

Director's Protest Resolution Report

**Colorado River Valley
Resource Management Plan
& Final Environmental
Impact Statement**

June 12, 2015



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Reader's Guide

How do I read the Report?

The Director's Protest Resolution Report is divided into sections, each with a topic heading, excerpts from individual protest letters, a summary statement (as necessary), and the Bureau of Land Management's (BLM) response to the summary statement.

Report Snapshot

Issue Topics and Responses
NEPA

Topic heading

Submission number

Issue Number: PP-CA-ESD-08-0020-10

Protest issue number

Organization: The Forest Initiative

Protesting organization

Protester: John Smith

Protester's name

Issue Excerpt Text:

Direct quote taken from the submission

Rather than analyze these potential impacts, as required by NEPA, BLM postpones analysis of renewable energy development projects to a future case-by-case analysis.

Summary

General statement summarizing the issue excerpts (optional).

There is inadequate NEPA analysis in the PRMP/FEIS for renewable energy projects.

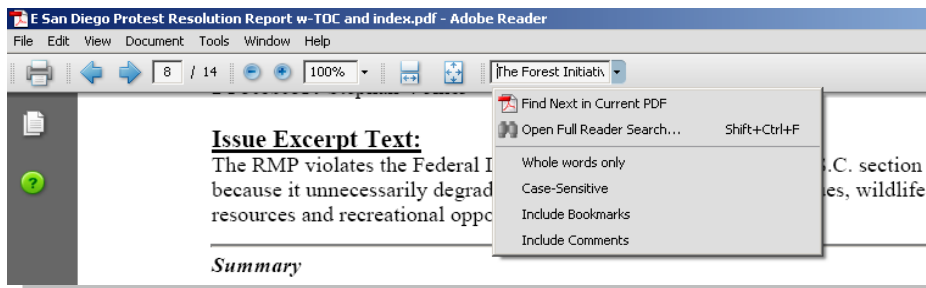
Response

BLM's response to the summary statement or issue excerpt if there is no summary.

Specific renewable energy projects are implementation-level decisions rather than RMP-level decisions. Upon receipt of an application for a renewable energy project, the BLM would require a

How do I find my Protest Issues and Responses?

1. Find your submission number on the protesting party index which is organized alphabetically by protester's last name.
2. In Adobe Reader search the report for your name, organization or submission number (do not include the protest issue number). Key word or topic searches may also be useful.



List of Commonly Used Acronyms

ACEC	Area of Critical Environmental Concern	IB	Information Bulletin
BA	Biological Assessment	IM	Instruction Memorandum
BLM	Bureau of Land Management	KOP	Key Observation Points
BMP	Best Management Practice	LRMP	Land and Resource Management Plan
BO	Biological Opinion	MOU	Memorandum of Understanding
CAA	Clean Air Act	NEPA	National Environmental Policy Act of 1969
CEQ	Council on Environmental Quality	NHPA	National Historic Preservation Act of 1966, as amended
CFR	Code of Federal Regulations	NOA	Notice of Availability
COA	Condition of Approval	NOI	Notice of Intent
CSP	Concentrated Solar Power	NRHP	National Register of Historic Places
CSU	Controlled Surface Use	NSO	No Surface Occupancy
CWA	Clean Water Act	NTT	National Technical Team
DEIS	Draft Environmental Impact Statement	OHV	Off-Highway Vehicle (has also been referred to as ORV, Off Road Vehicles)
DM	Departmental Manual (Department of the Interior)	ORV	Outstandingly Remarkable Value
DOI	Department of the Interior	PA	Preliminary Assessment
EA	Environmental Assessment	PPA	Power Purchase Agreement
EIR	Environmental Impact Report	RFDS	Reasonably Foreseeable Development Scenario
EIS	Environmental Impact Statement	RMP	Resource Management Plan
EO	Executive Order	ROD	Record of Decision
EPA	Environmental Protection Agency	ROW	Right-of-Way
ESA	Endangered Species Act	SO	State Office (BLM)
FEIS	Final Environmental Impact Statement	T&E	Threatened and Endangered
FEIS	Final Environmental Impact Statement	USC	United States Code
FLPMA	Federal Land Policy and Management Act of 1976	USGS	U.S. Geological Survey
FO	Field Office (BLM)	VRM	Visual Resource Management
FWS	U.S. Fish and Wildlife Service	WA	Wilderness Area
GIS	Geographic Information Systems	WSA	Wilderness Study Area
HRV	Historic Range of Variability	WSR	Wild and Scenic River(s)

Protesting Party Index

Protester	Organization	Submission Number	Determination
Dudley Fecht	Private party	PP-CO-CRV-14-01	Denied – Issues and Comments
Donald James	Private party	PP-CO-CRV-14-02	Denied – Issues and Comments
Marjorie Perry & William E.L. Fales	Cold Mountain Ranch	PP-CO-CRV-14-03	Dismissed – Not Germane
Mike Hawkins	Private party	PP-CO-CRV-14-04	Denied – Issues and Comments
Mike Pritchard	Roaring Fork Mountain Bike Association	PP-CO-CRV-14-05	Dismissed – Not Germane
Kathleen Sgamma, Claire Moseley	Western Energy Alliance, Public Lands Advocacy	PP-CO-CRV-14-06 and 06a	Denied – Issues and Comments
Jason Oates	Encana Oil & Gas	PP-CO-CRV-14-07	Denied – Issues and Comments
Spencer Ball	Rocky Mountain Sport Riders	PP-CO-CRV-14-08	Dismissed – Not Germane
Ken Neubecker	American Rivers	PP-CO-CRV-14-09	Dismissed – Not Germane
Jacque Whitsitt	Town of Basalt	PP-CO-CRV-14-10	Dismissed – Not Germane
Scott Jones, Don Riggle, Randall Miller	Colorado Off Highway Vehicle Coalition, Trails Preservation Alliance, Colorado Snowmobile Association	PP-CO-CRV-14-11, 11a and 11b	Denied – Issues and Comments
Kyle Tisdell & Tom Singer, Eric Huber, Rein van West, Peter Hart, and Amy Mall	WELC, Sierra Club, Western Colorado Congress, Wilderness Workshop, and NRDC	PP-CO-CRV-14-12, 12a, 12b, 12c and 12d	Denied – Issues and Comments
Ellen Sassano	Pitkin County	PP-CO-CRV-14-13	Dismissed – Not Germane
Nada Culver, Eric	The Wilderness Society, Sierra	PP-CO-CRV-14-14,	Denied – Issues

