at a specific point in time. Nonetheless, the

phased and clustered development of the Proposed Plan, along with other extensive resource protections atop the plateau, are expected to maintain current types and levels of recreational opportunities in large portions of the Planning Area over the 20-year period of analysis.

Topic: Recreation

Comment text: 57) BLM must develop a recreation system that can be managed with existing and projected budgets and reveal impacts of budget restrictions.

Response: 57) Management actions designed to maintain recreation resources are described in Table 2-1 and in Section 2.3.3.5 of the Proposed Plan/Final EIS. A discussion of the recreation budget for the next 20 years is unrealistic because budget estimates are projected on a much smaller time scale. BLM is currently managing recreational resources within its current budget allocation.

Topic: Recreation

Comment text: 58) The Draft is missing an economic analysis of recreation, direction on the allocation of developed and dispersed recreation, and direction of special event planning. These should be added.

Response: 58) Analysis of the Proposed Plan includes an economic analysis of recreation (Section 4.4.3 in the Proposed Plan/Final EIS). Recreation management is described and summarized in Section 2.2.3 and Table 2-1. Impacts to developed and dispersed recreation are discussed in Section 4.5.3.

Topic: Recreation

Comment text: 59) BLM should eliminate the game retrieval buffer, consider establishing developed dispersed campsites, restrict use to designated routes year-round, consider creating a formal hiking trail into East Fork Parachute Creek, restrict OHVs to roads not trails, restrict use of new oil and gas roads to administrative use by erecting gates and fences with signage, specify that oil and gas and other development roads are rehabilitated when they are closed, manage the top of the plateau to maintain primitive experiences, develop standards for travel and recreation in proposed protection areas (ACECs, WMAs), establish informational kiosks at entry points, reduce unnecessary/redundant or other troublesome roads, and disclose how new roads will be closed to recreational use to ensure effectiveness.

Response: 59) Travel management throughout the Planning Area under the Proposed Plan is discussed and summarized in Section 2.3.2 and Table 2-1 in the Proposed Plan/Final EIS. It includes restricting motorized and mechanized travel to designated routes, except for the Hubbard Mesa OHV area and over-snow travel by snowmobile. It also specifies that oil and gas roads will either be closed and reclaimed, maintained for administrative use, or converted to public use, depending on BLM's analysis of the specific situation and relevant needs on a case-by-case basis. While the Proposed Plan would not manage specifically to maintain certain types of recreational opportunities and outcomes, BLM believes that the requirement for phased and clustered development, with a minimum of 0.5 mile between pads, concentration of facilities near existing ridgetop roadways, and large areas of NGD/NSO restrictions along stream valleys and sideslopes will effectively maintain many or all of the existing primitive recreation conditions in substantial portions of the Planning Area.

Topic: General Comment

Comment text: 60) The Draft fails to analyze noise impacts of compressor stations, drill rigs, service trucks, etc. on wildlife and recreational users.

Response: 60) In terms of wildlife impacts from noise, Section 4.3.2 discusses the conservative assumptions about wildlife avoidance of areas of oil and gas activities. Noise was also mentioned as a factor that could affect recreational quality. BLM does not believe that a quantitative noise analysis is

needed for assessing the impacts of the various alternatives or selecting a final action.

Topic: General Comment

Comment text: 61) BLM should analyze the impacts of artificial lights on scenic values and sensitive species and require the strongest possible standards for the amount, duration, and type of lighting that might be installed.

Response: 61) Artificial lighting is a limited impact within the planning area, with localized nighttime activity during drilling constituting most of the artificial light sources. Drill rigs employ lights when operating at night to help create a safe working environment for the drilling crews. BLM does not consider nighttime operations from the relatively small number of drill rigs operating within the 127,007-acre Planning Area of sufficient magnitude to warrant special restrictions.

Topic: Socioeconomics

Comment text: 62) The Draft does not provide adequate socioeconomic analysis. What about second homeowners and non-labor income from retirement, dividends, and rent?

Response: 62) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS addresses impacts to employment and personal income from all sources.

Topic: Socioeconomics

Comment text: 63) BLM should do a comprehensive cost-benefit analysis.

Response: 63) A cost-benefit analysis is not required by NEPA, FLPMA, or BLM policies. The purpose of the alternatives analysis was to guide BLM and other decision-makers in selecting a final RMP Amendment for the Planning Area. The goal of the process is to find a balance between different and sometimes competing interests in the Planning Area and its resources, based on a variety of factors associated with the physical, biological, human, and management environments. Furthermore, reducing all considerations to economic gain or loss is impossible in a meaningful way, since many of the costs and benefits are qualitative, not quantitative, and subjective rather than objective.

Topic: Socioeconomics

Comment text: 64) The revision of the socioeconomic analysis should: explain how the employment numbers for each alternative were derived; discuss how the estimates of natural gas resource production were derived; and assess the influence of environmental quality on property values.

Response: 64) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS includes a discussion of how the employment numbers were derived. Derivation of natural gas resource production estimates are covered in Section 4.5.5 and the RFD (Appendix H). The influence of environmental quality on private property values is not addressed specifically in the socioeconomic analysis, but overall property value trends and housing availability are covered in Section 4.4.3.

Topic: Socioeconomics

Comment text: 65) Can BLM provide more information about the interviewees: how contacted, their demographics, the interview methodology, the content of the interviews (transcripts)?

Response: 65) During January and February 2003, E&E specialists contacted and interviewed 22 individuals. These were drawn from an original list of 50 individuals who had been involved in the ongoing BLM scoping effort, who had been identified by BLM as knowledgeable in their specific areas and representative of a user/interest group, or who held governmental or business positions that put them in a position to gauge public sentiment. Among the 22 were a Garfield County Commissioner, a town administrator, a town planner, two bank officials, a Chamber of

Commerce representative, county social service providers, seven commercial users of public lands – ranchers, outfitters, oil and gas operators – and many recreationists and local residents. Many of the interviewees overlapped categories. Proposed participants who were not interviewed had either left the area, declined to participate, or were unable to find the time for an interview. The interviewees were not selected based on any demographic characteristics but on their interest in public lands and public land management and their knowledge of the Planning Area. No effort was made to categorize interviewees by gender, age, or income. Interviewees were contacted by phone to determine their interest in participating. If interested and available, an appointment was scheduled. Seven of the interviews were conducted by phone, lasting up to an hour. The remainder were in-person discussions lasting up to 2 hours. The interviewers did not have a specific set of questions to be asked of all participants but used a group of talking points aimed at eliciting information about the participants’ backgrounds; their interest in public lands (particularly the Roan Plateau); their lifestyles, livelihood, and quality of life; and the ways in which public lands affect those things. No transcripts were made, but the interviewers made notes of the conversations and worked off those notes in preparing the information included in Sections 3.4.3 and 4.4.3 of the Draft RMPA/EIS and Proposed Plan/Final EIS.

Topic: Socioeconomics

Comment text: 66) The DEIS should look more closely at long-term costs associated with irreversible resource damage or alteration. BLM should conduct a more thorough analysis of irreversible and irretrievable impacts in relation to socioeconomics.

Response: 66) The impact analysis covers potential impacts for the 20-year planning period as well as cumulative impacts associated with the alternatives. Potential irreversible or irretrievable impacts were considered and appropriate mitigation or compensation measures proposed in Section 4.4.3 of the Final.

Topic: Socioeconomics

Comment text: 67) BLM should undertake a recreation use analysis to quantify and document visitor numbers, patterns, and types of use, in relation to socioeconomics.

Response: 67) The BLM used the best recreation visitor use information available at the time of its socioeconomic analysis and believes that this information is adequate for assessing impacts and selecting an alternative. Additional data from the Colorado Division of Wildlife on hunting use in the Planning Area, as well as traffic/road use data from Garfield County, were also used in the analysis to supplement available recreation data. A complete list of data sources is provided in the references section (Chapter 5) of the Proposed Plan/Final EIS.

Topic: Socioeconomics

Comment text: 68) The DEIS should explain the conclusion that the decline in hunting in recent years has not had a noticeable effect on the local economy. The DEIS should more thoroughly assess the economic value of all of the recreational and tourism-related activities.

Response: 68) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS includes specific analysis of potential impacts to hunting and the potential economic impact of changes in these activities on the local economy. This analysis includes trends for Garfield County and the surrounding area to better place potential impacts from the Proposed Plan in context of the more significant demographic and economic trends.

Topic: Socioeconomics

Comment text: 69) The DEIS should more thoroughly discuss impacts to the local governments to maintain roads, mitigate for air and water pollution, and meet increased demands for health, education, and social services. These need to be described cumulatively. As an example, see the Jonah Infill Drilling Project DEIS.

Response: 69) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS includes specific analysis of impacts to local governments, especially with regard to schools.

Topic: Socioeconomics

Comment 70) BLM should address social values connected with the environmental quality of public lands
text: (existence, bequest, and option values).

Response: 70) The environmental quality of public lands is qualitatively evaluated within each alternative. Specific costs associated with the existence or value of the lands is not evaluated.

Topic: Socioeconomics

Comment 71) Please fully discuss the uncertainty and risks when relying on a single value for estimating oil and gas resources. Why weren't The Wilderness Society estimates considered? What about
text: USGS (1994) and DOE (1998) estimates? Overestimation of gas reserves is widespread in the industry.

Response: 71) The RFD (Appendix H) used the best available information from a variety of sources, including the Colorado Oil and Gas Conservation Commission. Additionally, the very high success rate of gas wells drilled in the Planning Area and vicinity is evidence of substantial reserves. While BLM sees the potential for oil and gas development in the Planning Area as consistent with the Transfer Act, FLPMA, and the National Energy Policy, decisions regarding specific alternatives and impact analyses would not be affected under NEPA, because presence of a less recoverable or less economic resource would tend to reduce, not increase, the amount of development and associated impacts.

Topic: Oil and Gas

Comment 72) It is erroneous to assume uniformly that the oil and gas resource and well production rates are
text: uniform across the planning area.

Response: 72) While BLM recognizes that some heterogeneity and discontinuity of production zones may occur—both vertically and horizontally—the result would be to reduce, not increase, the amount of oil and gas development in the Planning Area under any of the alternatives. Therefore, assuming uniform production rates is conservative and fully appropriate under NEPA.

Topic: Oil and Gas

Comment 73) BLM's assumed drilling rate is arbitrary and capricious and violates NEPA. BLM does not have a good record in estimating drilling rates. If the assumed rates are real, please discuss
text: mechanisms by which BLM can restrict the rate to these low levels. Have these restrictions ever been applied?

Response: 73) The assumed rates of development for the five alternatives in the Draft RMPA/EIS—as well as the assumed drilling rates in the Proposed Plan/Final EIS—were derived from the RFD (Appendix H), adjusted to reflect current and anticipated numbers of available drill rigs, the amount of land potentially brought into production under new leases, and the various levels of environmental protections under the different alternatives. While the RMPA/EIS acknowledges in Chapter 2 and elsewhere that actual development rates may differ for a number of reasons, BLM believes that the assumed levels used for impact analysis are reasonable and realistic projections. BLM can effectively restrict drilling rates under the Proposed Plan through the restriction atop the plateau from expanding operations into successive development areas. The issuance of drilling permits can also be used to restrict drilling rates if additional permits would result in violation of a Federal or State standard or otherwise result in an unacceptable level of environmental impact.

Topic: Oil and Gas

Comment text: 74) Explain why the 80% threshold could not be met in 5 years.

Response: 74) To reach that level of development in 5 years would require a much greater annual drilling rate than is occurring at present or than BLM believes reasonably likely to occur. However, the Draft RMPA/EIS acknowledges (e.g., see Section 2.3.3) that the 80% threshold could be met earlier or later than assumed.

Topic: Oil and Gas

Comment text: 75) The estimate that the planning area represents 37% of the gas reserves in Colorado appears wrong. Either drop it or explain it.

Response: 75) This statement has been deleted from the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 76) Using a correct value of 1.5 instead of 5.8 TCF, the number of households that could be served with natural gas from the planning area is only 25% of the number in the DEIS.

Response: 76) Section 4.5.5.1 in the Proposed Plan/Final EIS recalculates this number to be 3.6 million households for 20 years.

Topic: Oil and Gas

Comment text: 77) Please explain why coalbed methane beneath the plateau is considered not economically viable. Discuss the market price and cost data on which that statement is based. If industry wanted to drill for this resource, can BLM stop it? What would be the impacts, including cumulative impacts?

Response: 77) Section 3.5.5.6 of the Proposed Plan/Final EIS clarifies the explanation regarding coalbed natural gas. The reason relates to the combination of depth and volume of the available resource. Development of coalbed natural gas in areas with a Federal mineral estate would be regulated by BLM and subject to the same restrictions/stipulations regarding surface activities. Since BLM does not believe that drilling for coalbed natural gas is realistic in the Planning Area during the 20-year period of analysis, the cumulative impacts would be speculative and hence not considered in the RMPA/EIS.

Topic: Other Minerals

Comment text: 78) Please discuss the market price and cost data on which this statement ("Oil shale has a new process that may be economically viable even if the price of conventional crude falls below \$30 per barrel") was based. What if industry wants to drill for oil shale? Can BLM stop it? What would be the impacts, including cumulative impacts?

Response: 78) Section 3.5.6.1 in the Proposed Plan/Final EIS expands on the discussion of oil shale development. Development of oil shale in areas with a Federal mineral estate would be regulated by BLM and subject to the same restrictions/stipulations regarding surface activities. Since BLM does not believe that oil shale development is realistic in the Planning Area during the 20-year period of analysis, the cumulative impacts would be speculative and hence not considered in the RMPA/EIS. Moreover, the type and extent of cumulative impacts would depend on the process used and the scale of development. If oil shale development does arise as a desired use during the planning period, impacts would be considered in a separate NEPA document prepared in response to specific proposals.

Topic: General Comment

Comment text: 79) Table ES-3 is worthless babble based on no data or scientific analysis. How does this table meet the Data Quality Act?

Response: 79) The purpose of Table ES-3 (Table S-3 in the Proposed Plan/Final EIS) and of all tables in the

document is to provide a synopsis of information presented in greater detail and at greater length in the text. Since the table summarizes qualitative assessments, the issue of “data quality” does not apply. Definitions of the terms used in the table area provided in the introduction to Chapter 4 and in the individual resource sections of Chapter 4 for which qualitative impact levels were described.

Topic: Oil and Gas

Comment text: 80) Please discuss and display the market price and cost data used to determine the level of drilling that is economically feasible in the RFD. What gas prices are assumed? What drilling costs were assumed for each technology examined in the RFD?

Response: 80) The RFD and the RMPA/EIS base assumptions regarding future oil and gas development on the high success rate for existing wells, the high demand for additional drilling, the downhole spacing approved by the COGCC, and the amount of land to become available for leasing and associated environmental protections under the various alternatives. Thus, assumed future development is not constrained, for the purposes of the RMPA/EIS, by market fluctuations that could decrease demand for additional drilling. The result is that the economically unconstrained assumptions about future development are conservative and hence appropriate under NEPA.

Topic: Socioeconomics

Comment text: 81) The DEIS should include information on the economic costs to local communities of lost recreational opportunities and displaced visitors. The loss of passive use values under Alternative 3 should be quantified and discussed, not ignored.

Response: 81) The updated socioeconomic analysis in Section 4.4.3 of the Proposed Plan/Final EIS includes specific analysis of potential impacts on recreational travel and the potential economic impact of changes in these activities on the local economy. This analysis includes trends for Garfield County and the surrounding area to better place potential impacts from the Proposed Plan in context of the more significant demographic and economic trends.

Topic: General Comment

Comment text: 82) The DEIS fails to disclose numerous related and connected actions that will likely have a major impact on how, and when, the reserves in the planning area and region are developed. Three connected actions are: plans by Encana to develop UNOCAL properties, the Encana Figure Four Project just north of the planning area, and new pipelines currently being permitted.

Response: 82) The RMPA/EIS assumes that oil and gas development on existing leases and any new leases under the selected alternative would occur at a pace comparable to the existing level of development and demand. While the other projects cited in the comment could tend to retard future development in the Planning Area due to competition for drill rigs or the market, they are not likely to hasten development, which is already assumed to be unconstrained by socioeconomic factors. The Proposed Plan/Final EIS includes references to development on adjacent and nearby private and public lands in the discussion of cumulative impacts for resources affected by offsite development.

Topic: General Comment

Comment text: 83) The DEIS does not comply with the Natural Historic Preservation Act by not including consultation with Native American tribes.

Response: 83) BLM believes the Draft RMPA/EIS does comply with the NHPA because no Native American tribal lands are present in or near the Planning Area.

Topic: General Comment

Comment text: 84) Law now requires that BLM include testimony and summaries from all its public meetings.

text: This does not appear to have been done.

84) The public meetings were clearly advertised and described during introductory comments as information meetings in which BLM was disseminating information to the public. The public

Response: was invited to ask questions, some of which were actually statements or positions, but the meetings were not a forum for formal public comment—again, as clearly stated by BLM at the meetings.

Topic: General Comment

Comment text: 85) Information relevant to the DEIS was not readily available throughout the comment period. Cited example is the set of 150 layers of mapping data posted on the contractor's website with no public announcement of availability.

85) BLM views these map layers not as an essential part of the Draft RMPA/EIS for public review. There were instead provided in response to a data request by an industry consultant for the purpose of a separate GIS analysis. All of the layers, representing locations of surface

Response: stipulations and other restrictions (NGD/NSO, SSR/CSU, and standard lease terms) had already been combined into an overarching “stipulation” layer, depicted on Maps 2, 4, 6, 8, and 10 for the five alternatives analyzed. An “announcement” on the project website noted that the information had been requested and provided and would be available to anyone else seeking it.

Topic: General Comment

86) Three decisions by BLM may violate the Administrative Procedures Act: the decision to drop

Comment text: Alternative F, the decision to revert to pre-1999 management in conflict with the 1999 FSEIS ROD, and the decision to ignore all other wilderness features and characteristics of Trapper Creek.

Response: 86) BLM does not believe that these decisions violate the APA, NEPA, FLPMA, or BLM policies.

Topic: General Comment

Comment text: 87) Unless BLM selects a final plan that provides the strongest safeguards to the public resources at stake in this decision, it must supplement its plan, offer a new set of alternatives, and initiate a new public comment period.

87) Because the impacts the Proposed Plan are within the range of impacts alternatives analyzed in the Draft RMPA/EIS in terms of levels of oil and gas development and levels of environmental

Response: protection (no substantial changes relevant to the environmental concerns have been made which would result in impacts substantially outside the range analyzed), BLM does not believe that a supplemental NEPA process is required.