Huber, Peter Hart, Luke Schafer and Megan Mueller	Club, Wilderness Workshop, Conservation Colorado, and Rocky Mountain Wild	14a, 14b, 14c and 14d	and Comments
Bret Sumner, Theresa Saur	Beatty & Wozniak on behalf of Bill Barrett Corporation	PP-CO-CRV-14-15	Denied – Issues and Comments
Chad Odegard	WPX Energy	PP-CO-CRV-14-16	Denied – Issues and Comments
William Sparks, Malinda Morain	Beatty & Wozniak on behalf of Dejour Energy	PP-CO-CRV-14-17	Denied – Issues and Comments
Ted Colvin	Colvin Construction	PP-CO-CRV-14-18	Dismissed – Not Received in Time
Zachary Harsh	Private Party	PP-CO-CRV-14-19	Dismissed – Not Received in Time

Issue Topics and Responses

Clean Air Act

Issue Number: PP-CO-CRV-14-06-2

Organization: Western Energy Alliance,
Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: We are also aware that NEPA directs the agency to "use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment..." However, we protest this purported justification because it ignores the fact that BLM does not have direct authority over air quality or air emissions pursuant to the Clean Air Act ("CAA"). 42 U.S.C. §§ 7401 et seq. Under the express terms of the CAA, only the Environmental Protection Agency (EPA) has the authority to regulate air emissions.

Issue Number: PP-CO-CRV-14-06-3

Organization: Western Energy Alliance,
Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: In Colorado, the Colorado Department of Public Health and Environment (CDPHE) has been delegated by EPA to regulate air emissions and visibility. In addition to CDPHE 2008a Air Quality Control Commission Regulations cited in the DEIS, the CDPHE, Air Quality Control Division, also issued Regulation No. 7, CCR 1001-9, which further controls air emissions from oil and gas operations statewide. Of specific significance is that the CAA explicitly restricts the authority of land

management agencies (i.e., BLM) to determining whether emissions from a "major emitting facility will have an adverse impact" on areas designated as Class I. In the FEIS, BLM fails to acknowledge that oil and gas facilities have not been classified as major emitting facilities and that the agency has no corresponding jurisdiction or authority to regulate oil and gas emissions as proposed. Moreover, CDPHE is correspondingly responsible for regulating visibility and regional haze through its State Implementation Plan (SIP). While BLM is able to participate in the development of the SIP, the regulatory authority clearly rests with CDPHE and not BLM. Consequently, all proposed management actions relating to air quality and visibility are unequivocally outside the jurisdiction of BLM and must be removed in their entirety from the PRMP and FEIS.

Issue Number: PP-CO-CRV-14-06-4

Organization: Western Energy Alliance,
Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: With respect to potential visibility impacts, BLM's authority is also limited by the CAA, which specifies that a federal land manager's authority is distinctly limited to considering whether a "proposed major emitting facility will have an adverse impact" on visibility within designated Class I areas. 42 U.S.C. § 7475(d)(2)(B). Oil and gas operations do not meet the definition of a major emitting facility. Therefore, under the CAA, the regulation of potential impacts to visibility and authority over air quality lies solely with the CDPHE. 42 U.S.C. § 7407(a).

Issue Number: PP-CO-CRV-14-06-5
Organization: Western Energy Alliance,
Public Lands Advocacy
Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: The goal of preventing impairment of visibility in Class I areas must be attained through the regional haze state implementation plans ("SIPs"). 42 U.S.C. § 7410(a)(2)(J); 77 Fed Reg. 73,926 (Dec. 12, 2012). Although federal land managers with jurisdiction over Class I areas have the opportunity to participate in the development of regional haze SIPs, BLM has no such jurisdiction in Colorado because it does not manage a Class I area in the State. 42 U.S.C. § 7491.

Issue Number: PP-CO-CRV-14-07-2
Organization: Encana
Protestor: Jason Oates

Issue Excerpt Text: The BLM improperly attempts to exercise authority to regulate air quality and air emissions in the Proposed Colorado River Valley RMP. The BLM sets as its objectives in the Proposed Colorado River Valley RMP Air Quality Section to "[c]ontrol or reduce air pollutants associated with construction and industrial activities to help protect human health, conform with the Colorado Regional Haze State Implementation Plan to improve visibility, reduce atmospheric deposition, and reduce greenhouse gas emissions." Proposed Colorado River Valley RMP, Table 2-2, pg. 2-33. Although Encana supports the BLM's laudable goal of protecting air quality, the BLM does not, as a matter of clear and unequivocal federal law, have the authority to impose air emissions standards, ensure that air quality standards are maintained, or protect visibility within the Colorado River Valley Field Office. The BLM does not have direct authority over air quality or air emissions under the Clean Air Act ("CAA").

42 U.S.C. §§ 7401-7671q; 40 C.F.R. Parts 50-99; 40 C.F.R. §§ 52.320-52.353 (Colorado's State Implementation Plan); COLO. REV. STAT. §§ 25-7-101-1309 (LexisNexis 2013); 5 CCR 1001-1-1001-23. Under the express terms of the CAA, the Environmental Protection Agency ("EPA") has the authority to regulate air emissions. In Colorado, the EPA has delegated its authority to the Colorado Department of Public Health and Environment ("CDPHE"). See COLO. REV. STAT. §§ 25-7-101-1309 (LexisNexis 2013). The CDPHE recently issued strict regulations for oil and gas-related emissions. See CDPHE, Air Quality Control Division, Regulation No.3, 5 CCR 1001-5 (2014); Regulation No.6, 5 CCR 1001-8 (2014); Regulation No.7, 5 CCR 1001-9 (2014). These regulations are the only authority for regulation of oil and gas-related emissions in Colorado.