Western Resource Advocates

Topic: General Comment

Comment text: 1) Requests disclosure of any meetings BLM or the planning team had at which any attorneys were present who represent existing or potential mineral lessees, cooperating agencies and governments, or other parties with an interest in the planning area.

Response: 1) BLM believes that this comment is beyond the scope of the Roan Plateau RMPA/EIS planning effort and therefore does not offer a response.

Topic: General Comment

Comment text: 2) The deferred drilling alternative (Alternative III) is fundamentally flawed. It is not required by law and would violate the law.

Response: 2) While BLM does not agree with this assertion, please note that deferred drilling is not a component of the Proposed Plan/Final EIS.

Topic: General Comment

Comment text: 3) Complying with all of the statutory mandates requires fully protecting all lands with wilderness qualities and eligible for ACEC designation and ensuring against the degradation of the special and sensitive lands atop the plateau.

3) BLM disagrees with this assertion. The Proposed Plan action emphasizes natural resource values through the application of protective surface use restrictions, and management actions, and administrative and legislative designations. The Proposed Plan includes four ACECs (East Fork Parachute Creek, Trapper / Northwater Creek, Maggie Gulch, and Anvil Points), maintains the current protections of streams eligible for Wild and Scenic River designation, places the entire top of the

Response: plateau in the Parachute Creek Watershed Management Area, places extensive NGD/NSO restrictions atop the plateau and puts the balance in SSR/CSU areas, and requires phased and clustered development with a minimum of 0.5 mile between well pads. Together with restrictions on motorized and mechanized travel to designated routes (except over-snow travel by snowmobile) and a greater emphasis on weed management and performance-based reclamation monitoring, these all combine to make the Proposed Plan very protective of the Planning Areas sensitive resources.

Topic: General Comment

Comment text: 4) Specific examples of points and issues that must be redressed in the final include: all five alternatives should provide for protecting all lands found by BLM to have wilderness qualities; at least one alternative must consider fully protecting all lands proposed by citizens for designation as WSAs; multiple use and sustained yield requires giving equal weight to competing land uses; responsible stewardship requires keeping sensitive lands off-limits to surface disturbances until reserves can be assessed without compromising natural values; these lands should be protected unless and until the minerals can be recovered without impacting special surface resources (technological advances); the pre-leasing stage is the time for BLM to impose adequate, enforceable protections for lands that qualify for ACEC designation; BLM should exercise its discretion under FLPMA and the Mineral Leasing Act to avoid issuing leases that would create "valid rights" where they do not belong (suggests meeting with the Farmington Field Office BLM staff for direction in this regard); order the creation of units and approval of unit operations so as to protect federal interests; implement the "True Conservation Alternative" submitted by citizens' groups and supported by local governments; the "Utah Wilderness Settlement" wrongly interpreted FLPMA -- newly acquired lands in the planning area are entitled to be designated and managed as WSAs.

Response: 4) Oil and gas leasing will be conducted on leasable lands in accordance with the Mineral Leasing Act and the Federal Onshore Oil and Gas Reform Act of 1987 and applicable regulations under 43 CFR 3100 and in accordance with the decisions made through application of FLPMA and other laws applicable to public lands.

Topic: Cultural Resources

Comment text: 5) BLM is required to comply with the National Historic Preservation Act, including the requirement to consult with any Indian tribe that attaches religious and cultural significance to the planning area. At a minimum, BLM is required to meet with interested tribes and tribal groups and provide for visits to the Planning Area at which tribal representatives and traditional practitioners can share information about specific sites, features, and resources.

Response: 5) The Proposed Plan includes cultural resource management to comply with the National Historic Preservation Act, Programmatic Agreement/State Protocol, WO-IB-2002-101, and other applicable laws, regulations, and policies. The goals of the plan are as follows: (1) Preserve and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations; (2) Reduce imminent threats from natural or human-caused deterioration or potential conflict with other uses by identifying priority geographic areas for new field inventory based on a

probability for unrecorded significant resources.

Topic: Rangeland Management and Health

Comment text: 6) BLM must meet the desired future condition for range resources and comply with obligations to federal grazing lessees. Recommends the New Mexico Cattle Growers Association 10-point program for managing oil and gas development without causing unnecessary or undue degradation or conflicts with range health.

Response: 6) The Proposed Plan/Final EIS discusses grazing and rangeland management in Section 2.3.3.5 and Table 2-1. Monitoring of vegetation resources and future range conditions is discussed in Appendices J, K, and L.

Topic: General Comment

Comment text: 7) Comment also includes a cover letter and legal memorandum to Gail Norton, Secretary of the Interior, and Kathleen Clarke, Director BLM, dated April 30, 2003.

Response: 7) BLM has fully considered all aspects of the Transfer Act, FLPMA, and the Mineral Leasing Act in the determination of availability of lands for leasing.

6.3.2.6 Private Individuals

A large number of comments were received from private individuals via U.S. Mail and the project website. Most of these comments were addressed in Sections 6.3.1 and 6.3.2. Unique comments and those not expressing an opinion, are summarized along with BLM’s responses in the following sections.

Letters

A. William Aldredge, Ph.D.
2518 Owl Creek Rd.
Thermopolis, WY 82443

Topic: General Comment

Comment text: 1) The planning area boundary should be extended to the Parachute Creek hydrologic divide instead of the current arbitrary western boundary at Parachute Creek.

Response: 1) The Planning Area boundary was drawn to include contiguous BLM lands and commingled private lands. While some resource values extend as far as the Parachute Creek hydrologic divide—e.g., wide-ranging species such as Rocky Mountain elk and water quality associated with the Parachute Creek watershed—this is not true of all resource values for which BLM will manage Federal lands in the Planning Area. However, the Proposed Plan/Final EIS provides some additional information on offsite cumulative impacts associated with oil and gas development and other resource uses west of Parachute Creek.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 2) The document does not provide adequate information on baseline conditions of big game, including population estimates and discussions of transitional habitat, to provide a basis for assessing the impacts of oil and gas development.

Response: 2) BLM disagrees with this assertion. Because of unavoidable uncertainty about the specific location, scale, and pace of oil and gas development, detailed quantitative analysis would not be realistic. Therefore, the RMPA/EIS focuses on direct and indirect impacts to overall habitats both above and below the rim, after incorporating the various stipulations and other protective measures and assumptions about numbers of wells and pads and miles of new or upgraded access roads under each alternative. This analysis also included assumed levels of effective habitat loss due to reduced wildlife use in proximity to areas of oil and gas activity. Throughout the analysis, BLM’s intent was to incorporate assumptions that would reduce the potential of underestimating impacts, in part as a way of

compensating for the unavoidable uncertainties. Sections 3.3.2 and 4.3.2 of the Proposed Plan/Final EIS incorporates additional CDOW data regarding big game ungulate (deer and elk) populations. The transitional habitat (including migration routes and cliff passages) is also addressed, including NGD/NSO protections under the Proposed Plan.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 3) The document is too conservative in its estimate of impacts of oil and gas activity on deer and elk and misused some of the methods cited in the references.

Response: 3) Section 4.3.2 of the Proposed Plan/Final EIS incorporates different (more stringent) assumptions regarding effective habitat loss associated with reduced wildlife use in proximity to oil and gas activities. These assumptions regarding zones of effective habitat loss were derived from recent publications recommended by CDOW.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 4) Without more precise information on location of wells and roads, any impact estimate is speculative. BLM should instead provide a range of "worst case" to "best case" scenarios.

Response: 4) At the RMP planning stage, BLM addresses the impacts of oil and gas leasing. Site-specific oil and gas development is addressed at the implementation stage. BLM is not required to conduct a "worst case" analysis but rather to examine a reasonable range of alternatives. This is what the five alternatives of the Draft RMPA/EIS represented.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 5) Migration routes should be protected by at least one mile of buffer from development, at a minimum as a TL if BLM can truly enforce the TL.

Response: 5) All of the migration routes mapped by CDOW on BLM lands in the Planning Area—comprising the areas where deer and elk are able to pass through the barrier of the Roan Cliffs—are located in areas with an NGD/NSO restriction for one or more sensitive resource values (e.g., steep slopes, high visual sensitivity, wildlife security, etc.). This prohibits long-term ground-disturbing activities.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 6) Oil and gas drillers and operators should be required to keep trash in bear-proof receptacles to reduce the potential for conflicts, which generally result in demise of the bear.

Response: 6) This is included as an oil and gas BMP in the Proposed Plan/Final EIS (Appendix I).

Topic: Oil and Gas

Comment text: 7) BLM has a tendency to assume low densities, then approve higher densities with minimal or no additional public process. BLM should use their experience to develop an impact scenario that is truly representative of what will actually happen in terms of oil and gas development.

Response: 7) As described in Section 4.5.5 of the Draft RMPA/EIS, assumed well densities were based on downhole spacing orders, associated surface densities, and annual drilling effort incorporating current levels and technologies for development in the Planning Area and vicinity. This information was derived from the RFD, and then modified by incorporating constraints associated with surface-use restrictions, weather-related constraints, etc. While the Draft RMPA/EIS clearly notes that these are estimates, BLM believes that the numbers used for the various alternatives are reasonable and realistic.

Topic: Oil and Gas

Comment text: 8) No information is presented on miles of pipelines.

Response: 8) As stated in the document, miles of roads and pipelines are treated together as an average per-well

estimate. Most pipelines would be located along roadways, both to reduce the amount of surface disturbance and for ease of construction and maintenance.

Topic: Areas of Critical Environmental Concern

Comment text: 9) All four ACECs should be incorporated into the final alternative.

9) The Proposed Plan/Final EIS incorporates all four ACECs (Section 2.3). While the four ACECs occupy a somewhat smaller area than under Alternative II, the basis of this revision was a more refined

Response: analysis by BLM of specific areas containing the relevant and important values for each ACEC. Thus, a comparable level of management emphasis on, and protection of, those values would also apply despite the smaller area.

Topic: General Comment

Comment text: 10) BLM should take a temporally and spatially more expansive and more detailed approach in the assessment of cumulative impacts.

10) The Proposed Plan/Final EIS provides a more expansive assessment of cumulative impacts. However, it is important to note that unavoidable uncertainties regarding future development and

Response: impacts on BLM lands in the Planning Area are compounded when attempting to predict future conditions on private lands inside and outside the Planning Area, over which BLM has no control, and on BLM outside the Planning Area, which are not affected by decisions contained within this RMPA/EIS.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 11) Statements about less impact from habitat fragmentation in naturally patchy winter range habitats are incorrect.

11) This statement, which BLM continues to believe correctly reflects the difference between small-

Response: scale fragmentation of patchy versus homogeneous habitats, was not a factor in the impact analysis of the Draft RMPA/EIS and has been removed from the Final.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 12) The document does not adequately discuss travel management, recreation, reclamation, or the potential for subdivision of the private in-holdings.

12) Except for subdivision of private in-holdings, the negative and positive impacts of these other land uses or management actions were addressed in the impact analysis for terrestrial and aquatic wildlife of

Response: the Draft RMPA/EIS (Section 4.3.2). The level of detail reflects the unavoidable uncertainties associated with attempting to predict future conditions over which BLM has no control. Beyond a point, predictions of future conditions become too speculative to form a sound basis for impact analysis.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 13) Monitoring is not adequately discussed and is a critical part of ongoing management of the planning area to assess impacts to wildlife.

13) The Proposed Plan/Final EIS includes an appendix on monitoring. However, monitoring is currently anticipated to be limited to enforcement (to ensure that development and other land uses conform to the lease or permit terms and the conditions of approval), reclamation success (including how it relates to restrictions on the amount of surface allowed to be disturbed at any one time atop the

Response: plateau [i.e., 320 acres]), and vegetation and range conditions (because of their importance to soil, water quality, wildlife, and livestock). Because of the many protective measures included to protect candidate threatened/endangered plants and the results of the impact analysis, BLM does not plan to include wildlife monitoring in the Proposed Plan/Final EIS, however, BLM is currently working with the CDOW to develop a wildlife monitoring program.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 14) Only the 5-month TLs are acceptable, and these must be enforced and not waived. TLs do not provide protection from habitat loss in other seasons, and TLs are limited to the 2-year development period, not the 20-year production period. Deer and elk do not readily habituate to oil and gas or other human activity in the winter range, especially for migratory herds.

Response: 14) The 5-month TLs are incorporated into the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). The impact analysis for the Proposed Plan also assumes a greater degree of effective habitat loss from reduced use in areas of oil and gas development. Additionally, while the Draft RMPA/EIS mentioned the potential for some habituation, it was not assumed to occur and was not incorporated into the impact analysis. Reference to habituation has been removed for the Final.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 15) Deferred drilling atop the plateau under Alternative III would do nothing to mitigate impacts to winter range and would probably be worse, not better, for deer and elk overall.

Response: 15) Under the Preferred Alternative, the concept of deferred drilling was intended to reduce impacts from oil and gas activities over the long term—and not just the deferral period—by providing time for directional drilling technology to evolve before allowing development on top of the plateau. The Proposed Plan achieves this desired outcome without a deferral period by requiring phased and clustered development, relying on directional drilling, from the outset for areas on top of the plateau (Section 2.3).

Topic: General Comment

Comment text: 16) The document does not meet the spirit of NEPA because impact assessment is too speculative and unrealistic. BLM and CDOW can manage wildlife and their habitats in a manner congruent with FLPMA, but such would require a more thorough analysis than included in the Draft.

Response: 16) The Draft RMPA/EIS explains, in Section 4.3.2 as well as other places, why more specific impact analyses are not possible given unavoidable uncertainties about the exact location, manner, timing, and pace of oil and gas development, and of other land uses. However, because the document makes generally conservative assumptions in an effort to not underestimate impacts, and because the assumptions used are both reasonable and realistic, BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS fully comply with NEPA.

Steve Anthony
720 Oak Ct.
New Castle, CO 81647

Topic: Special Status Plants and Significant Plant Communities

Comment text: 1) In order for an ACEC to provide maximum protection plants, it must be large enough to encompass habitat. For example, the size of the ACECs in Alternative II is much more effective than in Alternative III. More ACECs, larger in area, would appear to provide more protection for the range of special status plants and plant communities.

Response: 1) The Proposed Plan includes four ACECs of the following sizes: East Fork Parachute Creek (6,571 acres), Trapper/Northwater Creek (4,810 acres), Magpie Gulch (4,698) acres, and Anvil Points (4,955 acres)(Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). This provides a level of special management for the relevant and important resources that is intermediate between Alternatives II and III.

Topic: Special Status Plants and Significant Plant Communities

Comment text: 2) Utilizing SSR/CSU restrictions as a method of protection of rare plants (as in Alternative III) may protect a plant (or other ecological resource) that is known to be in an exact location, but it may lead to

future habitat degradation in the range where the plant may occur.

Response: 2) BLM does not believe that future habitat degradation is a necessary consequence of limiting SSR/CSU protections to known areas of occupied habitat and, furthermore, knows of no reliable and non-speculative basis for discerning where a rare plant “could” occur in the future—particularly given the very low rate of population expansion of most species.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 3) Any final management plan for the Roan Plateau should have a noxious weed strategy that is similar to the component outlined in Alternative II.

Response: 3) The Proposed Plan emphasizes prevention, inventory, detection, and monitoring and project actions as part of an integrated weed management program (which includes mechanical, biological, and chemical control techniques), as described for Alternative II (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). Additionally the Proposed Plan promotes natural processes and healthy native plant communities to deter noxious weeds.

Thomas J. Beckett
781 South Oneida Street
Denver, CO 80224

Topic: Oil and Gas

Comment text: Encourage BLM to select a middle-ground alternative as Preferred. Several specific points are the same as the Community Alternative.

Response: The natural resource values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. While the "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS, many of the basic components were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Robert Beverly
2855 Applewood Street
Grand Junction, CO 81506

Topic: Other Minerals

Comment text: The EIS should recognize the large amount of potentially recoverable oil from oil shale in the Roan Plateau and that it may be as much as 10,000 times the potential energy from gas deposits.

Response: Section 3.5.6.1 in the Proposed Plan/Final EIS expands on the discussion of oil shale development. Development of oil shale in areas with a Federal mineral estate would be regulated by BLM and subject to the same restrictions/stipulations regarding surface activities. However, BLM does not believe that oil shale development is realistic in the Planning Area during the 20-year period of analysis. If oil shale development does arise as a desired use during the planning period, impacts would be considered in a separate NEPA document prepared in response to specific proposals.

Ronald Borrego
3396 W. 31st Ave.
Denver, CO 80211

Topic: Oil and Gas

Comment text: Supports the Community Alternative.

Response: The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: General Comment

Comment text: 1) The Draft RMPA/EIS does not meet requirements of an EIS, per Environmental Quality Improvement Act of 1970: a) the document does not provide full and fair discussion of significant environmental impact; b) the document does not inform decision makers and the public of reasonable alternatives which avoid or minimize adverse impacts or enhance the quality of the human environment; c) the range of alternatives does not encompass all possible conditions needed for consideration by the ultimate agency decision maker; d) the range of alternatives as presented do not include a no-drilling alternative nor a full-drilling implementation alternative; e) environmental impacts are not discussed in proportion to their significance.

Response: 1) BLM believes that both the Draft RMPA/EIS and Proposed Plan/Final EIS meet the requirements of NEPA and BLM policies regarding NEPA compliance. "No drilling" is not a viable alternative because of existing leases and vested property rights. However, Alternative I (No Action) would limit leasing and drilling to areas already under lease. This placed virtually the entire top of the plateau and much of the lower area into a "no lease for oil and gas" designation, which approximates a "no drilling" scenario. As can be seen by comparison tables in the Summary and Chapter 4 of the Proposed Plan/Final EIS, the Proposed Plan, with its requirement for phased and clustered development atop the plateau, would result in relatively low levels of adverse environmental impacts while accommodating substantially more oil and gas recovery than No Action.

Topic: General Comment

Comment text: 2) The alternatives do not properly reflect public input provided to date. Review and consider all public input provided to date.

Response: 2) The Draft RMPA/EIS and Proposed Plan/Final EIS do reflect all public input to date. However, BLM believes that some aspects of public input—such as the desire of some to prohibit drilling on top of the plateau—are inconsistent with the Transfer Act that placed the NOSRs under BLM management. Therefore, while all public input was considered, BLM concluded that not all was appropriate for incorporation into the reasonable range of alternatives being analyzed.

**John Broderick
Parachute, CO**

Topic: General Comment

Comment text: 1) The Draft violates NEPA by not "attaining the widest range of beneficial uses of the environment without degradation." BLM should address how the planning area will be managed for all resources, not just how they will exist in light of oil and gas development.

Response: 1) BLM believes the natural resource values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy throughout the Roan Plateau planning process, including the Draft RMPA/EIS. Sections 2.3 and Table 2-1 of the Proposed Plan/Final EIS outline and summarize all planning-level management actions included in the Proposed Plan for all managed resources. These are reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Topic: General Comment

Comment text: 2) The plan does not present adequate information on the impacts of full field development on the

text: resources of the planning area.

Response: 2) It is BLM's policy that impacts beyond the 20-year planning period are too speculative to consider, except in a general, qualitative sense. Changes in economic, geopolitical, technological, environmental, or other factors that cannot be accurately predicted are likely to have a major effect on future development.

Topic: General Comment

Comment text: 3) The plan should address resources west of Parachute Creek, including water quality, fisheries, and wildlife. The cumulative impact analysis needs to address this area. Additionally, cumulative impacts related to oil and gas development on private land, while referenced in the Draft, are not adequately factored into the cumulative impact conclusions.

Response: 3) The Proposed Plan/Final EIS expands on the information provided for areas west of Parachute Creek, particularly regarding wildlife (Section 4.3.4.2). The discussion of cumulative impacts associated with oil and gas development on private lands in the Planning Area has also been expanded. However, because BLM does not manage these lands, the extent of these impacts is more speculative.

Topic: Terrestrial and Aquatic Wildlife

Comment text: 4) Impacts to deer and elk are underestimated and baseless. Recent literature indicates an impact zone much greater than the 3.5 factor used in the Draft RMPA/EIS. The use of Reed (1996) is inappropriate.

Response: 4) While BLM does not agree that Reed is inappropriate as an indicator of the scale of effective habitat loss associated with fragmentation from road construction and timber harvesting (the latter as an analog for well pad construction), a reassessment of effective habitat loss using references cited by the CDOW indicates that a wider impact zone is more conservative and thus more appropriate. Therefore, the Proposed Plan/Final EIS uses a larger area of reduced wildlife use around areas of oil and gas activity. This is discussed at length in Section 4.3.2 of the Proposed Plan/Final EIS (also see Table 4-11).

Topic: Terrestrial and Aquatic Wildlife

Comment text: 5) Instructional Memorandum No. 2005-069 appears to negate BLM's ability to mitigate direct impacts. The final RMPA needs to discuss the relevance of this memo on BLM's ability to mitigate impacts to water, wildlife, and fisheries.

Response: 5) Stipulations detailed in Table C-1 (Appendix C) in the Draft RMPA/EIS and Proposed Plan/Final EIS fully account for the requirements of this IM.

Topic: General Comment

Comment text: 6) BLM should select an alternative that: designates and manages all four ACECs; includes the noxious weed provisions and stipulations of Alternative II; manages the 21,382 acres of wilderness character lands; implements management actions, with an emphasis on intensive management, to make progress toward meeting all Land Health Standards; applies a 500-foot buffer to riparian areas, measured from the outer edge of the riparian vegetation; designates two SRMAs -- Hubbard Mesa and the top of the plateau; restricts all travel to designated routes and includes a "closed unless posted open" policy; uses the wildlife seclusion areas of the 1999 FSEIS; uses the Colorado River cutthroat trout management as in Alternative II but with intensive as well as passive (natural) management; manages livestock and rangeland as in Alternative III but with monitoring as in Alternative II; limits pad density to one per 640 acres; uses the winter range TL of Alternative II but adds a TL for calving and fawning areas; limits Standard Lease Terms to the existing 7,167 acres under Alternative I; and establishes performance-based reclamation standards (e.g., 70% vegetation cover) and conditions APD (drilling permit) approval on successful reclamation at previous well sites.

Response: 6) The Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS) designates four ACECs where special management is applied to protect and prevent irreparable damage to relevant and important scenic, fisheries, wildlife, and botanical/ecological values. The Action emphasizes prevention, inventory, detection, and monitoring and project actions as part of an integrated weed

management program. While no areas will be managed specifically to maintain roadlessness and naturalness, protections for various resources may have the effect of maintaining wilderness character. The Proposed Plan implements appropriate management actions on a landscape basis that would result in meeting Land Health Standards with emphasis on intensive management. New routes will be established outside of the riparian zone or must meet the objectives for maintaining riparian, fishery, and watershed conditions. While the Proposed Plan designates no SRMAs, the Planning Area will be managed as part of Glenwood Springs Extensive Recreation Management Area (ERMA). Hubbard Mesa will be managed as an OHV open-riding area using SSR/CSU stipulation. In addition, route closures, realignment, and signage will be used as needed to protect adjacent private property. The Proposed Plan provides for responsible use by limiting travel to designated routes or areas throughout the Planning Area (excluding over-the-snow travel). The Proposed Plan designates the Parachute Creek Watershed Management Area to protect ecosystem integrity and function related to the Colorado River cutthroat trout and supporting factors through management actions and an SSR/CSU restriction. The Proposed Plan incorporates a number of specific management actions intended to better mitigate, regulate, and monitor all management actions, including livestock grazing and impacts on other natural resource values. Leasing and drilling atop the plateau will be based on 2,640-foot minimum surface separation of pads (1 per 160 acres). Lands available to lease will be subject to timing limitations on periods when construction and drilling activities are prohibited to protect important wildlife habitats. The Proposed Plan incorporates a number of specific management actions, as well as reclamation standards, regular monitoring requirements, and reclamation success criteria intended to reduce the area of long-term physical impacts of ground-disturbing activities, including oil and gas development, as well as encourage more successful reclamation and revegetation of these areas.

Oni Butterfly
P.O. Box 347
Silt, CO 81652

Topic: General Comment

Comment 1) To combine a RMPA and EIS document and limit the analysis period to 20 years is not true to the
text: intent of NEPA.

1) BLM land use planning is implemented in compliance with Sections 201 and 202 of the Federal Land Policy and Management Act of 1976 (FLPMA), regulations in 43 CFR 1600, and NEPA. BLM

Response: planning guidance is applied subservient to these and other Federal laws and regulations. As discussed in Chapter 1 of the Draft RMPA/EIS and Proposed Plan/Final EIS, it is BLM’s policy that impacts beyond 20 years are too speculative to allow a meaningful and reliable analysis.

Topic: Oil and Gas

Comment 2) The document is flawed because it does not portray the true gas drilling scenarios and related
text: environmental impacts: it should a) incorporate a 40- year time-frame; b) reflect numerous advances in gas-drilling technology that would allow extraction under the cliffs without any surface occupancy of the top.

2) It is BLM’s policy that future conditions beyond the 20-year planning period or too speculative to provide a basis for realistic and reasonable analysis. A variety of economic, geopolitical, technological, environmental, or other factors that affect future levels of development are themselves subject to

Response: change. Regarding drilling technologies, the Proposed Plan incorporates a requirement for phased and clustered development atop the plateau, in which collating up to seventeen wells per pad would result with a minimum surface separation of 0.5 mile. Technology does not currently exist that would allow lower surface densities without making much more of the oil and gas resource inaccessible.

Topic: Oil and Gas

Comment 3) The Draft does not respond to comments during public scoping to not allow any surface occupancy
text: on the public lands at the top and on the cliffs of the Roan Plateau for any drilling activities.

Response: 3) Under Alternative I, essentially the entire top of the plateau is unavailable for oil and gas leasing. However, for the other alternatives, BLM believes that the Transfer Act requires making the top of the plateau available for future leasing to the extent consistent with multiple-use management under FLPMA and BLM policies.

Topic: Oil and Gas

Comment text: 4) Analysis for Alternative III is inadequate as it does not address the specific impacts that will occur from the time the drilling begins on the top, somewhere around year 16, through year 40. For example: Page 4-3 and Page 4-5.

Response: 4) It is BLM's policy that conditions beyond the 20-year planning period are too speculative to provide a basis for realistic and reasonable impact analysis. A variety of economic, geopolitical, technological, and environmental factors that affect drilling are themselves subject to change.

Topic: Oil and Gas

Comment text: 5) The analysis does not look carefully at past experiences with the drilling industry to calculate potential impacts from drilling activities. For example: Page 4-20, third paragraph. Page 4-21, second paragraph. Page 4-22, second paragraph. Page 4-24, second paragraph. Pages 4-22 and 4-23 in addressing potential waste stream outputs.

Response: 5) BLM believes that potential impacts have been adequately considered. While some incidents have occurred, the impacts have been relatively minor compared to the scale of impacts associated with direct and indirect impacts of habitat loss and modification from well pads, access roads, and associated facilities. Furthermore, because future incidents may differ in frequency, location, and severity from past incidents, quantitative estimates of their consequences are impracticable.

Topic: Hazardous Materials

Comment text: 6) Page 4-23, last paragraph: These would not necessarily be one-time consequences. Address potential for multiple accidents over time. This is also true for text on Page 4-29, paragraph three.

Response: 6) BLM believes that potential impacts have been adequately considered. While some incidents have occurred, the impacts have been relatively minor compared to the scale of impacts associated with direct and indirect impacts of habitat loss and modification from well pads, access roads, and associated facilities. Furthermore, because future incidents may differ in frequency, location, and severity from past incidents, quantitative estimates of their consequences are impracticable.

Topic: Water Resources

Comment text: 7) Page 4-25, second paragraph: How will operators isolate and protect usable water zones? Groundwater is a valuable resource in its own right that requires protection.

Response: 7) Groundwater is routinely isolated as part of the drilling process. Wells are closed to all depths except those of immediate interest. Because the gas reserve and groundwater resources are not collocated there is very little chance of impact.

Topic: Oil and Gas

Comment text: 8) Page 4-25, third paragraph. It is not correct to assume that recommended mitigation measures will be applied. There are only two people on the Western Slope that enforce COGCC regulations.

Response: 8) Lands where exploration and development activities are subject to specific mitigation measures will be in the form of Conditions of Approval, and will be developed through the permitting process. BMPs and mitigation measures and BMPs will be applied to protect wildlife, vegetation, geological, watershed, fisheries, visual, and Hubbard Mesa OHV open riding values (Section 2.3, Table 2-1, Appendix I, and Appendix J in the Proposed Plan/Final EIS). BLM believes that it has adequate resources to implement monitoring and enforcement needed to ensure compliance with the assumptions and components of the Proposed Plan.

Topic: Water Resources

Comment text: 9) Page 4-31. This section must be expanded to address the extensive cumulative impacts from drilling activities to the water system atop and under the Roan Plateau.

Response: 9) BLM has attempted to address cumulative impacts by resource as much as practicable given the uncertainties about the exact location, scale, pace, and character of development on private lands both within the Planning Area (“onsite”) and outside the Planning Area (“offsite”). The Proposed Plan/Final EIS provides some additional information on cumulative impacts to Water Resources (Section 4.2.4).

Topic: General Comment

Comment text: 10) Need a summary table of all the irreversible and irretrievable impacts mentioned in the document as well as summary tables for major individual and cumulative impacts.

Response: 10) BLM believes that the combination of narrative and tabular summaries of individual and cumulative impacts for the various resources addressed in Chapter 4 are sufficiently detailed and specific, as is Section 4.6 regarding irreversible and irretrievable commitment of resources. Even with the reasonable and realistic assumptions used in the impact analysis, unavoidable uncertainties about specifically where, at what pace, and in what manner resources will be impacted make quantitative or other impacts summaries or estimates of resource commitments impracticable.

Topic: General Comment

Comment text: 11) Prohibit any drilling on public lands that belong to the people. Close tops and cliffs to oil shale leasing and other extractive processes for all time. Ensure protection is provided for important habitat, roadless backcountry, recreation areas, and other special lands and that this protection remains in its intent unchangeable. Address in detail the commitment to utilization of BMPs and best technologies.

Response: 11) The natural resource values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. The phased and clustered development approach of the Proposed Plan, the emphasis on performance-based reclamation monitoring, more discussion of BMPs and mitigation measures, and extensive areas of NGD/NSO and SSR/CSU restrictions are all components of the Proposed Plan.

Robert Cherry
301 Perkins Street
Boone, NC 28607-5313

Topic: Oil and Gas

Comment text: Preserve the top of the plateau and the associated cliffs as a recreational area.

Response: The natural resource values and recreation opportunities in the Planning Area have been given special consideration in the Proposed Plan/Final EIS within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these values are described in Section 2.3 and Table 2-1 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Kristine Crandall
P.O. Box 977
Basalt, CO 81621

Topic: Recreation

Comment 1) Could BLM provide a quantitative assessment of current types of recreational use to assist in

text: quantifying impacts to this use? Adequate information is currently lacking in the Draft.

1) BLM does not have quantitative data on recreational use in the Planning Area. The Draft

Response: RMPA/EIS and Proposed Plan/Final EIS are based on the best information available through BLM's recreation planner for the area.

Topic: Socioeconomics

Comment text: 2) What are the social and economic costs of oil and gas development? The Draft presents only the benefits side of the equation and not the costs side.

2) The updated socioeconomic analysis in Section 4.4.3 and Appendix M of the Final includes a

Response: detailed analysis of the potential social and economic impacts of oil and gas development on the surrounding communities.

Topic: General Comment

Comment text: 3) The Draft does not adequately discuss cumulative impacts in light of other ongoing and potential oil and gas development in the region. Could BLM include a more thorough analysis?

3) The updated socioeconomic analysis in Section 4.4.3 of the Final includes more discussion of potential cumulative impacts of oil and gas development on the region. Additionally, the updated

Response: analysis was conducted in the context of larger demographic and economic trends for Garfield County and the region.

Topic: General Comment

Comment text: 4) The Draft does not adequately describe irreversible and irretrievable commitment of resources regarding some of the planning areas unique resources. Could BLM include a more thorough analysis of these losses?

4) Section 4.6 of both the Draft RMPA/EIS and Proposed Plan/Final EIS addresses irreversible and irretrievable resources. BLM believes that the amount of detail provided is appropriate for a NEPA

Response: analysis. Because of the many uncertainties associated with the exact scale, pace, and location of oil and gas development, other recreational uses, reclamation measures, mitigation measures, and other land uses and management actions, a more detailed or quantitative analysis would be speculative.

Topic: General Comment

Comment text: 5) BLM should take a hard look at the "Community Alternative" and adopt its key components.

5) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were

Response: incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Robert R. Crifasi
3257 Hawthorne Hollow
Boulder, CO 80304

Topic: Oil and Gas

Comment text: 1) Defer drilling on top and surrounding cliff areas.

1) The BLM has concluded that the Transfer Act requires oil and gas leasing in NOSRs 1 and 3,

Response: consistent with multiple-use management under FLPMA. Therefore, the Proposed Plan and all of the previously analyzed alternatives (except Alternative I, No Action) included future oil and gas leasing and development of the NOSRs. However, BLM has also concluded that the Proposed Plan, with its

requirement for phased and clustered development atop the plateau, achieves an appropriate level of resource protection while accommodating a reasonable level of oil and gas development without deferral.

Topic: Oil and Gas

Comment text: 2) Implement BMPs that require minimization, restoration, and reclamation of energy development zones and around the base - include strict controls for invasive weeds and water quality.

Response: 2) The Proposed Plan includes a number of BMPs to be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I).

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 3) Protect wilderness values of the Roan.

Response: 3) While no areas will be managed specifically to maintain roadlessness and naturalness under the Proposed Plan, protections for various resources, and the requirement for phased and clustered development, are expected to maintain wilderness character in large portions of the Planning Area (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Other Minerals

Comment text: 4) Permanent withdrawal of mineral extraction on top of the plateau and along the surrounding cliffs, as well as in sensitive riparian, shale community habitats, and other lands that would be irreversibly damaged by energy extraction.

Response: 4) The Proposed Plan emphasizes natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations. It incorporates 12 NGD/NSO restrictions and 14 SSR/CSU restrictions for the protection of a variety of resources, including the sensitive riparian and shale communities named in the comment. See Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS. In addition, a number of BMPs would be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I), and reclamation would be conducted within the context of performance-based success criteria.

Topic: Onsite Travel Management

Comment text: 5) Require all motorized vehicles and bicycles, including ATVs and snowmobiles, to remain on marked and designated roads only.

Response: 5) The Proposed Plan provides for non-motorized, mechanized, and motorized travel. Motorized vehicle travel would be limited to designated routes throughout the Planning Area, with the exception of the Hubbard Mesa OHV riding area and over-snow travel by snowmobile.

**Kevin Cun
Colbran, CO**

Topic: Water Resources

Comment text: 1) I believe Alternative II is the most feasible. But it should include critical Watershed Management. Concerned about impacts of spilled condensate and other by-products, as well as exploration and production, on and off location.

Response: 1) Under the Proposed Plan, the Parachute Creek WMA would be designated. The WMA management will include an SSR/CSU stipulation throughout. Additional NGD/NSO and SSR/CSU restrictions for a variety of watershed-related resources—including fisheries, riparian/wetland vegetation, sensitive plant species, and municipal water quality—as well as specific BMPs and mitigation measures are described in the Proposed Plan/Final EIS.

Topic: Oil and Gas

Comment text: 2) Suggests that any reserve pits be remediated. This will require an honest policing effort on the part of BLM.

Response: 2) The Proposed Plan implements innovative reclamation and performance-based monitoring standards (Appendix J).

Topic: Oil and Gas

Comment text: 3) It is important for BLM to consider horizontal or directional drilling.

Response: 3) The Proposed Plan requires innovative approaches, including use of directional drilling and collocating of up to seventeen wells on a pad.

**Kevin Curl
Colbran, CO**

Topic: General Comment

Comment text: Supports Alternative II, with directional drilling and watershed protection.

BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some

Response: drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative (Alternative II), including incorporation of a Watershed Management Area (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

**Clayton Daughenbaugh
1311 S. Elmwood
Berwyn, IL 60402**

Topic: Oil and Gas

Comment text: Indefinitely defer all oil and gas leasing on the top and cliffs of the Roan Plateau.

Response: The BLM has concluded that the Transfer Act requires oil and gas leasing in NOSRs 1 and 3, consistent with multiple-use management under FLPMA. Therefore, the Proposed Plan and all of the previously analyzed alternatives (except Alternative I, No Action) included future oil and gas leasing and development of the NOSRs.

Topic: General Comment

Comment text: I support a plan that prohibits drilling, provides protection for significant habitats and proposed wilderness areas, respects local community needs, keeps resource damage to a minimum, closes the top and cliffs to future oil shale leasing, keeps motorized use on designated trails and roads, and prioritizes natural resource protection.

Response: The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and

management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Douglas DeNio
87 River View Place
Parachute, CO 81635

Topic: Oil and Gas

Comment 1) Draft EIS does not take into account the expansion of gas exploration and production on 48,000
text: acres purchased by EnCana of the former UNOCAL property.

Response: 1) The Draft RMPA/EIS, as well as the Final, assumes that all of the private lands within the Planning Area are subject to oil and gas development.

Topic: Oil and Gas

Comment 2) Draft EIS is deficient in that impacts associated with drilling crews and maintenance personnel for
text: gas wells on the Plateau top are not addressed.