Issue Number: PP-CO-CRV-14-07-4
Organization: Encana
Protestor: Jason Oates

Issue Excerpt Text: With respect to potential visibility impacts, the BLM's authority is also limited by existing federal law. Under the CAA, a federal land manager's authority is strictly limited to considering whether a "proposed major emitting facility will have an adverse impact" on visibility within designated Class I areas. 42 U.S.C. § 7475(d)(2)(B) (2012). Oil and gas operations do not meet the definition of a major emitting facility.

Issue Number: PP-CO-CRV-14-07-5
Organization: Encana
Protestor: Jason Oates

Issue Excerpt Text: Further, under the CAA, the regulation of potential impacts to visibility and authority over air quality in general rests with the CDPHE. 42 U.S.C. § 7407(a) (2012); COLO. REV. STAT. §§ 25-7-101 -1309 (LexisNexis 2013). The goal of

preventing impairment of visibility in Class I areas will be achieved through the regional haze state implementation plans (SIPs) that were recently approved. 42 U.S.C. § 7410(a)(2)(J); 77 Fed. Reg. 76,871 (Dec. 31, 2012). Although federal land managers with jurisdiction over Class I areas may participate in the development of regional haze SIPs, the BLM has no such jurisdiction in the CRV Planning Area. 42 U.S.C. §§ 7491-7492 (2012); see also COLO. REV. STAT. §§ 25-7-1001 -1008 (LexisNexis 2013). Accordingly, the BLM has no authority over air quality and cannot impose emissions restrictions, either directly or indirectly, on natural gas operations in Colorado, particularly if the overall goal is to reduce potential visibility impacts.

Issue Number: PP-CO-CRV-14-07-6

Organization: Encana

Protestor: Jason Oates

Issue Excerpt Text: Given the restrictions on BLM's authority over air quality, the BLM lacks authority to impose any of the emissions measure controls listed in Table 2-2. See Colorado River Valley RMP, Table 2-2, pgs. 2-33-36. For example, the BLM attempts to require "phased-in use of improved drilling and completion engines that meet or exceed Tier 4 non-road diesel emissions standards." Colorado River Valley RMP, Table 2-2, pg. 2-34. This restriction is entirely inappropriate and beyond the BLM's authority because under the CAA the regulation of reciprocating internal combustion engines and other mobile sources is exclusively within the jurisdiction of the EPA, not the BLM. See 42 U.S.C. §§ 7522, 7523, 7524, 7525, 7541, 7542, 7543, 7547, 7550, 7601. The EPA, using its authority under the CAA, has specifically issued regulations regarding non-road diesel engines and fuels such as those typically used for drilling and development operations. 69 Fed. Reg. 38958 (Jun. 29,

2004); 69 Fed. Reg. 33474 (Jun. 15, 2004). For this reason, in its Record of Decision, the BLM must remove and eliminate all of its proposed actions requiring volatile organic compound emissions reductions from non-road diesel engines and fuels.

Issue Number: PP-CO-CRV-14-12-31

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM must ensure that this increase in NOx emissions from gas-fired compression engine sources under Alternative B would not result in exceedances of the 1-hour NO2 NAAQS.

Issue Number: PP-CO-CRV-14-12-35

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The Proposed RMP/FEIS continues to predict maximum cumulative 24-hour average and annual average PM2.5 impacts at Class II receptors under Alternative D above the NAAQS. See ARTSD Tables 4-10 and 4-11. The Proposed RMP/FEIS also predicts maximum cumulative 24-hour average PM10 impacts at Class II receptors for Alternative A above the NAAQS. See ARTSD Table 4-8. The Proposed RMP/FEIS also identifies concentrations above the NAAQS predicted under Alternatives B, C and D outside the CRVFO – i.e., “in an area near the South Taylor Project Mine (located along the border of the White River and the Little Snake Field Offices).” See ARTSD at 4-19. These significant PM impacts cannot continue to be ignored, and, specifically, the impacts predicted under the agency's Preferred Alternative B. There appear to be no changes to the modeling for the Proposed

RMP/FEIS. The Williams Comments raised several critical issues with the impact analysis for the draft RMP/DEIS, and all of those concerns remain for the Proposed RMP/FEIS. See, e.g., Williams Comments at 8-13 (Section II), 17-18 (Section III), and 23-26 (Section IV).

Issue Number: PP-CO-CRV-14-12-50

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text : BLM is required under NEPA to analyze and disclose all significant air quality impacts, regardless of whether another agency might address an adverse environmental impact in the future (e.g., the State of Colorado). And BLM's regulations require it to "require compliance" with Clean Air Act standards. 43 C.F.R. § 2920.7(b)(3). BLM is required under NEPA to satisfy all Clean Air Act requirements, and thus the BLM cannot authorize an action unless the agency has ensured that the PSD increments will not be exceeded. The PSD increments are separate ambient air quality standards not to be exceeded, as set out in §163 of the Clean Air Act, that apply in addition to the national ambient air quality standards in clean air areas. Reliance on the State's requirements to track increment consumption cannot be substituted for the BLM's obligations under NEPA. BLM is required to "provide for compliance with" all CAA requirements, and cannot authorize development activities that would violate the PSD increments. BLM should appropriately analyze PSD increment consumption and disclose potential impacts, determine the significance of these impacts, and provide for mitigation as necessary to ensure there will be no significant impacts to air quality deterioration from the proposed action.

Issue Number: PP-CO-CRV-14-12-54

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Without a comprehensive air quality analysis at the RMP level that accurately reflects the status quo in the CRVFO, BLM's conclusion that it is in compliance with the ozone NAAQS and other applicable legal requirements is unsupported, and the agency will be unable to guard against further air quality degradation going forward.