Response: 2) The Draft RMPA/EIS incorporated disturbance impacts related to human activity and vehicular traffic atop the plateau, as does the Final. Regarding wildlife, the Proposed Plan/Final EIS assumes a higher degree of reduced use by wildlife in areas of human activity, including oil and gas access roads, than did the Draft. See Section 4.3.2.

Topic: Water Resources

Comment 3) Draft EIS is deficient in that a method or methods for treating and disposing condensate and
text: produced water from wells on top is not clearly identified.

Response: 3) The Draft RMPA/EIS stated (Section 4.5.5.) that oil and gas activities on top of the plateau would truck the condensate and produced water to offsite locations for disposal. The Draft also described currently used locations for offsite disposal. While some consideration may be given to onsite treatment and disposal instead of offsite trucking—a potentially positive change is if the treated water can be used beneficially (e.g., for stock watering). BLM does not believe that this can be assumed or required for the Proposed Plan.

Topic: Climate and Air Quality

Comment 4) the air quality model does not address pollutant emissions from condensate tanks
text:

Response: 4) The air quality model does not address emissions from condensate tanks. Tank emissions tend to be minimal compared to other sources. The primary emissions of concern from the tanks would be VOCs (HAPs), which would not be modeled, as there are no standards (NAAQS, PSD Increments) for VOCs. The only place VOC emissions would be modeled would be for ozone, which was not modeled for this situation.

Topic: Oil and Gas

Comment 5) No noise analysis was done for impacts emanating from compressor stations, drill rigs, service trucks
text: and other gas extraction activities

Response: 5) In terms of wildlife impacts from noise, Section 4.3.2 discusses the conservative assumptions about wildlife avoidance of areas of oil and gas activities. Noise was also mentioned as a factor that could affect recreational quality. BLM does not believe that a quantitative noise analysis is needed for assessing the impacts of the various alternatives or selecting a final action.

Topic: Onsite Travel Management

Comment text: 6) motorized travel on top, including snowmobiles, needs to be restricted to designated routes

Response: 6) The Proposed Plan restricts motorized travel to designated routes throughout the Planning Area, excluding the Hubbard Mesa OHV riding area and over-snow travel by snowmobile (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Oil and Gas

Comment text: 7) supports the Community Alternative

Response: The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Jeff Derengowski
1410 Yosemite Dr.
Colorado Springs, CO 80910

Topic: General Comment

Comment text: Requests information regarding the potential development of the Roan Plateau.

Response: The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Topic: General Comment

Comment text: Requests information regarding the potential development of the Roan Plateau

Response: Sections 3.5.5 and 3.5.6 of the Draft RMPA/EIS and Proposed Plan/Final EIS provide information on oil and gas drilling and oil shale, respectively.

Cecil Gardner

Topic: Oil and Gas

Comment text: 1) I am in favor of oil and gas development on private and public land. I am also in favor of the BLM managing the top of the Roan Plateau so that ranchers can graze livestock and construct and maintain range projects as they have in the past.

Response: 1) Development of the natural gas resource, as well as rangeland management, are important components of the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS) as well as the five alternatives analyzed in the Draft RMPA/EIS and will be implemented within the multiple use context of all BLM land use decisions.

Topic: Rangeland Management and Health

Comment text: 2) Companies should develop reservoirs off of the barrow pits along roads and to adjacent pipelines. Water should be solar pumped to the top of Long Ridge and a water pipeline down Long Ridge, Short Ridge, and along the fenceline on the ridge between Bull Gulch, Grassy Gulch, and Spring Gulch.

Response: Thank you for your interest and participation in the BLM land use planning process for the Roan Plateau Planning Area. Your comment has been noted and considered.

Maryanne and Bill Gemmell
312 Longview Court
Grand Junction, CO 81503

Topic: Oil and Gas

Comment text: We would like to see drilling for gas as described in Alternative III. However, why not start drilling above when 50% of wells below the rim are complete?

BLM has concluded that the concept of phased and clustered development atop the plateau, which arose as an outcome of the Consultation and Coordination process following publication of the Draft

Response: RMPA/EIS, provides the optimal balance between environmental protection atop the plateau and reasonable recovery of the underlying oil and gas resource. Therefore, the Proposed Plan is based on this concept rather than deferred drilling.

Pam Hackley
HC 64 Box 3208
Castle Valley, UT 84532

Topic: General Comment

Comment text: 1) BLM should reevaluate the purpose and need for drilling on top of the plateau given existing wells and projected new wells below the rim.

1) BLM believes that the Transfer Act requires that all of the NOSR areas be made available for oil and gas leasing, consistent with multiple-use management under FLPMA and BLM policies. However,

Response: Alternative I included a no-lease designation on top of plateau (thus including it in the range of alternatives analyzed), and the Proposed Plan incorporates a requirement for phased and clustered development to reduce potential impacts. The deferred leasing aspect of Alternative III was also intended to allow technologies to develop in ways that would reduce impacts.

Topic: Socioeconomics

Comment text: 2) BLM should more thoroughly assess impacts on recreation in relation to the local economy and should establish a "community impacts board" to assess impacts on, and ways to reduce impacts to, local communities from the adversely fluctuating economies (associated with gas field development).

2) The updated socioeconomic analysis in Section 4.4.3 and Appendix M of the Final includes a more thorough analysis of recreation and potential impacts on the local economy. Currently, BLM maintains

Response: the Northwest Colorado Resource Advisory Council (RAC) as a platform for community input. RAC is the advisory council for the BLM, composed of 15 members representing a broad range of public land interests, ranging from environmental to local government to commercial activity.

Topic: Upland Vegetation and Riparian/Wetland Areas

Comment text: 3) BLM should develop standards for reclamation success, establish a monitoring program for ensuring that the criteria are being met, and require bonding adequate to ensure successful reclamation.

3) The Proposed Plan includes the use of BMPs and mitigation measures to reduce impacts of surface-

Response: disturbing activities, standardized reclamation practices (Appendix I in the Proposed Plan/Final EIS), and performance-based revegetation monitoring standards (Appendix H).

Topic: General Comment

Comment text: 4) BLM should adopt the "Community Alternative."

The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS.

Response: However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are

also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Bill Hamann
235 Arroyo Dr.
Grand Junction, CO 81503

Topic: Oil and Gas

Comment text: 1) Include an alternative that allows no drilling on top. Like the Community Alternative.

Response: The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: General Comment

Comment text: 2) The Draft RMPA/EIS does not include a thorough and objective Multiple Use analysis (per the Multiple Use Act of 1960).

Response: 2) BLM believes that multiple-use was incorporated in all of the five alternatives, and analysis of impacts in the Draft RMPA/EIS as well as in the Proposed Plan (Section 2.3, Table 2-1, and Chapter 4 in the Proposed Plan/Final EIS).

Patricia E. Helland
44 Willowview Way
Parachute, CO 81635

Topic: Oil and Gas

Comment text: 4) Oppose gas leasing on the top of the Roan Plateau at this time.

Response: The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. BLM believes that the Proposed Plan appropriately protects the ecological, hydrological, recreational, and scenic values of the top of the plateau while accommodating a reasonable degree of oil and gas production.

Topic: Oil and Gas

Comment text: 1) None of proposed alternatives realistically estimate the rate of gas development in the concerned BLM areas. The environmental impacts of gas development are systematically underestimated.

Response: 1) The assumed rates of development for the five alternatives in the Draft RMPA/EIS—as well as the assumed drilling rates for the Proposed Plan/Final EIS—were derived from the RFD (Appendix H of the Draft RMPA/EIS and Proposed Plan/Final EIS), but adjusted to reflect current and anticipated numbers of available drill rigs, the amount of land potentially brought into production under new leases, and the various levels of environmental protections under the different alternatives. While the RMPA/EIS acknowledges in Chapter 2 and elsewhere that actual development rates may differ for a number of reasons, BLM believes that the assumed levels used for impact analysis are reasonable and realistic projections.

Topic: Oil and Gas

Comment text: 2) You have not taken into account the combined impacts accelerating gas development on adjacent and nearby private land with gas development within the BLM area of consideration on watersheds or

wildlife.

Response: 2) The impact analysis in Section 4.3.2 specifically discusses cumulative impacts—both within and outside the Planning Area. The Proposed Plan/Final EIS includes an expanded discussion of this topic.

Topic: Oil and Gas

Comment text: 3) None of the proposed alternatives show how gas development will be responsibly managed. None address management and regulation of drilling operations, production operation, and reclamation, nor is there a clear monitoring protocol or process.

Response: 3) The Proposed Plan incorporates the use of BMPs and standardized reclamation practices as well adaptive management to monitor reclamation success against defined criteria (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). Issues involving management and regulation of drilling operations are covered within standard oil and gas leasing and permitting frameworks, which are touched up in the Oil and Gas sections (3.5.5 and 4.5.5) and related appendices of the RMPA/EIS.

Ann Henson
926 Yucca Court
Longmont, CO 80501

Topic: General Comment

Comment text: Preferred Alternative III is unacceptable. Alternative V is most favorable. Preserve the view, protect livestock grazing, and wildlife needs on the top. Motorized travel is not acceptable (except snowmobiles)

Response: BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

Barbara Hill
2935 El Torro Road
Grand Junction, CO 81503

Topic: General Comment

Comment text: Requests an informational meeting in Grand Junction regarding Roan Plateau Management Plan.

Response: BLM has conducted a number of informational meetings in the general vicinity of the Planning Area (Chapter Six of the Proposed Plan/Final EIS).

Frederick Jackson
118 Ash Avenue
Rifle, CO 81650

Topic: Oil and Gas

Comment text: Gas from wells seeps into the water table polluting the water, this should not be allowed to happen.

Standard oil and gas development practices attempt to prevent such occurrences. The Proposed Plan specifically addresses such concerns with a number of BMPs to be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I) as well as designation of the Parachute Creek Watershed Management Area, which provides special management considerations and prescriptions to protect the water resources on top of the Roan Plateau (Table 2-3).

Joe Jagers
Williams Energy Services
Tower 3, Suite 1000
1515 Arapahoe Street
Denver, CO 80202

Topic: Oil and Gas

Comment text: I support the development of the Roan.

Thank you for your interest in the BLM land use planning process. Development of the natural gas reserves within the Roan Plateau Planning Area has been considered within the multiple use context of all BLM land use decisions.

Mr. and Mrs. Wayne Jewell
P.O. Box 238
DeBeque, CO 81630

Topic: Oil and Gas

Comment text: Objects to gas drilling on the Roan Plateau. Concerned about observed well pad road maintenance where winter plowing resulted in walls of dirt four to five feet tall on side of road.

Thank you for your interest in the BLM land use planning process. BLM appreciates your concern regarding winter plowing of proposed natural gas well pad maintenance roads. Best Management Practices for this activity are incorporated into the Proposed Plan/Final EIS (Appendix I).

Jan and Gayla Kobialka
11598 Overleigh Drive
Woodbridge, VA 22192

Topic: Oil and Gas

Please bar all mineral leasing from the proposed wilderness area. The middle ground alternative proposed by Colorado groups should be adopted because it protects the best of this area and keeps oil and gas drilling off of the top and cliffs. We ask the BLM when issuing leases to attach clear stipulations that require operators to use "best management practices."

Thank you for your interest and participation in the BLM land use planning process for the Roan Plateau Planning Area. The natural resource values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. In addition, a number of BMPs would be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I).

David Kohls
P.O. Box 6145
Battlement Mesa, CO 81636

Topic: Paleontological Resources

Comment text: 1) All of the Roan Plateau, whether private or public land, is an extremely valuable paleontological resource area. I see no interference of paleontological collecting activities on the present or future natural gas recovery activities in the RMPA. However, it would be unconscionable for the collecting of paleontological material to be prohibited because of this economic activity. In most instances, these activities do not seem to be mutually exclusive and can well co-exist, side-by-side.

Response: 1) None of the five Alternatives considered in the Draft RMPA/EIS, nor the Proposed Plan/Final EIS, interferes with the collection of paleontological resources as permitted and regulated on BLM lands within the Planning Area.

Topic: Paleontological Resources

Comment text: 2) Two localities situated within the RMPA contain Eocene-age invertebrate fossil material. I beseech you and other decision-makers to help protect this valuable resource for present and future generations. [Note, the locations of these sites are confidential and not included in the text of this comment].

Response: 2) The Proposed Plan/Final EIS includes protection of Sharrard Park paleontological resources from surface-disturbing activities through an SSR/CSU restriction.

Kenneth Kreckel
Oil and Gas Geosciences
3670 Placid Dr.
Casper, CO 82604

Topic: Oil and Gas

Comment text: 1) Drilling on the lower plateau should be at one pad per 640 acres, drilling on the upper plateau should be excluded for the life of the plan, and both of these should be actual requirements, not merely assumptions.

Response: 1) In developing the Proposed Plan of the Proposed Plan/Final EIS, BLM concluded that a surface density of one pad per 160 acres atop the plateau was reasonably achievable with current technology and, as recommended by CDNR as part of the Consultation and Coordination process, to require a minimum of 0.5-mile separation to accomplish that density. Below the rim, BLM would have a goal of clustering to an average surface density of one pad per 160 acres but would not require it. Although the Proposed Plan would allow drilling on top of the plateau without a deferral period (as in the Preferred Alternative), the result of phased and clustered development would be a smaller number of pads and fewer miles of access roads than any of the alternatives in the Draft RMPA/EIS (see Table 4-2).

Topic: Oil and Gas

Comment text: 2) Even modest angles of directional drilling could reduce the number of well pads in the preferred alternative from 402 to perhaps 66, with an associated decrease in impacts, no adverse impact of production, efficiencies in terms of personnel and equipment, and only a minor reduction in cash margin per well due to higher drilling costs (about \$0.11 per MCF). Furthermore, directional drilling technologies will continue to improve, as will economics.

Response: 2) The Proposed Plan would require phased and clustered development atop the plateau and would rely on directional drilling to allow clustering of up to seventeen wells per pad, with an average surface density of 160 acres and a downhole spacing of 10 acres. The number of pads would thus be lowered to 141 (see Table 4-2 of the Proposed Plan/Final EIS). BLM does not believe that a comparable level of clustering is practicable below the rim, due in part to the adjacency and commingling of existing and potential new Federal leases with private lands. However, BLM would manage toward a gross density of 160 acres below the rim as well.

Topic: Oil and Gas

Comment text: 3) Besides not adequately considering directional drilling atop the plateau, BLM does not adequately consider an alternative for accessing reserves beneath the upper plateau by directional drilling from the lower plateau.

Response: 3) The Preferred Alternative of the Draft RMPA/EIS did incorporate directional drilling beneath the cliffs from wells placed along the edge of the steep-slope NGD/NSO (see Section 4.5.5). Under the Proposed Plan, this placement of wells would also be permitted, although the need for it may be ameliorated by the requirement for phased and clustered development, using directional drilling, atop the plateau (see response to Kenneth Kreckel Comment 2).

Topic: Oil and Gas

Comment text: 4) Any action on the upper plateau should be deferred until the lower plateau is fully developed, to give technology and economics an opportunity to continue to progress.

Response: 4) The Proposed Plan, by requiring phased and clustered development atop the plateau through reliance on directional drilling, would achieve this result without imposing a deferral period as under the Preferred Alternative. See response to Kenneth Kreckel comment 1.

David A. Lien
430 E. Cheyenne Mtn. Blvd. #21
Colorado Springs, CO 80906

Topic: General Comment

Comment text: 1) Please protect all roadless and wilderness quality land from all energy development, mining, logging, new road construction, OHVs, and other impacts.

Response: 1) Under the Proposed Plan no areas will be managed specifically to maintain roadlessness and naturalness. However, protective stipulations for other resources and the phased and clustered development of the Proposed Plan will have the effect of maintaining wilderness character in large portions of the Planning Area while accommodating a reasonable level of oil and gas development.

Topic: General Comment

Comment text: 2) The final alternative should: protect roadless areas from oil and gas development; prohibit leasing on the Roan Plateau top and cliffs until technology is developed to a point that would not require surface disturbance; provide real, non-changeable protections for important habitat, proposed wilderness, backcountry recreation, and natural areas, including permanent "no ground disturbance" stipulations.

Response: 2) BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

The Proposed Plan also places NGD/NSO or SSR/CSU restrictions across large portions of the Planning Area, with the entire top of the plateau in the Parachute Creek Watershed Management Area and most of the streams and valleys outside areas available for drilling. While some situation may arise in which a protective stipulation would not apply, any such situation would require a clear demonstration that the resource value being protected by the stipulation would not be compromised.

Ivo E. Lindauer

**269 Lodge Pole Circle
Parachute, CO 81635**

Topic: General Comment

Comment text: It is impossible to implement the BLM mission to sustain the health, diversity, and productivity of public lands for the use and enjoyment of future generations if leasing is allowed. Gas well and production development uses much water. Introduction of unwanted plants and invasive plant species would be increased. The impact of more people, vehicles, and machinery would create stress for the animals. The Roan Plateau provides habitats for several rare and endangered plant species. 80% of the gas present in Roan Plateau can be obtained by drilling under the ledges. Drilling would not lessen the US dependency on foreign oil and gas.

Response: BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

**David Llewellyn
6432 Willow Road
West Bloomfield, MI 48324**

Topic: General Comment

Comment text: The BLM has found that much of the Roan Plateau meets the qualifications for wilderness designation. Among the alternatives presented in BLM's draft plan, the "No Action" one is best. Please defer leasing until energy development is possible without surface disturbance, allow motorized vehicle use only on marked and designated routes, and make energy development responsible and respectful.

Response: BLM believes that the Proposed Plan represents a high degree of environmental protection while accommodating a reasonable amount of natural gas production. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

**Robert Millette
0116 Deer Park Ct
Glenwood Springs, CO 81601**

Topic: Oil and Gas

Comment text: Supports the Community Alternative.

Response: The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS.

However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: Oil and Gas

Comment text: 1) Draft RMPA/EIS fails to adequately consider new, emerging, low-impact drilling technologies.

Response: 1) The Proposed Plan relies heavily on new, emerging, low-impact drilling technologies to minimizing the amount of surface disturbance. This includes use of directional drilling to allow clustering of up to seventeen wells per pad, with a minimum of 0.5 mile between pads, and a requirement for phased development that limits disturbance to only on portion of the upper plateau at a time.

Topic: Oil and Gas

Comment text: 2) Draft RMPA/EIS fails to adequately address monitoring and enforcement of environmental restrictions at drill sites, and adequate monitoring and protection from silting and storm water run-off.

Response: 2) The Proposed Plan implements innovative reclamation and performance based monitoring standards.

Topic: Water Resources

Comment text: 3) The Draft RMPA/EIS inadequately addresses cumulative impacts to the watersheds and habitat.