Issue Number: PP-CO-CRV-14-15-6

Organization: Bill Barrett Corporation

Protector: Bret A. Sumner/Theresa M. Sauer (Attorneys)

Issue Excerpt Text: Records of Decision for NEPA documents do not themselves authorize any activity capable of emitting air pollutants. Companies must obtain a permit and authorization from the Colorado Air Quality Control Commission (CAQCC) or EPA (e.g. Indian airshed) before constructing any regulated emission source that is analyzed in the NEPA document, and must comply with applicable air regulations once operations commence. Applications for Permits to Drill (APD) are issued with conditions of approval that require operators comply with all applicable laws, but the BLM is not legally authorized to regulate air quality standards. It is the responsibility of EPA or the CAQCC to issue air permits for oil and gas operations and to ensure that operators comply with those permits and the CAA. BLM must analyze and disclose impacts to air and other resources in NEPA documents, but is not the regulating agency that ensures that oil and gas operations comply with the CAA.

Issue Number: PP-CO-CRV-14-15-6
Organization: Bill Barrett Corporation
Protestor: Bret A. Sumner/Theresa M. Sauer (Attorneys)

Issue Excerpt Text: Records of Decision for NEPA documents do not themselves authorize any activity capable of emitting air pollutants. Companies must obtain a permit and authorization from the Colorado Air Quality Control Commission (CAQCC) or EPA (e.g. Indian airshed) before constructing any regulated emission source that is analyzed in the NEPA document, and must comply with applicable air regulations once operations commence. Applications for Permits to Drill (APD) are issued with conditions of approval that require operators comply with all applicable laws, but the BLM is not legally authorized to regulate air quality standards. It is the responsibility of EPA or the CAQCC to issue air permits for oil and gas operations and to ensure that operators comply with those permits and the CAA. BLM must analyze and disclose impacts to air and other resources in NEPA documents, but is not the regulating agency that ensures that oil and gas operations comply with the CAA.

Issue Number: PP-CO-CRV-14-16-2
Organization: WPX Energy
Protestor: Chad E. Odegard

Issue Excerpt Text: With respect to potential visibility impacts, the BLM's authority is also limited by existing federal law. Under the CAA, a federal land manager's authority is strictly limited to considering whether a proposed major emitting facility will have an adverse impact on visibility within designated Class I areas. 42 U.S.C. § 7475(d)(2)(B) (2012). Oil and gas well drilling, completion, and production operations do not meet the definition of a major source emitting facility. Further, under the CAA, the

regulation of potential impacts to visibility and authority over air quality in general, rests with the CDPHE. 42 U.S.C. §§ 7407(a) (2012). The goal of preventing impairment of visibility in Class I areas will be achieved through the regional haze state implementation plans (SIPs) that are being developed. 42 U.S.C. § 7410(a)(2)(J). Although federal land managers with jurisdiction over Class I areas may participate in the development of regional haze SIPs, the BLM has no such jurisdiction in Colorado. 42 U.S.C. §§ 7491 (2012); see also COLO. REV. STAT. §§ 25-7-1008 (2012). Accordingly, the BLM has no authority over air quality and cannot impose emissions restrictions, either directly or indirectly, on natural gas operations in Colorado, particularly if the overall goal is to reduce potential visibility impacts. The BLM's proposed Management Actions relating to visibility must be eliminated.

Issue Number: PP-CO-CRV-14-16-4
Organization: WPX Energy
Protestor: Chad E. Odegard

Issue Excerpt Text: Further, the BLM has no authority over air quality so it cannot enforce its goals and objectives as currently drafted. The BLM should not attempt to develop or enforce air quality mitigation measures or standards but should leave air quality enforcement and control measures to the agencies with the resources, experience and authority over the same.

Summary:

The BLM violates the Clean Air Act because:

- The BLM does not have the authority to regulate air quality or emissions.
- The PRMP/FEIS predicts exceedances of the National Ambient Air Quality Standards (NAAQS) will occur within the planning area.
- The PRMP/FEIS does not analyze Prevention of Significant Deterioration (PSD) increment consumption.

Response:

BLM Authority to Regulate Air Quality or Emissions

The PRMP/FEIS does not exceed the BLM's statutory authority by proposing area wide restrictions for activities that impact air quality. As discussed in the PRMP/FEIS:

The BLM manages public lands in the best interest of the public in accordance with its organic act, the Federal Land Policy and Management Act (FLPMA). In addition to providing direction on developing resources for the public, the act contains direction on the protection of resources. Section 102(8) of the act states in part that 'the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values.' Section 302(b) of the act states 'in managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands.'

Under NEPA, the BLM is required 'to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment...' and to 'use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment...' (40 CFR 1500.2) NEPA also requires analysis of potential mitigation measures and implementation and monitoring of selected mitigation measures. In addition, the BLM must ensure that projects on public lands meet or comply with all local, state, federal, and tribal plans, standards, and regulations." (Colorado River Valley PRMP/FEIS, p. V-5).

Thus, the BLM must manage the public lands in a manner that appropriately protects air quality and its related values. Through its RMPs, the BLM establishes desired outcomes for air quality and the "area wide restrictions" needed to meet those outcomes (BLM Handbook H-1601-1, p. C-2). In the case of the Colorado River Valley PRMP/FEIS, the BLM conducted air quality analyses to determine impacts from specific federal actions anticipated under the PRMP/FEIS, and then developed emission control strategies and mitigation measures [i.e. "area wide restrictions"] to address those impacts and achieve desired outcomes for air quality. This does not mean the BLM is writing new regulations, nor is the BLM establishing itself as a regulatory agency or establishing mitigation measures that are intended to supersede the agencies with regulatory authority over air quality. Rather, the BLM is responding to estimated impacts from

the PRMP/FEIS and complying with direction under NEPA, FLPMA, and the Clean Air Act (Colorado River Valley PRMP/FEIS, p. V-5).

NAAQS Exceedances

The PRMP/FEIS does not predict exceedances of the NAAQS due to federal actions anticipated under the Proposed Alternative. The Proposed Alternative includes air quality protection measures similar to those described in Alternative B of the Draft RMP/Draft EIS. The air quality protection measures in the Proposed Alternative in PRMP/FEIS would be more protective than under Alternative D (Colorado River Valley PRMP/FEIS, p. 4-29). The BLM determined that Alternatives B and D in the Draft RMP/Draft EIS would not result in exceedances of the NAAQS:

The air analysis shows that impacts to air quality from the proposed "project" levels [i.e. future federal actions anticipated under the Proposed Alternative] of development for [Draft RMP/Draft EIS] Alternatives B, C, and D are estimated to be below National Ambient Air Quality Standards (NAAQS), Colorado Ambient Air Quality Standards (CAAQS), PSD increments, and visibility and deposition thresholds (Colorado River Valley PRMP/FEIS, p. V-11).

Therefore, since the Proposed Alternative is more protective than Alternative D, it is anticipated that proposed "project" levels under the Proposed Alternative would also not result in exceedances of the NAAQs.

PSD Increment Consumption Analysis

The BLM is not required to analyze Prevention of Significant Deterioration (PSD) increment consumption in conjunction with the analysis associated with the PRMP/FEIS. As stated in the PRMP/FEIS:

The PSD program and subsequent analyses required for sources obtaining PSD permits apply to a specific list of major station source categories. The Colorado Department of Public Health and Environment (CDPHE) has been delegated authority for issuing permits under this program. CDPHE is also responsible for determining baseline and conducting increment consumption analyses. BLM is not responsible for conducting a PSD increment consumption analysis for this planning-level document (Colorado River Valley PRMP/FEIS, p. V-11).

Energy Policy Act

Issue Number: PP-CO-CRV-14-06-22

Organization: Western Energy Alliance,
Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: We protest BLM's lease stipulations because they reflect a marked increase in major and moderate constraints that are unjustified in direct

violation of Section 363 of the Energy Policy Act of 20058, which requires federal land management agencies to ensure that lease stipulations are applied consistently and to ensure that the least restrictive stipulations are utilized to protect many of the resource values to be addressed. No Surface Occupancy (NSO) stipulations in the Proposed Plan are 49% higher than

current management, and Controlled Surface Use (CSU) stipulations increase 46%. BLM must explain how this increase comports with this statutory mandate.

Issue Number: PP-CO-CRV-14-15-8
Organization: Bill Barrett Corporation
Protestor: Bret A. Sumner/Theresa M. Sauer (Attorneys)

Issue Excerpt Text: Additionally, CRV-NSO-5 is a mostly new stipulation introduced in the proposed RMP and is largely redundant to existing Federal and state regulations. Although BLM has attempted to better define the applicable zones for this stipulation, BBC is concerned with the expansion of a buffer distance to 328 feet from 50 feet without any discussion or justification for the increase. BLM has

Summary:

The PRMP/FEIS violates the Energy Policy Act of 2005 by failing to apply the least restrictive stipulations for oil and gas leasing in riparian areas and big game winter habitat.

Response:

In order to mitigate impacts to other resources, the BLM appropriately proposes and analyzes restrictions on potential oil and gas leasing through oil and gas lease stipulations. The BLM policy requires RMPs to identify and consider areas subject to both moderate and major constraints for oil and gas leasing and identify specific lease stipulations that will be employed to accomplish resource condition objectives (BLM Handbook H-1601-1, p. C-23 to C-24). Accordingly, each alternative analyzed in the PRMP/FEIS presents a set of oil and gas lease stipulations necessary to meet the goals and objectives for each resource and resource use in the planning area. A summary of oil and gas lease stipulations that were considered under each alternative can be found in Appendix B (Colorado PRMP/FEIS, Appendix B, Table B-1).

The PRMP/FEIS fully analyzed impacts of the lease stipulations for each alternative (See Chapter 4 of the PRMP/FEIS). By comparing impacts across the alternatives, the BLM determined which stipulations in the Proposed Alternative were necessary, without being overly restrictive, to meet the goals and objectives of the PRMP/FEIS.

The purpose of timing limitations on big game habitat is to "reduce behavioral disruption of big game during the winter season" (Colorado River Valley PRMP/FEIS, p. B-37). As documented

not provided any rational basis for this stipulation, and BBC protests its inclusion in the RMP.

Issue Number: PP-CO-CRV-14-17-12
Organization: Dejour Energy Corporation
Protestor: William E. Sparks/Malinda Morain

Issue Excerpt Text: Regarding monitoring pressure, in the response to comments, the TRFO/SJNF state: "a new guideline has been added creating a requirement for monitoring pressures in adjacent abandoned wells during high volume hydraulic fracturing operations." FEIS Appendix S at S-J06 (Response WA 53). We support such a requirement but could not locate this guideline in the LRMP.

in the PRMP/FEIS, a "disturbed animal incurs a physiological cost, through excitement (preparation for exertion) or locomotion. A fleeing or displaced animal incurs additional costs through loss of food intake and potential displacement to poorer (lower) quality habitat. The effects of disturbances are determined in large part by their intensity, duration, frequency, timing, and the size and shape of the area affected. Continuous disturbance would probably result in reduced animal fitness and reproductive potential" (Colorado River Valley PRMP/FEIS, p. 4-198). The PRMP/FEIS considered Parker et al, 1984, which "emphasized the importance of avoiding situations in which wintering deer would be forced to move to avoid human activity, owing to decreased energy stores in winter and greater effort in moving through snow." (Colorado River Valley PRMP/FEIS, p. 4-199)

The Proposed Alternative would actually reduce the length of the timing limitation. Under the Proposed Alternative, oil and gas lease stipulation CRVFO-TL-2 would prohibit surface occupancy and surface-disturbing activities from December 1 to April 15 in big game winter habitat, while oil and gas lease stipulations GS-TL-1 (Alternative A) and CRV-TL-1 (Alternative C, D) would prohibit surface occupancy and surface-disturbing activities from December 1 to April 30. The proposed timing limitation aligns with wildlife impact minimization recommendations described in *Colorado Division of Wildlife's Actions to Minimize Adverse Impacts to Wildlife Resources* (Oct 27, 2008). The purpose of this document is to enumerate potential actions that may avoid, minimize, and/or mitigate adverse impacts of oil and gas operations on Colorado's wildlife resources.