Response: 3) The Proposed Plan designates the Parachute Creek Watershed Management Area (WMA), to be protected with an SSR/CSU stipulation and implements additional resource protections for other water-related values. BLM does not agree that the cumulative impacts to watersheds and habitats are inadequately addressed.

Topic: General Comment

Comment text: 4) Some alternatives do not adequately protect specific resources: a) provide a large enough stream buffer zone (Alternative II), b) reduce too much of the plateau to Front Country designation (Alternative III), c) inadequately protect sensitive plant species and ACECs (Alternative III).

Response: 4) The Proposed Plan designates four ACECs where special management is applied to protect and prevent irreparable damage to relevant and important scenic, fisheries, wildlife, and botanical/ecological values. The plan will protect rivers and corridors totaling 7,883 acres within the Resource Area that are found to be eligible under the Wild and Scenic Rivers Act, by not allowing any surface disturbing activities that might impair values, until a suitability analysis has been completed. Stream protections also result from NGD/NSO and SSR/CSU restrictions related to riparian/wetland vegetation and high-value habitat for the Colorado River cutthroat trout (including both "high-risk" and "moderate-risk" watershed functions as used in the Draft RMPA/EIS). Additionally, the entire top of the plateau would be designated the Parachute Creek Watershed Management Area, with special management of water-related qualities and SSR/CSU restrictions throughout. Known occurrences of rare plants would continue to be protected by NGD/NSO or SSR/CSU restrictions. BLM acknowledges that recreational opportunities and outcomes will be altered due to oil and gas development atop the plateau but believes that most of the existing types and levels of use will continue in areas not subject to oil and gas development.

J. Paul Mutney
29315 Roan Dr.
Evergreen, CO 80439

Topic: General Comment

Comment Supports multiple use on the Roan Plateau. Conservation, recreation, and development can be done

text: simultaneously and cooperatively.

Thank you for your interest in the BLM land use planning process. Protection of natural resources and recreation in the Roan Plateau Planning Area has been carefully considered within the multiple use context of the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Sam and Terri Potter
Big Mountain Outfitters
P.O. Box 148
Rifle, CO 81650

Topic: Other Minerals

Comment text: 1) No alternatives address "inevitable" development of the oil shale resource in this area.

1) BLM continues to believe that oil shale development during the 20-year planning period of this RMPA/EIS is very unlikely. This is reinforced by the recent filing of applications for research programs, none of which was within the Planning Area. If, or when, oil shale development occurs, a separate NEPA analysis and document would be required based on a specific proposal (location, technology, etc.).

Response:

Topic: Oil and Gas

Comment text: 2) Under Alternative III, who would make the 80% call to allow drilling on top of the plateau? Suggest an independent agency.

2) The 80% determination would not be a "call" but rather a straightforward mathematical calculation, as described in Section 2.3.3. BLM would be responsible for tracking how many wells have been drilled in relation to the total number projected under Alternative III.

Response:

Topic: Recreation

Comment text: 3) No attempt has been made to coordinate any management plan for the potential Hubbard Mesa SRMA to prevent continued surface degradation of adjoining private lands.

3) Under the Proposed Plan, Hubbard Mesa would be managed as an open OHV riding area, employing an SSR/CSU restriction. Route closures, realignment, and signage would be used as needed to protect adjacent private property (Section 2.3 and Table 2-1 of the Proposed Plan/Final EIS).

Response:

Tony Pressler
Rudy Steele Guides and Outfitters
11347 Highway 6 & 24
Parachute, CO 81635

Topic: Oil and Gas

Comment text: 1) Against oil and gas development on the Roan Plateau.

The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Response:

Topic: Terrestrial and Aquatic Wildlife

Comment text: 2) Concerned that indirect impacts to deer not included in analysis. Has observed that resident deer exposed to drilling activities adapt and lose fear of people and natural instincts. These animals become easy to kill by hunters, poachers, and predators.

Response: 2) Regarding indirect impacts, Section 4.3.2 of the Draft RMPA/EIS devotes considerable text to discussing indirect impacts on deer and other wildlife through impacts to habitat quality under the various alternatives. These include both positive and negative effects of travel management, grazing management, weed control, reclamation, and mitigation measures related to habitat quality. Regarding habituation, BLM tends to agree that deer and other wildlife may show increased tolerance to human activity through time, although whether the result of that impact is detrimental to deer (for the reasons cited in the comment) or beneficial (by reducing the amount of effective habitat loss associated with reduced use near human activity) may vary. However, the CDOW has stated that habituation to oil and gas activities either does not occur or is not significant. Therefore, neither the Draft RMPA/EIS nor the Proposed Plan/Final EIS ascribe any effect on impact levels due to habituation (Section 4.3.2).

Eric Rechel
2890 Seely Road
Grand Junction, CO 81503

Topic: Oil and Gas

Comment text: 1) I support the citizens or middle ground solution. Please prohibit leasing on top of the plateau and on the cliffs, allow motorized vehicle use only on roads or open trails, and maximize protection of natural resources.

Response: The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. The concept of phased and clustered development atop the plateau will protect important ecological, hydrological, and recreational resource values while recovering a reasonable amount of the oil and gas resource. Motorized travel would be limited to designated routes, except for the Hubbard Mesa OHV riding area and over-snow travel by snowmobile.

Topic: General Comment

Comment text: 2) Also, I want you to extend the comment period by another 6 months.

Response: 2) The public comment period was extended from 90 days to 120 days.

Greg Russi
271 Buckthorn Road
New Castle, CO 81647

Topic: Oil and Gas

Comment text: Cites Federal Oil and Gas Royalty Act that states that gas wells must be inspected a minimum of once annually if they are located in, or adjacent to, environmentally sensitive areas. Opposes drilling on top of Plateau until BLM is able to guarantee the inspection schedule the law requires.

Response: Thank you for your interest in the BLM land use process for the Roan Plateau Planning Area. We appreciate your concern that natural gas wells be inspected a minimum of once annually if they are located in, or adjacent to, environmentally sensitive areas. The Glenwood Springs Field Office is committed to complying with this stipulation in the Federal Oil and Gas Royalty Management Act for natural gas well drilling within the Planning Area.

Mable Sanders
7 West Ridge Ct.
Parachute, CO 81635

Topic: Areas Managed to Protect Wilderness Character or Specific Wilderness Values

Comment text: 1) The plan to designate the top of the Roan Plateau as a Wilderness Area needs to be carried out soon.

1) Under the Proposed Plan, no areas will be managed specifically to maintain roadlessness and naturalness. However, protections for various resources—and especially the concept of phased and

Response: clustered development atop the plateau—would have the effect of maintaining wilderness character in substantial portions of the Planning Area (see Section 2.3 and Table 2-1 of the Proposed Plan/Final EIS).

Topic: Oil and Gas

Comment text: 2) The numbers of wells approved, number of wells drilled, acreages, etc. is outdated and needs to be updated and/or rewritten to tell the true story of the Roan Plateau.

2) The Draft RMPA/EIS used information available at the time the process was initiated, but some of the information (e.g., number of wells drilled) is a “moving target” due to ongoing development.

Response: Consequently, some of the information in the Draft was, in fact, “outdated” by the time the impact analysis was finalized and the Draft published. The Proposed Plan/Final EIS uses updated information (Table ES-2 and Section 3.5.5).

Kirk Scales
48 East Valley Road
#104
Carbondale, CO 81623

Topic: Oil and Gas

Comment text: Please consider delaying leasing for the top of the Roan Plateau to allow for better surface and wildlife protection.

The natural resource values of the Roan Plateau Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated

Response: throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS. Although the concept of deferred leasing under the Preferred Alternative of the Draft did not receive wide-scale public support, BLM believes that the concept of phased and clustered development under the Proposed Plan does a more thorough job of protective sensitive resource values while accommodating leasing and drilling atop the plateau.

Topic: Water Resources

Comment text: 2) Maximum protection should be provided for the watershed.

2) The Parachute Creek Watershed Management Area would be designated by the Proposed Plan and protected by an SSR/CSU stipulation. BMPs and mitigation measures would also be implemented to

Response: protect watershed values associated with fisheries, botanical resources, and municipal water quality could be applied to 29,073 acres. Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area are detailed in Table 2-3.

Victoria Schmitt
3396 W. 31st Ave.
Denver, CO 80211

Topic: Oil and Gas

Comment text: 1) Adopt the Community Alternative.

Response: The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: General Comment

Comment text: 2) Alternatives III, IV, and V will permanently change the land forever. Strengthen stipulations to safeguard Roan Plateau's ecological values and to protect the area's impressive and popular backcountry and primitive recreation opportunities. Include Watershed Management Areas in the plan. Concentrate oil and gas development in the existing production area at the base. Consider how BLM could better involve local communities.

Response: 2) BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

Gregory L. Scott
29904 Lee Road
Evergreen, CO 80439

Topic: Oil and Gas

Comment text: Supports 'Community Alternative'. Have potential effects of proposals before Congress been included in alternative development?

Response: Thank you for your interest in the BLM land use planning process. The "Community Alternative" is not a BLM alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). Proposals that may be introduced into Congress are not considered Congressional actions that are analyzed during the NEPA process of disclosing potential impacts of proposed alternatives.

Thomas J. Scrimgeour
810 Alpine Drive
Boulder, CO 80304

Topic: General Comment

Comment text: 1) We need to be shifting to a different source for energy and placing more emphasis on conservation. As long as we do produce oil and gas, however, we should do so in a way that preserves ecological, recreational, and wilderness qualities such as in the Roan Plateau -- such as with permanent (non-changeable) NGD/NSO stipulations and no drilling on top.

Response: 1) Thank you for your interest and participation in the BLM land use planning process for the Roan Plateau Planning Area. The natural resource and recreation opportunity values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed

Plan/Final EIS. The Proposed Plan clearly defines situations in which protective stipulations (e.g., NGD/NSO) would not apply. These situations would require clear demonstration that the resource value being protected would continue to receive adequate protections.

Topic: General Comment

Comment text: 2) Protect sensitive wildlife habitats, wilderness, backcountry recreation areas, and natural areas.

2) BLM believes that the Proposed Plan represents a high degree of environmental and recreation opportunity protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on development along ridgetops and out of the environmentally more sensitive stream valleys.

Response: Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. The Proposed Plan emphasizes natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations. It incorporates 12 NGD/NSO restrictions, 14 SSR/CSU restrictions, and 5 TLs for the protection of a variety of resources (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Betsy Shade, MD
1762 Belle Court
Millersville, MD 21108

Topic: General Comment

Comment text: 1) Oppose preferred alternative. Prefer "middle-ground" (community alternative) approach that protects irreplaceable wild lands atop the plateau while allowing drilling below the foot of the cliffs.

1) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were

Response: incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).

Topic: General Comment

Comment text: 2) BLM should select an alternative with strict permanent stipulations that cannot be waived. These should be designed to protect wilderness values, sensitive wildlife habitats, and highly scenic lands. BMPs should be required for all operations and vehicle traffic confined to durable routes designated by BLM.

Response: 2) The Proposed Plan emphasizes natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations. It incorporates 12 NGD/NSO restrictions, 14 SSR/CSU restrictions, and 5 Timing Limitations for the protection of a variety of resources (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). The Proposed Plan clearly describes circumstances when the protective stipulations might not apply. These situations would require clear demonstration that the resource value being protected would continue to receive adequate protections. A number of BMPs will be applied to all long-term ground-disturbing activities, as appropriate to each site and activity (Appendix I). Vehicle traffic would be limited to designated routes throughout the Planning Area, excluding the Hubbard Mesa OHV riding area and over-snow travel by snowmobile.

Vicki Stamper
P.O. Box 1805
Laramie, WY 82073

Topic: Climate and Air Quality

Comment 1) The conclusion in the Draft that air quality impacts would be minor or negligible is not supported
text: with adequate data, and the modeled impacts were not adequately disclosed, thus violating NEPA.

Response: 1) BLM does not agree with the comment that conclusions about air quality impacts were supported with adequate data and that impacts were not adequately disclosed. The air quality impact methodology and results are described in considerable detail in Section 4.2.5.

Topic: Climate and Air Quality

Comment 2) The near-field analysis is flawed and cannot be relied on to indicate the extent of air quality impacts in that it: improperly assumed flat terrain, included too small a group of air pollution sources, did not justify the NO_x emission rate from compressors, used different compressor stack parameters than in the
text: far-field analysis (Table 3-19 in the Air Quality Assessment Report), underestimated particulates, failed to analyze impacts from construction vehicles or drilling rigs, and appears to have underestimated emissions from flaring.

Response: 2) Flat terrain was chosen because the level of information available for the location of sources was insufficient to do otherwise. Further, modeled results in complex terrain would not necessarily result in higher concentrations. This would depend on several factors including: location of sources relative to the terrain; shape, height, and location of terrain; meteorology, source characteristics, etc. The near-field analysis generally followed the accepted methodology from a previous analysis for the Glenwood area (NPS, 1998) performed for BLM. The near-field analysis was intended to look at impacts in the vicinity of a representative set of sources, and was not intended to be a cumulative analysis. The cumulative impacts analysis was performed with the CALPUFF model and the appropriate BLM and inventory sources. EPA's Significant Impact Levels (SILs) are intended for use in PSD permit analyses (EPA, 1991) and hence are not required for the near-field NEPA analysis. Also, the construction activities included in the near-field analysis are temporary in nature and thus, the comparison to the SILs is not applicable. NEPA no longer requires a "worst-case" analysis. Thus, this type of analysis was not done. (See Federal Register: April 25, 1986 (Volume 50, Number 80), Rules and Regulations, Pages 15618-15626). Table 3-19 is indeed incorrect and will be fixed in the FEIS. However, the modeling was done with the correct source parameters and does not need to be redone. See previous response about "worst-case" analysis. Also, the revised near-field now includes all particulate emissions associated with the 25 wells. As for the amount of vehicle miles traveled for the modeling, this information is available on a 2-CD set containing the TSD and associated tables, attachments and appendices, and modeling files by request from the BLM NSTC. Construction and construction vehicle traffic were also included in the analyses Tailpipe emissions were not included in the analysis. To address the comment concerning comparisons to the Rawlins RMP EIS, no modeling was done for the Rawlins RMP EIS, so the accuracy of the stated figure for PM-10 emissions cannot be verified. The quoted emission rate from the Vernal analysis is in grams per second per square meter (g/s-m²). Converting back to grams per second yields a figure of 0.004 g/s. Further, the Rawlins analysis has thousands more wells than the Roan Plateau analysis. A separate analysis of the impacts from the road only was done at the request of EPA Region 8. To address the comment regarding the placement of receptors, and to update the near-field analysis to reflect site-specificity, the near-field analysis was updated. The changes made in the analysis are outlined at the end of this document. Please note that the essentials of the analysis (5 x 5 well matrix, etc.) have not changed. Vehicle tailpipe emissions were not included in either the near- or far-field analyses. The drill rig engines were excluded based on preliminary emissions calculations performed by NSTC Air Quality staff. The near-field analysis is not and was not intended to be "cumulative analysis". The flare modeling was conducted as a separate exercise using the SCREEN3 model, as recommended during stakeholder meetings. The SCREEN3 model is a simple, single-source Gaussian plume model with a pre-determined matrix of meteorological conditions. The model is also linear with respect to emission rate. Therefore, a doubling of the modeled emission rate gives a doubling of the resulting concentrations. Examining the flare modeling results and the maximum concentrations listed in Table 5-73, an increase in emissions by a factor of eight, assuming such an exercise is valid, still yields extremely small concentrations. Therefore, further modeling is not required. Emission factors were taken from EPA's AP-42, volume 1, chapter 13.5, and did not include VOCs.

Topic: Climate and Air Quality

Comment text: 3) The estimate of the number of compressor engines used in the CALPUFF modeling seems to be in error.

Response: 3) The number of compressor engines used in the CALPUFF modeling was calculated from the following: 10,000 cubic feet per day (MCF/day) and basin wide production 225 MMCF/day. The calculation for the GSMA Alternative IV (equivalent to Alternative II) scenario is as follows: (1100 HP/10,000MCF per day)*557,071 = 61,278 HP or 61 compressors.

Topic: Climate and Air Quality

Comment text: 4) The Draft does not provide adequate support for the assumed NOx emission rate for compressor engines in the Vernal Field Office area.

Response: 4) BLM used the 0.7 g/hp-hr NOx emission rate at the request of the Utah DEQ. BLM believes that using “uncontrolled NOx emissions from compressors in the Vernal Field Office area” would not be appropriate and not in accordance with NEPA.

Topic: Climate and Air Quality

Comment text: 5) The CALPUFF analysis failed to model at least 3 years of meteorological data as required by EPA regulations.

Response: 5) The EPA Guideline on Air Quality Models (GAQM) is just that; a guideline; it is not regulation. Further, the GAQM is primarily intended for application in a regulatory (permitting) setting and is not necessarily applicable to NEPA.

Topic: Climate and Air Quality

Comment text: 6) The use of monitoring data to reflect existing source impacts is flawed and unjustifiable.

Response: 6) The background air quality data, for this or most modeling analysis, are not intended to, nor should be “maximum pollutant concentrations”, but are intended to be representative of the area under analysis. This approach has been used in numerous previous BLM air quality analyses and was agreed upon by the stakeholders group during the protocol development process.

Topic: Climate and Air Quality

Comment text: 7) The Draft failed to include a proper cumulative Prevention of Significant Deterioration (PSD) increment analysis.

Response: 7) The analysis of increment consumption is the sole responsibility of State air agencies that have been delegated authority by EPA under the Clean Air Act. Also, the phrase “monitoring baseline date” has been replaced with “monitoring base year” or “monitoring base year date” to avoid confusion with the term “baseline” as used in conjunction with PSD.

Topic: Climate and Air Quality

Comment text: 8) The inventory of source emissions is not adequate. Specifically: the sources were modeled at average annual emission rate regardless of the averaging time of the particular standard in question; the inventory did not include sources greater than 50 km from the Class I areas; no inventory was compiled for sources permitted by EPA on the Uintah and Ouray Indian Reservations; no sources from Wyoming were included; and the adjustments for the CALPUFF modeling are not justifiable.

Response: 8) The extension of the modeling domain 50 km beyond the modeled sources was agreed to by the stakeholders as part of the modeling protocol. This “buffer” beyond the modeled sources is generally standard modeling practice. It is done to avoid puffs generated by the model for sources close to the boundary leaving the domain quickly and not returning to the domain and therefore not having any modeled impact. It is the understanding of BLM NSTC-AQ staff that at the time of modeling analysis, no sources on Uintah/Ouray Indian land qualified to be explicitly included in the modeling. The

existing sources would be represented by the background air quality data. In response to why sources from Wyoming were not included, see the response to section above as to why the inventory did not include sources greater than 50 km from the Class I areas. The commenter misunderstands how the adjustments to inventory sources were done. The analysis of source-receptor relationships was done only to select a limited number of inventory sources for further review. This was based on particulate matter results of previous modeling of inventory sources and the 5 Class I areas that had the highest particulate matter impacts.