With respect to the proposed oil and gas lease stipulation for riparian areas, CRVFO-NSO-5 is intended to: "1) Maintain the proper functioning condition, including the vegetative, hydrologic and geomorphic functionality of the perennial water body. 2) Protect water quality, riparian/wetland vegetation, and aquatic habitats. 3) Provide a clean, reliable source of water for downstream users. 4) Benefit fisheries, amphibians, waterfowl, migratory birds, and other species dependent on aquatic and riparian habitats as well as the habitat itself" (Colorado River Valley PRMP/FEIS, p. B-17). As documented in the PRMP/FEIS, "by preventing and limiting ground-disturbing activities, these stipulations [CRVFO-NSO-5] would have direct benefits on water resources by minimizing erosion and sediment and contaminant delivery in those areas" (Colorado River Valley PRMP/FEIS, p. 4-99). Due to numerous comments on the DRMP/DEIS about having too many overlapping stipulations, the CRVFO combined stipulations (above) analyzed in the DRMP/DEIS for perennial streams, water bodies, riparian areas, and aquatic dependent species into one revised NSO stipulation (CRVFO-NSO-5) for the Proposed RMP/Final EIS. Since the revised stipulation is inclusive of the NSO stipulation for perennial waters, 100 meters (328 feet) was maintained as the a buffer distance from the outer edge of riparian/wetland zones. The combined stipulation (CRVFO-NSO-5) is coincidentally numbered similarly to CRV-NSO-5 for streamside management zones found in the DRMP/DEIS.

Federal Land Policy Management Act

Issue Number: PP-CO-CRV-14-06-19

Organization: Western Energy Alliance,
Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: Excessive Closures To and Restrictions On Future Oil and Natural Gas Leasing, Exploration, and Production: Under the CRV DEIS Preferred Alternative, BLM proposed closing over 55,000 acres to future oil and gas leasing. We protest this closure because it is contrary to the statutory requirements of FLPMA. Section 204 (c) of FLPMA expressly forbids the withdrawal of more than 5,000 acres except by the direct authority of the Secretary of the Interior, and only then after publishing the proposed withdrawal in the Federal Register and providing for public hearing specific to the withdrawal.

Issue Number: PP-CO-CRV-14-06-21

Organization: Western Energy Alliance,
Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: We also protest this withdrawal because it violates BLM's multiple-use mandate under FLPMA. Under Section 102 of FLPMA, Congress directed BLM to manage lands on a multiple-use basis to "...best meet the present and future needs of the American people" in a "combination of balanced and diverse resource uses," including minerals development. BLM's reasons for the proposed closures include Lands with Wilderness Characteristics, Wilderness Study Areas (WSA), and a Special Recreation Management Area (SRMA). Importantly, in FLPMA Section 103(c), Congress itemized the resources BLM should take into account in allocating management. "Wilderness characteristics" is not included as such a resource, while

mineral development was identified as a "principal or major use" of public lands under Section 103(1).⁶ Even though recreation is identified as a "principle or major use;" BLM fails to explain how the two uses are mutually exclusive and how closure of this area is therefore justified. Congress further emphasized the importance of minerals development by declaring that public lands be managed "in a manner which recognizes the Nation's need for domestic sources of minerals."

Issue Number: PP-CO-CRV-14-17-10

Organization: Dejour Energy Corporation

Protestor: William E. Sparks/Malinda
Morain

Issue Excerpt Text: BLM Unlawfully Withdraws the Lands in the Garfield Creek SW A From Leasing In the PRMP, BLM proposes to withdraw from leasing lands in the Garfield Creek SW A that are already leased for oil and gas and are located in the heart of the prolific Piceance Basin. BLM also would place onerous lease stipulations and potential COAs on existing leases that are overly restrictive and violate the mandate in the Act and BLM Manual 1601. The PRMP violates FLPMA as BLM provides no basis supporting this land withdrawal or for not developing areas with a high potential for oil and gas development. The BLM, in the PRMP, classifies the lands within the Garfield Creek SWA as having a high potential for oil and gas development. DRMP/FEIS Chapter 2 at page 2-9. However, BLM withdraws the federal minerals in this area from future leasing without a supportable or rational justification. BLM's PRMP is therefore arbitrary and capricious and must be revised.

Issue Number: PP-CO-CRV-14-17-7

Organization: Dejour Energy Corporation

Protestor: William E. Sparks/Malinda Morain

Issue Excerpt Text: The PRMP unnecessarily constrains oil and gas development, particularly in the Piceance Basin and as to the federal minerals in the Garfield Creek SW A. Garfield Creek SW A and surrounding areas are prolific oil and gas areas and BLM even recognizes them as having a high potential for oil and gas. Yet BLM withdraws this area from future

leasing. As BLM is aware these areas are drilled on a 10-acre basis; the PRMP forecloses this area to oil and gas development and unreasonably constrains it in violation of BLM's obligations under FLPMA to manage for multiple use and in the interest of national energy security.

Summary:

The PRMP/FEIS violates the FLPMA by:

- Prioritizing recreation, state wildlife areas, and wilderness characteristics over oil and gas development, thereby violating the multiple use mandate of the FLPMA.
- Withdrawing more than 5,000 acres from oil and gas leasing.