Topic: Climate and Air Quality

Comment text: 9) No particulate emissions from increased traffic on existing roads were quantified or modeled.

Response: 9) The fugitive dust calculations included both resource and access roads. Inclusion of secondary non-project sources of fugitive dust was discussed during the stakeholder/protocol development meetings. It was the general opinion of the group that, due to the uncertainty/difficulty in quantifying these emissions, that they would not be included in the modeling.

Topic: Climate and Air Quality

Comment text: 10) The CALPUFF modeling did not evaluate the Preferred Alternative (Alternative III).

Response: 10) The number of wells in Alternative III is identical to Alternative IV and differs only in that development on top of the Plateau would be deferred until 80% of the area on BLM lands below the cliffs is drilled. BLM believes that this minor difference between the two Alternatives does not warrant separate modeling. This assumption is borne out in the results. Potential visibility impacts to Class I areas differ very little between Alternatives, and the differences are similarly small for the comparison of results to the NAAQS standards and PSD Increments. Therefore, the results for Alternative III are assumed to be equal to Alternative IV.

Topic: Climate and Air Quality

Comment text: 11) The CALPUFF modeling did not evaluate all Class I areas that could be affected.

Response: 11) The modeling domain and the Class I areas included in the analysis were considered and approved by the stakeholder's group, which included the FLMs (USFS, NPS) that have management responsibility for the Class I areas under consideration.

Topic: Climate and Air Quality

Comment text: 12) The Draft did not provide a cumulative assessment of impacts to visibility or other air quality related values in affected Class I areas.

Response: 12) The BLM believes that the cumulative analysis presented in RMP DEIS is adequate to meet NEPA requirements. The AQRV (visibility, acid deposition, ANC) analysis does use appropriate background values for each of the analyses. See the details of each analysis in the TSD.

Topic: Climate and Air Quality

Comment text: 13) The visibility analysis relied on an incorrect standard for defining significant degradation.

Response: 13) BLM, as one of the FLMs, uses the number of days in excess of a 1.0 deciview "Just Noticeable Change" potential visibility change as a significance threshold for its NEPA analyses. This is based on the following statement by Pitchford and Malm in their 1994 Atmospheric Environment article titled "Development and Application of a Standard Visual Index" (Vol. 28, No. 5, pp 1049-1054): "Ideally, a JNC [Just Noticeable Change] change in a scene resulting from a change in the extinction coefficient should be about a 1 or 2 dv [deciview] change in the deciview scale (i.e. a 0.1 - 0.2 fractional change in

extinction coefficient) regardless of the baseline visibility level." By using the 1.0 dv threshold, BLM has chosen to report potential significance based on the lowest value of Pitchford and Malm's range of "Just Noticeable Change."

Topic: Climate and Air Quality

Comment text: 14) The Class I analysis does not comport with federal land managers' guidance.

14) The National Park Service, U.S. Fish & Wildlife Service, and USDA-Forest Service formed the "Federal Land Managers' AQRV Work Group" (FLAG) "to achieve greater consistency in the procedures Federal Land Managers use in identifying and evaluating AQRVs (air quality related values)." Although BLM also administers mandatory federal PSD Class I areas, BLM was not invited to be one of the FLAG agencies. FLAG's fundamental principle is that new air pollutant emission sources "(PSD and those subject to new source review) should not, by themselves, significantly impede progress toward the national visibility goal." In their December 2000 final FLAG Phase I report, FLAG identified a process to analyze potential AQRV (including visibility) impacts when conducting New Source Review. Their referenced legal basis for the visibility impact analysis process was stated as: "The FLMs have visibility protection responsibility under 40 CFR §51.307 (New source review), which spells out the requirements for State Implementation Plan (SIP) visibility protection programs, as well as 40 CFR §52.27 (Protection of visibility from sources in attainment areas) and 40 CFR §52.28 (Protection of visibility from sources in non-attainment [sic] areas). These three provisions, taken together along with the SIP-approved rules, establish the visibility protection program for new and modified sources throughout the country." Appendix 2.A (Visibility Parameters) states "FLAG proposes that the relative humidity adjustment to the "dry" scattering efficiencies (unadjusted for relative humidity) for hygroscopic particles are made as follow: The preferred alternative is to apply day-by-day f(RH) adjustment factors to the analysis. For this alternative hourly relative humidity data are needed. Hourly f(RH) values should be averaged to generate a 24-hour relevant f(RH) factor. FLAG recommends, however, that if the hourly relative humidity exceeds 98%, that it be rolled back to 98%, so that there will be no f(RH) factors applied that are greater than f(98)." and their Table 2.A-1 "f(RH) values for various values of relative humidity" (un-referenced) assumes dry ammonium nitrate and ammonium sulfate light scattering efficiencies are to be multiplied by the following factors at the specified relative humidity's: 1x (no multiplier) up to 36 percent RH; 2x (doubled) at 71 percent RH; 3x (trebled) at 82 percent RH; 4x (quadrupled) at 88 percent RH; factor of 4.3x at 90 percent RH; factor of 5.3x at 91 percent RH; factor of 5.9x at 92 percent RH; factor of 7.0x at 93 percent RH; factor of 8.4x at 94 percent RH; factor of 9.8x at 95 percent RH; factor of 12.4x at 96 percent RH; factor of 15.1x at 97 percent RH; and a factor of 18.1x at 98 percent RH. FLAG "clamps" the light scattering growth factor at 18.1x for relative humidity values of 99 and 100 percent without any explanation. The growth factors were derived by Tang's ammonium sulfate growth curves smoothed between the crystallization and deliquescence points [Tang I.N., Wong W. T. and Munkelwitz H. R. (1981). The relative importance of atmospheric sulfates and nitrates in visibility reduction. Atmospheric Environment 15, 2463] which clearly show a dramatic exponential assumed light scattering efficiencies above 90 percent RH. In fact, a 99 percent RH corresponds to a growth factor of nearly 50x, and 100 percent RH would be over 4,000,000x When BLM models potential visibility impacts from a Proposed Plan (and alternatives) under NEPA using daily optically measured extinction, we will not use data observed at ambient conditions above 90 percent RH because the IMPROVE Standard Operating Procedures indicate those data are not valid (The conclusion of invalidity is easily drawn from their discussion and selection of data). We will assume either modeled or observed aerosols can increase their "dry" light scattering efficiencies by 4.3x at ambient conditions at or above 90 percent RH as a reasonable assumption. However, it is unreasonable to assume (throughout the semi-arid continental climate regimes of the West) that the visibility impact analysis procedures described by FLAG, and the just noticeable change parameter of 1.0 deciview developed by Pitchford and Malm (1993), are valid under ambient conditions at or above 90 percent RH for an entire 24-hour day. Aerosol data collected under ambient conditions at or above 90 percent RH for 24-hours are likely to be minimized due to precipitation "scrubbing," and the potential impact of modeled aerosols would be overestimated using light scattering efficiencies greater than 4.3x. Although BLM accepts these compounding biases as "reasonable" up to 90 percent RH, we will not further exaggerate these biases by using light scattering

Response:

efficiencies up to 18.1x, as suggested by the commenter.

Topic: Climate and Air Quality

Comment text: 15) The "refined" analysis of cumulative visibility impacts on Class I areas is flawed and inconsistent with standards.

Response: 15) Refined visibility analyses, using results from the same CALPUFF modeling used in the screening analysis, were performed. The refined visibility calculations were done as follows: 1. The concentrations of coarse PM, soil PM, sulfate ion, and nitrate ion, are calculated from the CALPUFF modeled daily f(RH) and extinctions for PM coarse, PM fine, sulfate and nitrate. 2. The concentrations are then used to calculate delta dv using the standard equation, using an average daily background extinction and average daily f(RH). The values for extinction are taken from the Canyonlands IMPROVE site. f(RH) values were taken from CALPUFF model output. As stated above in response to previous comments, FLAG Guidance is just that, guidance, not regulation. BLM uses FLAG methodology when we believe it is appropriate and scientifically defensible. However, BLM NSTC staff use other methods when we believe other methods will yield a more defensible result.

Topic: Climate and Air Quality

Comment text: 16) The Draft failed to disclose that significant impacts to sulfur and nitrogen deposition could occur from implementation of the plan.

Response: 16) The USDA-Forest Service (Fox, et al 1989) has identified the following total deposition (wet plus dry) thresholds below which no adverse impacts are likely: five kg/ha-yr for sulfur, and three kg/ha-yr for nitrogen." (See Fox et al, 1989) - these values actually vary by region of the US). The FLAG "Deposition Analysis Thresholds" (used as guidance when reviewing PSD Permit Applications) are based on a "natural background deposition value" (0.50 kg/ha-yr N or S "East" and 0.25 kg/ha-yr N or S "West"), adjusted by a "Variability Factor" (0.50, or cutting natural background in half) and a "Cumulative Factor" (0.04, assuming the cumulative source impact would be 25 times greater than the modeled deposition impacts). Whereas Fox identifies potential adverse impacts, FLAG is simply a screening process to eliminate those sources that are certain not to have a significant impact, so that no further analysis is required by the FS, FWS or NPS. Therefore, BLM did not use the FS DATs in this analysis.

Topic: Climate and Air Quality

Comment text: 17) The Draft failed to include an analysis of VOC emissions or its impacts on ozone concentrations.

Response: 17) VOC (HAPs) emissions from compressors and dehydrators were included in the modeling. The CALPUFF model, approved by the stakeholder group, cannot be used to predict potential future ozone concentrations.

Topic: Climate and Air Quality

Comment text: 18) The projected hazardous air pollutant concentrations were probably underestimated.

Response: 18) See response to previous comments (including #2) on the near-field modeling analysis and (including #3, 4, 6, and 8) on the far-field (CALPUFF) modeling analysis.

Topic: Climate and Air Quality

Comment text: 19) The Draft failed to discuss any mitigation measures for the predicted air impacts.

Response: 19) No significant air quality impacts were modeled, so there is no need to discuss mitigation. A cumulative analysis was conducted as part of larger air quality study.

J.D. Sturgill
P.O. Box 1500
Carbondale, CO 81623

Topic: Socioeconomics

Comment text: 2) The Draft RMPA/EIS fails to consider the economic impact of the presented alternatives and to fully consider the environmental impacts of developmental drilling operations.

Response: 2) Potential economic impacts of the Proposed Plan are considered in Section 4.4.3 of the Final.

Topic: Oil and Gas

Comment text: 3) Drilling for gas is not practicable at this time due to available technology and adverse impacts.

3) As a result of the Consultation and Coordination process with agencies such as the Colorado Department of Natural Resources, the Proposed Plan includes systematic, phased, and clustered oil and gas development within a non-contracting Federal Unit atop the Roan Plateau (Section 2.3 and Table 2.1 of the Proposed Plan/Final EIS). This approach relies heavily on advances in directional drilling

Response: technology that allow clustering to a surface density of one per 160 acres, with a minimum separation of 0.5 mile. BLM believes that this approach, combined with the extensive areas with prohibitions or restrictions on long-term ground-disturbing activities, would allow for protection of important ecological, hydrological, and recreational resource values while accommodating a reasonable level of natural gas development.

Topic: General Comment

Comment text: 4) Failure to consider the locally supported Community Alternative is a serious omission in the DEIA.

4) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were

Response: incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and table 2-1 of the Proposed Plan/Final EIS).

Gladys Boyce Tolbert
9124 Rampart Street
Denver, CO 80260-6715

Topic: Oil and Gas

Comment text: Defer all leasing on the top and cliffs until energy development can be achieved in a manner not requiring surface disturbances to the plateau top and cliffs. Protect wildlife habitat, wilderness areas, and the natural areas in the planning areas, and minimize resource damage. Most importantly, all motorized use access should be limited to developed roads and trails.

Response: Thank you for your interest and participation in the BLM land use planning process for the Roan Plateau Planning Area. The natural resource and recreation opportunity values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. In particular, mechanized travel under the Proposed Plan would be limited to designated routes throughout the Planning Area, excluding the Hubbard Mesa OHV riding area and over-snow travel by snowmobile. Protective measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

R. Glenn Vawter
8 Gamba Drive
Glenwood Springs, CO 80601

Topic: Other Minerals

Comment text: 1) The option for oil shale research and development should be left open. The Draft does not include a single reference to oil shale.

1) Sections 3.5.6.1 and 4.5.6.1 of the Draft RMPA/EIS specifically discuss the oil shale resource and its possible development, respectively. At publication of the Draft RMPA/EIS oil shale did not seem

Response: likely to be a factor during the 20-year life of the plan. Due to current geopolitical and economic factors that affect the viability of oil shale, BLM has reevaluated this resource to the extent possible in Sections 3.5.6.1 and 4.5.6 under the Proposed Plan/Final EIS.

Amanda P. Voight
6063 Robinson Street
Jupiter, FL 33458

Topic: General Comment

Comment text: 1) Either prohibit drilling on top of the plateau altogether, or at least defer it until technologies have advanced to the point that impacts would be greatly reduced.

1) BLM believes that the Proposed Plan represents a high degree of environmental protection while recovering a reasonable amount of the oil and gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum

Response: distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative.

Topic: Other Minerals

Comment text: 1) Oil shale development should remain open as an option, at least keep Anvil Points as a research and development site. The document appears to make no mention of oil shale. The option of future research, development, and production of oil shale should be left open.

1) Oil shale is discussed at Sections 3.5.6.1 and 4.5.6.1 of the Draft RMPA/EIS. These sections are brief, because at the time of the formulation of alternatives, the potential for oil shale development was considered remote during the 20-year period of analysis. BLM recognizes that recent geopolitical and

Response: economic considerations have increased interest in the development of this resource and has expanded this discussion in Sections 3.5.6.1 and 4.5.6 in the Proposed Plan/Final EIS. In summary, implementation of any of the alternatives would not adversely affect reasonably foreseeable development of other types of mineral resources, including oil shale.

Robert J. Wenzel
0235 Odin Drive
Silt, CO 81652

Topic: General Comment

Comment text: 1) BLM needs to provide information on: the overall benefit of gas production in Colorado to the nation as a whole and local citizens; the nature, magnitude, and duration of the resultant environmental damage; how long corrective actions take and who funds them; the damage surface owners are likely to

suffer and their legal protections; good and bad effects on local residents, businesses, and community infrastructure; whether drilling is being subsidized by taxpayers; lack of advance notice to citizens about massive purchases of mineral rights by oil and gas companies; why foreign-based companies are allowed to harvest their products at the expense of local surface owners and ranchers; and the lack of state or federal government leadership in ensuring the development of environmentally protective energy sources (e.g., hydrogen fuel cell).

Response: 1) Regarding substantive issues raised in the comment, BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS provide all of the information required under NEPA, FLPMA, and BLM policies to serve as a basis for the analysis and disclosure of impacts under a reasonable range of alternatives and to support the selection and implementation of a Plan Amendment.

Dooley P. Wheeler
251 McCarron Circle
Apt. 4
Rifle, CO 81650

Topic: Oil and Gas

Comment 1) Alternative III is acceptable if drilling is required to include documentation of other mineralization in **text:** case these other resources are later developed.

Response: 1) Under the Proposed Plan, development of mineral resources such as oil shale, coal, and others may be allowed (Section 2.3 and Table 2-1 in the Draft RMPA/EIS). All exploration/development activities will be subject to 43 CFR 3809 as well as the NGD/NSO or SSR/CSU constraints identified in the Proposed Plan.

Topic: General Comment

Comment 2) Hopefully, BLM is prepared to deal with radicals who want to prevent drilling on top of the plateau **text:** to protect some real or imagined endangered species.

Response: 2) The Proposed Plan, as well as the other five analyzed alternatives, includes development of the natural gas reserves in the Roan Plateau Planning Area within the multiple use context of all BLM land use decisions, including management and protection of special status species, including those listed, proposed, or candidate threatened, or endangered species.

Topic: Oil and Gas

Comment 3) Would like to know who to contact in Rifle or Parachute about visiting and observing a drilling **text:** operation.

Response: 3) BLM suggests you directly contact companies who either run operations on private lands or as lessees on public lands. The Glenwood Springs Field Office can provide contact information for the latter.

Elizabeth Whitman
718 White River Avenue
Rifle, CO 81650

Topic: Oil and Gas

Comment **text:** Don't allow gas companies to drill on the Roan Plateau.

Response: The BLM has concluded that the Transfer Act requires oil and gas leasing in NOSRs 1 and 3, consistent with multiple-use management under FLPMA. Therefore, the Proposed Plan and all of the previously analyzed alternatives (except Alternative I, No Action) included future oil and gas leasing and development of the NOSRs. The natural resource values of the Planning Area have been given special consideration within the context of multiple use as mandated by FLPMA and BLM policy. Protective

measures and management actions related to these resource values are described in Section 2.3 and reiterated throughout the impact analysis in Chapter 4 of the Proposed Plan/Final EIS.

Shawn Wilson
433 Andover Street
Kentwood, MI 49548

Topic: General Comment

Comment text: The Roan Plateau is a jewel that BLM previously found met wilderness criteria. Please protect it by not drilling (on top).

Some areas within the Roan Plateau Planning Area do meet some wilderness characteristics as defined by the Wilderness Act of 1964 (Section 3.5.8 in the Draft RMPA/EIS). The Proposed Plan emphasizes balance in managing for a variety of multiple resource uses incorporating outcome-based adaptive

Response: management, including a systematic, phased and clustered oil and gas development within a non-contracting Federal Unit (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). Although not specifically managed for wilderness characteristics, the phased and clustered development is expected to preserve most or all of these characteristics in large portions of the upper plateau.

Richard E. Woodrow
401 Yale Circle
Glenwood Springs, CO 81601

Topic: General Comment

Comment text: The time to develop the Roan Plateau is now, for economic and geopolitical reasons. We need the gas now, and the planning area was previously designated as a petroleum reserve related to oil shale. Alternatives IV and V are the only reasonable choices. Alternative III merely postpones the inevitable. It is a national resource, and the local citizens or governments should not be given too much weight.

Response: Development of oil and gas resources is a major component of the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS) as well as the five alternatives analyzed in the Draft RMPA/EIS.

Non-Confidential Website Comments

Name/Address:	Phone/Email:	Topic:	Confidential:
Ed Baker PO Box Rifle, CO 81650	General Comment		No
<p>Comment: I made extensive comments, but only what fit in the comments box were show as saved for printing or I assume what would have been submitted. this is my second attenpt. Briefly, I prefer alternative III. Specific Comments: The 50% slope limitation is ridiculous. If the pad is constructed on a 50% slope the cut and fill slopes will have to be greater than 50%. The Bureau's own recomendation is for a maximum of 2:1 or 50% for cut and fill slopes and 4:1 for topsoil embankments. Since the topsoil and fill slope will be revegetated for 20 plus years slopes greater than 4:1 will be very difficult and should be avoided. Dust control will be necessary to avoid significant effects on other multiple uses. Based on experiance around Parachute/Rifle, dust control and erosion control If the BLM does not provide the resources to monitor and enforce "conditions of approval" the environmental consequences will not be acceptable. Table ES-3 should be modified to increase the projected affects on water quality and fish and wildlife. Due to the organics and completion chemicals, mud pits should be in cut areas, fenced and netted if</p>			

	organics are present.
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Response Number:	Response Text:	Topic:
1	The lands of the Naval Oil Shale Reserves No. 1 and 3 atop and below the Roan Plateau were transferred to the Department of Interior in 1997 with specific direction to develop a resource Management Plan and enter into leases for the exploration, development, and production of petroleum resources "as soon as practicable," consistent with multiple use management. Therefore, except for Alternative I (i.e., No Action) the Proposed Plan/Final EIS and all of the previously analyzed alternatives included future oil and gas leasing and development of the NOSRs.	Oil and Gas
2	The proposed RMP manages the Planning Area to meet or exceed Land Health Standards for soils on a watershed scale.	Soils
3	Below the rim, NGD/NSO will be stipulated on slopes greater than 50% to maintain site stability and site productivity.	Soils
4	SSR/CSU stipulations will be implemented on erosive soils and slopes greater than 30%.	Soils

Comment Detail

Name/Address:	Phone/Email:	Topic:	Confidential:
Steve Black 1525 Sherman St. 5th Floor Denver, CO 80203		General Comment	No
Comment:	Please add me to your mailing and e-mail distribution list. Thank you. Steve Black		

Response Number:	Response Text:	Topic:
1	Unless you requested otherwise, your name and address is automatically entered into the Roan Plateau database mailing and distribution list.	General Comment

Name/Address:	Phone/Email:	Topic:	Confidential:
Kendall Henry 2022 Midland Ave. Glenwood Springs, CO 81601		Oil and Gas	No
Comment:	Dear Mr. Goodenow: The Roaring Fork Audubon Society finds that none of the Management alternatives cited in the Roan Plateau Draft Resource Management Plan Amendment and Environmental Impact Statement (referred to hereafter as the Draft) provide adequate protection for wildlife, fish, water and rare plants. We are concerned, as is our statewide organization, Audubon Colorado, that the plan would fragment the habitat into smaller blocks and less habitat interior than at present and animals and birds would be displaced, reducing or exterminating certain species. Specific species are detailed in a previous Audubon Colorado letter. The BLM's mission is to "sustain, the health, diversity, and productivity of public lands for the use		

and enjoyment of present and future generations", and to allow oil and gas development in this "essentially natural and mostly untrammled" area could have serious ramifications for the biodiversity there. The Draft states that impacts would be moderate to some species and may be more harmful to others and ANY negative affect is just not acceptable when only 4% of the total gas projected to be "recovered" would be from the top of the plateau. Roaring Fork Audubon has about 400 members and the majority consensus of our membership supports the Community Alternative which will not allow drilling on top of the plateau. The monetary rewards of oil and gas drilling are short-lived when compared to the huge economic value of hunting which the Colorado Division of Wildlife has valued at \$3,800,000 YEARLY. When Glenwood Springs City Council/County Commissioners asked for comments on the Draft there was overwhelming support of the Community Alternative to Save the Roan Plateau (conservatively 80%). Since President Bush has said that 51% of the popular vote has given him a mandate to continue his policies we believe that the BLM has been given a mandate to "not drill on top of the plateau." Thank you for the opportunity to comment on the Draft. Sincerely, Kendall Henry Board Member, Roaring Fork Audubon Society

**Response
Response
Number:**

Response Text:

Topic:

1 The Proposed Plan/Final EIS (Section 2.3 and Table 2-1) designates four ACECs where special management is applied to protect and prevent irreparable damage to relevant and important scenic, fisheries, wildlife, and botanical/ecological values. The Proposed Plan/Final EIS emphasizes prevention, inventory, detection, and monitoring and project actions as part of an integrated weed management program. While no areas will be managed specifically to maintain roadlessness and naturalness, protections for various resources may have the effect of maintaining wilderness character in portions of the Planning Area. The Proposed Plan/Final EIS implements appropriate management actions on a landscape basis that would result in meeting Land Health Standards with emphasis on intensive management. New routes will be established outside of the riparian zone or must meet the objectives for maintaining riparian, fishery and watershed conditions. While the Proposed Plan/Final EIS does not designate any SRMAs, the Planning Area will be managed as part of Glenwood Springs Extensive Recreation Management Area (ERMA). Hubbard Mesa will be managed as an OHV open riding area using SSR/CSU stipulation. In addition, route closures, realignment, and signage will be used as needed to protect adjacent private property. The Proposed Plan/Final EIS provides for responsible use by limiting travel to designated routes or areas throughout the Planning Area (excluding over-the-snow travel). The Proposed Plan/Final EIS designates Parachute Creek WMA to protect ecosystem integrity and function related to the Colorado River cutthroat trout and supporting factors through management actions and an SSR/CSU restriction. The Proposed Plan/Final EIS incorporates a number of specific management actions intended to better mitigate, regulate, and monitor all management actions, including livestock grazing, impacts on other natural resource values. Leasing and drilling atop the plateau will be based on 2,640-foot minimum surface separation of pads (1 per 160 acres). Lands available to lease will be subject to timing limitations on periods when construction and drilling activities are prohibited to protect important wildlife habitats. The Proposed Plan/Final EIS incorporates a number of specific management actions, as well as reclamation standards, regular monitoring requirements, and reclamation success criteria intended to reduce the area of long-term physical impacts of ground-disturbing activities, including oil and gas development, as well as encourage more successful reclamation and

Terrestrial and
Aquatic Wildlife

revegetation of these areas.

Confidential Website Comments

Comment: Asking the public to limit its comments to 500 words or less on a 600+ page, highly controversial document, is extremely problematic. We would prefer not to make an issue of it, but I would think it could make for some interesting challenges, publicly and perhaps legally. The BLM should clearly make an email address available for more detailed comments. Thanks

Responses

Response Number:	Response Text:	Topic:
1	The comment management system software and supporting server parameters required BLM to limit any individual comment submitted through the Roan Plateau project website to 500 words. However, all individuals and organizations were encouraged to submit as many individual comments as necessary to adequately detail their comments. In addition, hard copy comments of any length were received via US mail, shipping services, or in person at the Glenwood Springs Field Office.	General Comment

Comment: Table 4-38, on page 4-214 of the draft plan and EIS is missing information under Alternative V. At the Glenwood Springs public meeting on December 16, ENE staff announced that a corrected version of that tabel would be provided on the draft plan internet site. That site does now contain a link to a replacement Table 4-38, but it does not link (asking for code names not known to me). On Tuesday, December 21, ENE staff told me that this problem would be corrected by Wednesday 22. It is now Thursday morning 23, and we still cannot get into that replacement table. We sure could use it. Thank you.

Response Number:	Response Text:	Topic:
1	BLM apologizes for any difficulty is accessing the Roan Plateau project website or the replacement Table 4-38. These functions have been fixed and the website is now functioning.	General Comment

Comment: Thanks, Maureen, for your telephone call about the Roan Plateau site's link to the new Table 4-38. I am still encountering a request for "user name" and "password" each time I try to reach that link. I have had others try it from other computers in several other towns, and they hit the same block. Since you are able to get to that corrected table, I wonder if you could just facs it to me at: () Thanks again.

Response Number:	Response Text:	Topic:
1	You are welcome. The comment website functionality has been corrected and is working.	General Comment

Comment: I'd like to ask BLM and/or its contractor to confirm receipt of the comments I submitted earlier this month. Please send me an email to confirm that my comments have been received ... I received an error message when I sent "unconfidential" comments. Thank you for your help.

Response Number:	Response Text:	Topic:

1 Thank you for your concern, the Roan Plateau comment response database automatically provides a response to comments received. General Comment

Comment: I would like to receive information on the lands and parks information of their future uses and what irretrievable and irreversible commitments of resources that are present within the lands pertaining to all projects of environmental concerns in the above mentioned. I am doing personal research. I would greatly appreciate it. I would also like to commend you and your team on their hard work and enduring efforts at this present time. Sincerely,

**Response
Response
Number:**

Response Text:

Topic:

1 Please contact the Glenwood Springs Field Office to obtain the aforementioned information. General Comment

Comment: Dear land managers, The purpose of this letter is to comment on the management plan for the Roan Plateau and in particular to comment upon the alternatives put forth by the BLM and their subsequent analysis. 1. The alternatives provided by the BLM in this plan are not adequately representative of the interests of the surrounding and most directly affected communities. A final management plan must take into greater account the expressed interests of the local communities through individual comments and through elected bodies such as municipal governments and county commissioners. 2. None of the alternatives accurately represent the best management of our public lands. The final plan for the management area should better reflect community input and should include a combination of features from different alternatives while possessing at its core the protection of the top and cliffs of the Roan Plateau. 3. The analysis of each proposed alternative does not adequately include the larger context of drilling and other related activities occurring in adjacent lands and in the region as a whole. Assuming that the planning area is somehow isolated and unaffected by larger regional trends is an obvious and significant defect in the analysis put forth in this management plan. 4. The alternatives and analysis offered in this report do not adequately take into account the vital importance of tourism to the local economies and therefore underestimates the potential negative outcomes for local communities. 5. The plan fails to take fully into account the highly magnified costs drilling to obtain the portion of resources that can be accessed only by drilling at the top. By not including an alternative that prohibits drilling on the top this analysis is fundamentally flawed. Only by possessing an alternative that protects the top of the plateau from drilling activity can one clearly and accurately assess the additional impacts that would be incurred to access the small portion of the resources that cannot be obtained from the base of the cliffs. By excluding this alternative this report has eliminated the opportunity to have a just and honest comparison of alternatives for the management area. 6. Deferred drilling, though a novel idea, does not provide any substantial or long-lasting protection for land, water, or habitat. Additionally a deferral period of 16 years may be a significant underestimation bringing into question the validity of the preferred alternative. 7. Technological advance often needs an impetus. Limiting drilling to the base of the cliffs will spur development of less harmful practices and more efficient directional drilling technologies whereas allowing drilling on the top will provide little incentives for the industry to improve its stewardship practices. 8. High standards of protection should be applied to water resources, water quality, and wild and scenic waterways. 9. Requirements for best practices should be strengthened and binding. 10. Strict protections for preserving recreation opportunities including hunting should be adopted. 11. Motorized and mechanized travel should be limited to designated routes only in order to better protect the varied resources of the area. 12. Particular care should be taken to protect special status species such as the Cutthroat Trout.

**Response
Response
Number:**

Response Text:

Topic:

1 The lands of the Naval Oil Shale Reserves No. 1 and 3 atop and below the Roan Plateau were transferred to the Department of Interior in 1997 with Oil and Gas

specific direction to develop a Resource Management Plan and enter into leases for the exploration, development, and production of petroleum resources "as soon as practicable," consistent with multiple use management. Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Section 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details.

- 2 The "No Action" Alternative contains analysis for not drilling atop the Roan. Oil and Gas
- 3 Much more detail regarding some of the issues raised in your comments may be found in the responses to written comments from elected officials, Cooperating Agencies, interest groups, and other members of the public. They are organized by topic area. General Comment

Comment: Proliferation of well pads and access roads will adversely affect the animal populations found on top of the plateau. Large animals will avoid any disturbing elements introduced into the environment. In particular the vehicles driving on the access roads will drive the game away. Acres of habitat will be scraped down to dirt and lost. The ambiance will be lost to hunters, recreationists, bikers and people who value and use the Roan plateau for other purposes besides hydrocarbon production. As a general rule I have found that a gas producing field degrades the alternative uses which a tract of government owned land should be used for. Preservation of the wilderness characteristics of land such as this is considerably more important than the small amount of energy which can be extracted. There should be more to utilization of government land than simply energy extraction. Too much time and effort has been put into environmental protection over the last few decades to sacrifice it to the petroleum companies.

Response

Response Number:	Response Text:	Topic:
1	The lands of the Naval Oil Shale Reserves No. 1 and 3 atop and below the Roan Plateau were transferred to the Department of Interior in 1997 with specific direction to develop a Resource Management Plan and enter into leases for the exploration, development, and production of petroleum resources "as soon as practicable," consistent with multiple use management. Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Section 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details.	Oil and Gas
2	While no areas will be managed specifically to maintain roadlessness and naturalness, numerous and extensive protections for various resources, in combination with the phased and clustered development approach for the area atop the plateau, are expected to maintain some wilderness characteristics in substantial portions of the Planning Area.	Terrestrial and Aquatic Wildlife
3	Much more detail regarding some of the issues raised in your comments may be found in the responses to written comments from elected officials, Cooperating Agencies, interest groups, and other members of the public. They are organized by topic area.	General Comment

Comment: Gas drilling will affect the hydrology of the plateau top. The new roads affect drainage patterns and contribute to sedimentation. Other gas drilling operations have depleted aquifers and affected natural springs. Where will the water used in drilling operations come from? Any disruption in current surface flows must adversely affect the streams which originate on the top of the plateau.

Response

Response Number:	Response Text:	Topic:
1	Regarding wells and pipelines within 200 meters of a stream, such would not be permitted under any of the alternatives considered in the Draft RMPA/EIS, or in the Proposed Plan/Final EIS. On the contrary, occupied trout streams, upslope watershed areas, and upstream or tributary reaches critical to water quality would be given special management emphasis, including extensive areas closed to long-term ground disturbing activities. For example, refer to Map 3 (for the Preferred Alternative) in the Draft RMPA/EIS and to Map 2 in the Proposed Plan/Final EIS. Also see Tables 2-1 and 2-3.	Water Resources
2	Much more detail regarding some of the issues raised in your comments may be found in the responses to written comments from elected officials, Cooperating Agencies, interest groups, and other members of the public. They are organized by topic area.	General Comment

Comment: The future use of the land for oil shale production should at least be mentioned, if not thoroughly analyzed. It is impossible at the present time to define exactly how development will be accomplished. Nevertheless the excavation of quantities of shale will be required. Where will the tailings be deposited. How large will the volume of this material be? Where will the production plant be located? If the shale remains in place during retorting what will be the effect on the land surface? Is it compatible with the current surface environment, or will it become a natural sacrifice area such as existing hard rock mining sites that were mined two centuries ago?

Responses

Response Number:	Response Text:	Topic:
1	Section 3.5.6.1 in the Proposed Plan/Final EIS expands on the discussion of oil shale development. Development of oil shale in areas with a Federal mineral estate would be regulated by BLM and subject to the same restrictions/stipulations regarding surface activities. Since BLM does not believe that oil shale development is realistic in the Planning Area during the 20-year period of analysis, the cumulative impacts would be speculative and hence not considered in the Proposed Plan/Final EIS. Moreover, the type and extent of cumulative impacts would depend on the process used and the scale of development. If oil shale development does arise as a desired use during the planning period, impacts would be considered in a separate NEPA document prepared in response to specific proposals.	Other Minerals
2		Other Minerals

Comment: The air quality impact should be determined. Oil and gas activity south of the Roan Plateau in the San Juan Basin has deteriorated as a result of the very large O&G production area there. If Roan Plateau emissions are added to the rest of the area that will ultimately be put out for lease, what will be the air quality impact on western Colorado?

Response Number:	Response Text:	Topic:
1	The air quality impact methodology and results are described in considerable detail in Section 4.2.5.	Climate and Air Quality

Comment: 1. We recommend not drilling ANYWHERE on the top sections or sides of the Roan Plateau due

to the amount of environmental damage that will be incurred, but instead recommend drilling around the plateau base where there is little slope AND where there is ready access possible for drilling equipment. With this approach:

- Drainage runoff can be much more controlled on relatively flat localities,
- Access roads can be more easily constructed on relatively flat localities,
- Slant- or directional-drilling can be used from specifically selected areas to reach locations directly under the top of the plateau,

2. The whole issue of reviewing drilling on top of the Roan Plateau hinges on the concept that we must protect CERTAIN public areas due to their unique natural beauty. Coupling this concept with an acknowledgement of the Roan Plateau's environmental fragility, makes drilling on top totally untenable. Allowing gas development here - even as a secondary use of the land - is irresponsible and shortsighted, especially when considering the whole issue of how our nation should be addressing energy problems, and in consideration of our heritage of SPECIFICALLY BEAUTIFUL PROPERTIES.

3. The Roan Plateau contains some 127,000 total acres, including some 53,500 which are privately held, and 73,602 which are public lands - including 1) about 34,000 acres leased and potentially drilled , and 2) about 40,000 acres of undisturbed land. The public can do nothing to prevent drilling, by owners of the mineral estate, on lands privately held. Clearly, then, IF there is going to be any drilling on the top section of the plateau, we would want it to be on private property, with an understanding there will be a shared use of that land with the current landowners.

4. We also recommend locating drilling pads to allow maximizing the number of wellheads per pad. Due to the depths at which natural gas is found in the Grand Valley vicinity, we'd anticipate that, with good prior selections, drillers might be able to locate from 8 – 12 wellheads on each pad.

5. In prior BLM lease sales, the Environmental Protection Agency, National Park Service and U.S. Forest Service have voiced grave concerns about the lack of air quality regulations, and monitoring or mitigations to reduce effects on water and wildlife from acid rain. Any allowance for drilling in the BLM areas of the Roan Plateau must incorporate air quality regulations to prevent air pollution and adhere to visibility guidelines, TO MEET FEDERAL AIR QUALITY STANDARDS OF THE CLEAN AIR ACT AND OTHER FEDERAL LAWS, AND BE AT LEAST AS STRINGENT AS THE MOST RESTRICTIVE STATE STANDARDS, as the Roan Plateau and some of its vicinity is potentially a wilderness area.

6. With any / all permitted drilling, we recommend the BLM request gas companies to help purchase some of the air quality monitors to reduce direct costs to the general public.

7. In past BLM lease sales, the EPA contended the BLM's prior environmental review did not "adequately link the modeled impacts, which are clearly above regulatory criteria, with what BLM proposes that it would do or it would recommend others do to mitigate impacts." Hence, we request the BLM adequately link modeled impacts, using data from current site operations, with its proposals for mitigating impacts in order to remain within regulatory criteria. Specifically, we request using actual data on nitrogen oxide pollution.