Response:

Multiple Use Mandate

Section 103(c) of FLPMA defines "multiple use" as the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people. Accordingly, the BLM is responsible for the task of striking a balance among the many competing uses to which public lands can be utilized. The BLM's multiple-use mandate does not require that all uses be allowed on all areas of the public lands. Through the land use planning process, the BLM evaluates and chooses an appropriate balance of resource uses which involves tradeoffs between competing uses. While the FLPMA does identify mineral exploration and development as a "principal or major use," Section 102(8) of the FLPMA also states that the BLM "where appropriate, will preserve and protect certain public lands in their natural condition." Accordingly, the PRMP/FEIS restricts oil and gas activities on certain public lands in order to protect other resource uses and values, including recreational opportunities, state wildlife areas, and wilderness characteristics.

Withdrawal of Land from Mineral Entry

Contrary to the protester's assertion, the CRV PRMP/FEIS does not propose for withdrawal of the lands in question. Rather, the CRVFO proposes to close mineral entry these areas. Doing so is not a violation of the FLPMA. In providing the BLM discretion to make management decisions based on the principles of multiple use and sustained yield, the FLPMA distinguishes between excluding principle and major uses on areas greater than 100,000 acres (Section 202(e)(2)) and withdrawals of areas larger than 5,000 acres (Section 204(d)). As the protesting party asserts, the BLM proposes to close approximately 55,000 acres of lands to mineral leasing. In doing so, the 100,000 acre threshold is not reached, thereby not requiring the congressional notification process as required by 43 U.S.C. § 1712(e)(2)).

NEPA – Air Quality

Issue Number: PP-CO-CRV-14-06-10

Organization: Western Energy Alliance, Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire Moseley

Issue Excerpt Text: For local roadways and resource roads, the CRVFO DEIS Alternatives B, C, and D assumed graveling and paving to control emissions. For WRFO, the assumed roadway controls are for water or chemical suppression. See Appendices A and B, pages A-3 and B-3. For Alternative A, only watering (50% control) is included for roadway dust suppression, which is not reiterated and is inconsistent with the "No similar action" statement in Table 2-3. Moreover, Table 2-6 showed that PM10 emissions for Alternative A were twenty times the PM10 emissions for Alternative D. Clearly, this discrepancy could not be accounted for by the fact that roadway particulate matter emissions should be only double the Alternative D emissions, given the control effectiveness (50% vs. 94%). We asked BLM to clarify the basis for this dramatic difference between PM10 emissions for Alternative A and the other Alternatives, as presented in Table 2-6. We protest the fact that this issue was not addressed in the response to comments and that it remains in the PRMP despite the fact such a discrepancy indicates a significant flaw in the analysis which must be corrected.

a. Instead, the FEIS states "During construction, reduce emissions of fugitive dust by requiring operators to implement watering (minimum twice daily during dry conditions) or application of other dust-suppressant agents at construction areas, including access roads used during construction... In the oil and gas development area, require road design,

construction, and surfacing methods that would achieve at least 94 percent fugitive dust emission reduction using asphalt, chip-seal, or gravel in combination with watering or dust suppressants." This suppression requirement is impracticable and no description is provided regarding how BLM would implement and monitor this standard. Moreover, it is inconsistent with the management action contained in Chapter 2, Section 2.7, which does not include the 94% standard. We urge BLM to revise Chapter 4, Section 4.2.1, Air Quality to comport with the Chapter 2 requirement.

Issue Number: PP-CO-CRV-14-06-7

Organization: Western Energy Alliance, Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire Moseley

Issue Excerpt Text: However, BLM failed to respond to PLA's comment that Section 2.3.6.10 indicates that gas processing would be conducted in the WRFO as cumulative emissions, and pages B-37 and B-38 provide a summary of emissions for processing units for Alternative D. The header page on the tables indicates that scaling factors are needed for Alternatives A, B and C. There are no evident scaling factors. It is important for these scale-up factors to be reviewed and updated or deemed credible by the plant operators. BLM also needs to clarify how to calculate processing plant emissions from the Ib/well data provided in the table on page B-37.

Issue Number: PP-CO-CRV-14-06-8

Organization: Western Energy Alliance, Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire Moseley

Issue Excerpt Text: The DEIS also calculated 194.77 lb NO_x per well X 21,200 wells is 2,040 ton of NO_x. However, BLM failed to explain whether this is an annual emission rate. This must be clarified in the FEIS.

Issue Number: PP-CO-CRV-14-06-9

Organization: Western Energy Alliance, Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire Moseley

Issue Excerpt Text: In light of the predicted impacts on 1-hour N₂O, and based on the WRFO analysis, Despite our comments, BLM failed to discuss the implications for operating this gas processing plant in the FEIS. BLM needs to address this protest issue.

Issue Number: PP-CO-CRV-14-12-19

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Of primary concern is the fact that BLM did not implement a comprehensive and enforceable set of air quality mitigation measures that would ensure no significant impacts to air quality and air quality related values in the Proposed RMP/FEIS. Without further analysis of the mitigation measures needed to sufficiently address potential air quality impacts for this Proposed RMP/FEIS, the BLM failed to satisfy its most fundamental obligations under NEPA.

Issue Number: PP-CO-CRV-14-12-21

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: It does not appear that the BLM ever assessed what the impact from natural gas powered drill rig and hydraulic fracturing pump engine emissions would have on predicted air quality impacts. The ARTSD describes different air quality management actions for Alternatives B and C than what is in the Proposed RMP/FEIS, requiring “within one year of the Record of Decision (ROD), all new and existing drill rig and frac pump engines would meet USEPA Tier 4 Nonroad Diesel Engine Emission Standards or meet equivalent emission standards, regardless of when they begin operation in the CRVFO”. ARTSD Table 2-3 at 2-6. BLM must ensure consistency between the Proposed RMP/FEIS and the modeled management actions in the ARTSD.³² According to Table 2-5 of the ARTSD, emissions under Alternatives B and D were based on the assumption that 100% of drill rig engines meet Tier 4 emissions standards starting in the second year of development. And while the modeling reflects the management actions presented in the ARTSD, BLM must justify why drill rig engines and hydraulic fracturing pump engines will no longer be required to burn natural gas within two years of the ROD.