8. We request the BLM, through its parent operation at the Interior Department, to require the state to regulate flaring, the open burning of impure natural gas, which releases plumes of pollutants into the air. The requirement should also control flaring to reduce the likelihood of accidental fires in this very dry area.

9. Did the BLM consult with Native Americans on Roan Plateau drilling?

10. Using the example of drilling allowed in other areas of the state, specifically the San Juan Basin, we question whether the BLM will be able to manage ongoing enforcement problems associated with gas drilling in this area, including impacts to a. soil and range b. water c. air d. wildlife

11. What cultural sites are on top of the Roan?

12. What new data on wildlife and air was just released to the public?

13. The BLM created a program in 1999 to manage natural gas drilling on public lands in the Glenwood Springs area which took a strong position to protect wildlife habitat, especially in areas that mule deer need for food and shelter in the winter. The proposed plan, item #3 weakens protections of the mule deer winter range as compared with the earlier 1999 program. We recommend the BLM provide the protection afforded in 1999 – at a time when wildlife is facing more and more stress with mankind's encroachment into wild areas.

14. Please investigate extensive use of both slant and directional drilling around the base of plateau IF and/or WHEN the leases are auctioned off.

**Response
Response
Number:**

Response Text:

Topic:

1 and 2	<p>1 and 2) BLM believes that the Proposed Plan represents a high degree of environmental protection while accommodating some recovery of the underlying natural gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Additionally, the Proposed Plan incorporates a number of special management designations and protective restrictions previously limited to the environmentally most protective alternative. Looking at the BLM portion of the Planning Area as a whole, the Proposed Plan would have fewer pads and miles of access roads than any alternative, including No Action—and hence smaller areas of surface disturbance—but with production of natural gas comparable to the most intensive development scenario.</p>	
3	<p>3) The BLM has concluded that the Transfer Act requires oil and gas leasing in NOSRs 1 and 3, consistent with multiple-use management under FLPMA. Therefore, the Proposed Plan and all of the previously analyzed alternatives (except Alternative I, No Action) included future oil and gas leasing and development of the NOSRs.</p>	Oil and Gas
4	<p>4) Please see response to Comments #1 and 2.</p>	Climate and Air Quality
5	<p>5) Under the Proposed Plan/Final EIS, and all five previously analyzed alternatives, all multiple-use activities included in the Roan Plateau Resource Management Plan would be conducted to be in compliance with all State and Federal air and water quality standards, as well as any other applicable local standards (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS).</p>	Oil and Gas
6	<p>6) Please see the response to Comment #5.</p>	Oil and Gas
7	<p>7) Please refer to Section 4.2.5 of the Proposed Plan/Final EIS for specific parameters of the air quality model used to analyze impacts throughout Chapter 4.</p>	Climate and Air Quality
8	<p>8) Please see response to Comment #5.</p>	Oil and Gas
9	<p>9) Please see Chapter 6 of the Proposed Plan/Final EIS for a complete description of all consultation and coordination activities undertaken to support construction of the Roan Plateau RMPA.</p>	General Comment
10	<p>10) The Proposed Plan/Final EIS includes a discussion of required monitoring activities to include enforcement (to ensure that development and other land uses conform to the lease or permit terms and the conditions of approval), reclamation success (including how it relates to restrictions on the amount of surface allowed to be disturbed at any one time atop the plateau [i.e., 320 acres]), and vegetation and range conditions (because of their importance to soil, water quality, wildlife, and livestock) and wildlife (in cooperation with the Colorado Division of Wildlife). No air quality monitoring is proposed, because the impact analysis projects impacts well below any risk level to human health and the environment.</p>	General Comment
11	<p>11) Cultural resource sites throughout the Planning Area are described in Section 3.4.2 in the Draft RMPA/EIS.</p>	Cultural Resources
12	<p>12) It is not clear what data this comment references. As much as possible, data for resources described in Chapter 3 and used in the impact analysis of Chapter 4 of both the Draft RMPA/EIS and Proposed Plan/Final EIS are as</p>	General Comment

- current as was possible to obtain.
- 13) The Proposed Plan/Final EIS reinstates the Wildlife Security Areas atop the plateau, as well as enlarges the same areas below the rim, both of which were identified and allocated as such in the 1999 FSEIS but inadvertently omitted, or reduced in size, from the five alternatives considered in the Draft RMPA/EIS, respectively. Terrestrial and Aquatic Wildlife
- 14) Please see response to Comments #1 and 2. Oil and Gas

Comment: Please reconsider what you are planning on doing. Look I supported Ken Salazar and gov. Owens. Now wake up and stop this un necessary abuse of this special area. Extinction is forever!!!!

Responses

Response Number:	Response Text:	Topic:
1	The natural resources in the Roan Plateau Planning Area have been carefully considered within the multiple use context of all BLM land use decisions.	General Comment

Comment: Dear BLM – As a Colorado native, and having lived on the Western Slope for the last few years, I am fully aware of the role that natural resource extraction plays in our local economies and communities. I am also fully aware that protected wildlands and are an integral part of sustaining our local communities over the long term. It is in this spirit that I join the vast majority of Western Slope local governments, newspapers, and citizens in OPPOSING drilling on top of Roan Plateau. Instead, I support the Community Alternative, a platform the offers the truest form of balance between gas development and the protection of irreplaceable lands. It is my hope that, in its Roan Plateau RMP, the BLM will support all the provisions in the Community Alternative, including such aspects as:

- Prohibiting leasing on the top and cliffs of the Roan Plateau – or deferring all leasing on the top and cliffs until energy development can be achieved through technologies that will not require surface disturbance – thus maintaining that public land for uses other than oil and gas development.
- Safeguarding habitat for wildlife and for rare and sensitive plants and plant communities throughout the Planning Area.
- Closing the top and cliffs and other sensitive lands and habitats to future oil shale leasing, including for research and development purposes.
- Designating two special recreation management areas, one above and one below the rim, and manage these areas to provide and maintain the opportunities these areas provide.
- Mandating the use of Best Management Practices that can evolve as technologies advance.
- Ensuring that local communities are given opportunity to provide input for any leasing, drilling permits, and other development projects on the public lands in the Planning Area.

Most of my previous points here focus on resource extraction and the need to protect biological resources for their own sake. However, I also have a great interest in maintaining low-impact, quiet use recreational activities on the top of the plateau such as hiking and horseback riding. In order to allow these opportunities to continue, the BLM should ensure that motorized vehicles stay on marked, designated trails and roads only. Thank you for the work you are doing on the Roan Plateau RMP, and for considering my comments. Sincerely

Response Number:	Response Text:	Topic:
1	The "Community Alternative" is not a BLM alternative developed and analyzed in the Draft RMPA/EIS. The various components of this "alternative" were carefully considered within the multiple use context of BLM land use decisions.	General Comment
2	The natural resources in the Roan Plateau Planning Area will be carefully considered within the multiple use context of all BLM land use decisions.	General Comment
3	Thank you for your interest and participation in the BLM land use planning	General Comment

CHAPTER 6 ▪ CONSULTATION AND COORDINATION

process for the Roan Plateau Planning Area. Your comment has been noted and considered in the development of the Proposed Plan/Final EIS.

Comment: Could you please forward me a copy of the following references cited in Section 4.2.5 (references to air quality technical documentation written by Trinity Consultants): Trinity 2004: Air Quality Impact Assessment Trinity 2004: Air Quality Technical Support Document (TSD) the CD-ROM (Appendix F) of the TSD I have already requested a copy of the DEIS on CD-ROM, but I was unsure if the CD would have the technical documents I requested above. In addition to this information, I am most concerned with understanding the details of your PM10 and PM2.5 modeling. Why did you use different receptor grids for the road vs. all source modeling? What kind of controls are you implementing for fugitive dust control and how will you enforce these controls? Finally, how did you generate fugitive dust emissions? If you used AP-42, what were your assumptions (soil moisture content and silt content). I have seen many environmental assessments/EIS make gross under-predictions in the past based on your emission projection methodology. Thanks for your attention and quick response. I request confidentiality in regards to my name, address, and phone number.

Responses

Response Number:	Response Text:	Topic:
1	Please contact the Glenwood Springs Field Office to obtain the aforementioned references.	Climate and Air Quality

Comment: This comment regards the Roan Plateau I have been going to the Longridge area since 1982 and have been over virtually all public areas west of the JQS that drain into Northwater/Trapper and Eastfork drainages I have taken my kids and friends into the very bottoms or these drainages to the point that they run over falls. Over the past months I have read about the pristine nature of the area and agree. I do however have some disagreement with the notion that gas drilling will damage and irreparably destroy the area. I have a few suggestions that should be considered in your final plans. 1. Look at the topo map of the area in question. Most of the area below the rim on the outer boundaries is a 1000' drop from the top or at least a very steep grade below 500' forbid drilling on vertical cliffs or slopes less than 3to1 in a certain elevation range. 2. On the interior do not allow drilling past 1/4 mile from center line of the highest elevation of the ridge and impose a slope and elevation limit in addition. 3. Most important to me and what I would like to see as a model to all gas and mineral extraction in the west would be an agreement with the federal or state agencies and gas and mineral owners allowing easements or preferably leases to allow the public to pass over and use the surface of these properties for the public good in the same way that the adjoining public lands. This would reduce the impact of public use on present lands by including more accessible acres thus reducing the impact and conflict with extraction procedures. In closing I would like to stress and hope that those planning the multi use intent of our public lands would look at the public and private/oil company land and realize the strong position they have as far as getting the gas companies to agree to some sort of compromise as far as public access. The private lands on and around the Roan will be developed and the public lands will surely follow, the question is will the public gain or lose in the final plan. Jeff Tonder PS I understand that the east fork is under consideration for wilderness status. If you go there and pay attention you will see that there has been a road that ran down the bottom above the falls and probably led all the way to the valley floor. A much more pristine creek lies to the north with the most beautiful and remote section lying on gas company land.

Response Number:	Response Text:	Topic:
1	The proposed RMP includes leasing and drilling atop the plateau as part of a federal unit, with lease restrictions on surface density and phasing of development. Consistent with development on ridges, pads would be located on slopes of 20% or less. The action will provide for non-motorized, mechanized, and motorized travel as opportunities allow. Travel in areas	General Comment

affected by oil and gas development, or other uses, may be limited, restricted, or closed to resolve conflicts, provide for public safety, and provide for orderly oil and gas operations. New routes associated with oil and gas or other uses will be designated administrative access only, unless specific objectives for other resources (e.g., recreational travel routes or access to recreational sites) are present that warrant other designations on a case-by-case basis.

Comment: 1) We have been led to believe the Transfer Act required the letting of leases on the Roan Plateau. The Transfer Act does NOT require the letting of leases for either oil or gas. The Act specifically refers to the letting of leases for petroleum development as soon as practicable. There is no mention of letting leases for gas development. Further, natural gas is not petroleum. 2) Even if drilling is to occur is it not practicable at this time. The DEIS states there are challenges to drilling on the Plateau that have not yet been overcome. Technology is not yet sufficiently developed to warrant the letting of leases for drilling on the Plateau. 3) It is not practicable for the BLM to let leases anywhere until the ability to conduct proper oversight operations is developed. The BLM's Grand Junction and Glenwood Springs offices have only three inspectors covering 1,831 active wells. From 1999 to 2003 they found 1,783 incidents of non-compliance but handed out no fines or penalties. Oversight procedures must be fully in place to protect the environment, protect the public, and to avoid giving the developers carte blanche. 4) I support the Community Alternative with the stipulations mentioned above. It was initially endorsed by every jurisdiction in Garfield County and the BLM should have included it in the DEIS

Response Response Number:	Response Text:	Topic:
1	The lands of the Naval Oil Shale Reserves No. 1 and 3 atop and below the Roan Plateau were transferred to the Department of Interior in 1997 with specific direction to develop a Resource Management Plan and enter into leases for the exploration, development, and production of petroleum resources "as soon as practicable," consistent with multiple use management. Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Section 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details.	Oil and Gas
2	The lands of the Naval Oil Shale Reserves No. 1 and 3 atop and below the Roan Plateau were transferred to the Department of Interior in 1997 with specific direction to develop a Resource Management Plan and enter into leases for the exploration, development, and production of petroleum resources "as soon as practicable," consistent with multiple use management. Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Section 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details.	Oil and Gas
3	1) The BLM has concluded that the Transfer Act requires oil and gas leasing in NOSRs 1 and 3, consistent with multiple-use management under FLPMA. Therefore, the Proposed Plan and all of the previously analyzed alternatives (except Alternative I, No Action) included future oil and gas leasing and development of the NOSRs.	Oil and Gas
4	Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments.	General Comment

- 5 Many of the basic components of the "Community Alternative" were incorporated in various combinations into the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan/Final EIS (Section 2.3 and Table 2-1). For additional information regarding the "Community Alternative", please refer to the response to Congressman Salazar's comments. General Comment
- 6 2) BLM believes that the Proposed Plan represents a high degree of environmental protection while accommodating some recovery of the underlying natural gas resource. Specifically, the Proposed Plan would require phased and clustered development on top of the plateau, with a focus on developing along ridgetops and out of the environmentally more sensitive stream valleys. Through a reliance on directional drilling, up to seventeen wells would be collocated on a single pad, with a minimum distance of 0.5 mile between pads. Compared to the No Action alternative—which would allow some drilling on top in areas not included within the transferred Naval Oil Shale Reserves—the Proposed Plan is assumed to result in only six more well pads (thirteen versus seven) but 200 more wells. The effect would be much greater gas production but with a relatively modest increase in environmental impacts. Oil and Gas
- 7 3) The Proposed Plan/Final EIS includes an emphasis on monitoring enforcement (to ensure that development and other land uses conform to the lease or permit terms and the conditions of approval), reclamation success (including how it relates to restrictions on the amount of surface allowed to be disturbed at any one time atop the plateau [i.e., 320 acres]), and vegetation and range conditions (because of their importance to soil, water quality, wildlife, and livestock), and wildlife management. Oil and Gas
- 8 4) The "Community Alternative" was not an alternative developed and analyzed in the Draft RMPA/EIS. However, many of the basic components of the "Community Alternative" were incorporated in various combinations in the five alternatives analyzed in the Draft RMPA/EIS. Many of these components are also reflected in the Proposed Plan (Section 2.3 and Table 2-1 in the Proposed Plan/Final EIS). General

Comment: April 10, 2005 Bureau of Land Management Glenwood Springs Field Office P.O. Box 1009 Glenwood Springs, CO 81602 Attn: Greg Goodenow RE: Roan Plateau Comments Dear Mr. Goodenow: As a concerned Garfield County resident, I am compelled to comment about the Draft Roan Plateau Resource Management Plan Amendment/Draft Environmental Impact Statement (RMPA/DEIS) which was released in November 2004. Other groups have found fault with many aspects of this very large and sometimes contradictory document. I will leave it to them to question if the RMPA /DEIS document stands up to accepted biological research rigor and follows key federal/state legal statutes such as the Clean Water Act and Clean Air Act. I echo their findings that wording such as "No Ground Disturbance," "where feasible and appropriate" and other similar language in the RMPA not only is misleading, but vague and subjective. Objective criteria and standards are missing in the RMPA and must be a part of this document. Having thoroughly researched the subject, I am quite familiar with the arguments for and against drilling on the Roan Plateau. I must tell you I am not in favor drilling on top of the Roan Plateau nor am I in favor of any of the 5 alternatives. According to BLM figures, 86% of the gas reserve likely to be developed in the Planning Area is accessible without drilling on top of the Plateau. While technological advances are occurring, there is still and will always be considerable habitat destruction and irreversible damage created by gas pad site development, increased heavy equipment and truck traffic. The report minimally and inadequately addresses noxious weed control, a very real and direct consequence of surface disturbance. Given the unique and complex nature of the Roan Plateau habitat, I do not feel the long-term negative impacts are worth the 14%

of gas retrievable by drilling from the top. Very bluntly, I do not believe the current attitudes of the gas companies nor the current management of the oil and gas industry by the BLM in Garfield County is acceptable. I do not trust the BLM's ability nor commitment to enforce the already vague and therefore subjective restrictions that are listed in the RMPA. Let me give you two examples: While gas-producing companies are well aware of seasonal closures, they routinely start the drilling process just prior to the closure dates knowing they cannot meet the seasonal closure deadline. They then ask for an extension from the BLM, citing "public safety reasons" and the BLM easily grants the extension. Drilling operations continue well into the closure period. This was most recently documented in Mamm Creek in 2004 and reported by the Glenwood Springs Post Independent. Another disturbing trend occurs when a production company secures a lease with seasonal closure restrictions and begins mapping their drilling timelines. Many times companies will immediately make an argument to the BLM that these restrictions be lifted. The lifting of these restrictions by the BLM is more routine than the exception and is a blatant disregard for the wildlife and habitat protections put into place and agreed to by the companies at the time the lease was signed. It seems to me that if the BLM is already undermining many of the wildlife and habitat protection processes already in place in Garfield County in favor of oil and gas drilling, what confidence do I have that the agency will hold true to the habitat and wildlife protections it professes for the Roan Plateau which holds even more critical wildlife habitat, undisturbed acreage, unpolluted rivers and streams? Thank you for the opportunity to comment on the Draft Roan Plateau Resource Management Plan Amendment. Kind regards

Response

Response Number:	Response Text:	Topic:
1	1) Regarding substantive issues raised in the comment, BLM believes that the Draft RMPA/EIS and Proposed Plan/Final EIS provide all of the information required under NEPA, FLPMA, and BLM policies to serve as a basis for the analysis and disclosure of impacts under a reasonable range of alternatives and to support the selection and implementation of a Plan Amendment.	General Comment
2	2) BLM believes that the description of weed monitoring and management was adequate in the Draft RMPA/EIS (Sections 4.3.1 and 4.5.4). The Proposed Plan/Final EIS would emphasize implementation of an integrated weed management program (which included mechanical, biological, and chemical methods) to deter and control noxious weeds. This would include promoting healthy native plant communities as well as prevention, inventory, detection, monitoring, and specific project and control actions.	Upland Vegetation and Riparian/Wetland Areas
3	The lands of the Naval Oil Shale Reserves No. 1 and 3 atop and below the Roan Plateau were transferred to the Department of Interior in 1997 with specific direction to develop a Resource Management Plan and enter into leases for the exploration, development, and production of petroleum resources "as soon as practicable," consistent with multiple use management. Measures to conserve and/or protect special and unique natural and scenic resources have been incorporated into the Proposed Plan. Refer to Section 2.3 and Chapter 4 of the Proposed Plan/Final EIS for details.	Oil and Gas
4	Much more detail regarding some of the issues raised in your comments may be found in the responses to written comments from elected officials, Cooperating Agencies, interest groups, and other members of the public. They are organized by topic area.	General Comment