Issue Number: PP-CO-CRV-14-12-24

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: At a maximum development rate of 773 wells per year, it would be close to three and a half years, at the earliest, before cleaner burning engines would be fully phased in in the planning area. At the 2014 rate of 244 wells per year, cleaner burning engines would not be fully phased in for over 10 years. BLM must analyze the impacts of this less stringent requirement and the agency must be explicit

in defining the timeframe for implementing the switch to cleaner burning engines.

Issue Number: PP-CO-CRV-14-12-25

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text:

In addition to backtracking on the management actions for drill rig and hydraulic fracturing pump engines, BLM also relaxed the requirements for control of VOC emissions from condensate tanks and produced water tanks, under Alternative B, from 95% control to 90% control. Cf. FEIS at 4-28 and ARTSD Table 2-3 at 2-7. Again, BLM's draft RMP/DEIS was inconsistent with the modeled management actions in the ARTSD and assumed 95% control of VOC emissions from storage tanks in its impact analysis of Alternative B while only requiring 90% control in the draft RMP/DEIS.³⁶ If BLM will be requiring only 90% control from storage tanks it must account for this relaxation in the ozone impact analysis.

Issue Number: PP-CO-CRV-14-12-27

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: If BLM will be requiring only 80% of the condensate and produced water be piped to consolidated facilities then it must account for the increase in emissions associated with the additional 10% treated and hauled from the well-site in the air quality impact analysis.

Issue Number: PP-CO-CRV-14-12-29

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Since the emissions inventories in the ARTSD do not reflect this change to no longer require 100% of compressors at compressor stations be powered by electricity – i.e., no field compression emissions are included in the emissions inventory for Alternatives B and C, ARTSD, Appendix A, A-3 – it is critical that BLM fully account for the increase in emissions associated with the use of gas fired compressor engines at compressor stations in the Alternative B analysis. This emissions source can significantly influence the potential ozone and NO₂ impacts evaluated for the RMP/EIS. In fact, the assumption for Alternative A, that there is no electrification at compressor stations, results in the following emissions increases from field compression that should have been included in the emissions inventory for Alternatives B and C for the Proposed RMP/FEIS but were not.

Issue Number: PP-CO-CRV-14-12-33

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: "The higher predicted concentrations of particular matter and nitrogen oxides for Alternative A over the other alternatives is most likely the result of the lower fugitive dust control, higher truck traffic, no electrification of compression, and other differences in control strategies between the alternatives." FEIS at V-11. It is not clear what specific predicted concentrations BLM is referring to here. This implies that modeling was performed to predict concentrations of PM and NO_x for the various alternatives yet the ARTSD still only includes modeling of Alternative A emissions. BLM must disclose any

additional modeling that was performed to predict concentrations of PM and NO_x for Alternatives B, C and D. The above statement further implies that there was modeling for alternatives other than Alternative A that included no emissions from compression (i.e., compressors driven by electric motors).

Issue Number: PP-CO-CRV-14-12-37

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM should consider the fugitive dust and tailpipe emissions produced by OHVs traveling on designated routes under the various alternatives, even if the relative contribution of emissions is “so much less” than that from oil and gas development. Given the fact that the modeled PM impacts are shown to be high in the western portion of the planning area, emissions from this source, even if small, could contribute to significant impacts in this area when considered cumulatively with all other sources that impact the same area. And given the fact that there are only a few active PM monitors in the planning area, BLM cannot assume background monitored levels of PM₁₀ and PM_{2.5} will account for emissions from OHV travel. As shown in the inventories for oil and gas development, travel on unpaved roads creates significant amounts of fugitive dust, which results in high levels of both PM_{2.5} and PM₁₀. Specifically, fugitive dust emissions from road dust during construction and production make up 95% of PM₁₀ emissions and 92% of PM_{2.5} emissions from the oil and gas inventories. See, e.g., ARTSD Appendix A at A-38 and A-40. And these emissions are based on the assumption that a very high level of fugitive dust control is being implemented in the oil and gas development area (i.e., 94% control of

fugitive dust). FEIS at 4-28. Uncontrolled fugitive dust emissions from OHV travel on designated routes could impact overall PM concentrations in the planning area, depending on where and when these emissions occur and BLM should include this source in its modeling. As with the oil and gas source inventory – but without assuming any type of dust mitigation – the BLM can estimate fugitive dust emissions from OHVs based on average distances driven, mean vehicle speed, moisture content and silt content of the surface soil, and annual average precipitation rates.⁴³ Without performing such a quantitative analysis the BLM cannot know the full and accurate impacts of its authorizations regarding ORV travel in the planning area and whether OHV travel will contribute to significant cumulative PM impacts.

Issue Number: PP-CO-CRV-14-12-38

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Of additional concern with regard to how the PM impacts were presented in the Proposed RMP/FEIS, the document continues to present 24-hour PM_{2.5} concentrations for comparison with the NAAQS as the highest 3-year average of the highest 8th highest concentration (or 98th percentile). FEIS Table 3-5 and Table 4-10, n. b. According to EPA, “[c]ombining the 98th percentile monitored value with the 98th percentile modeled concentrations for a cumulative impact assessment would result in a value that is below the 98th percentile of the combined cumulative distribution and would therefore not be protective of the NAAQS”.⁴⁴ The BLM must use the average of the 1st highest 24-hour average concentration over the five meteorological

years modeled combined with the 98th percentile monitored background concentration when comparing PM impacts with the 24-hour average PM_{2.5} NAAQS. The agency's failure to provide this analysis is a significant omission in its analysis.

Issue Number: PP-CO-CRV-14-12-40

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Conservation Groups' supplemental comments on the draft RMP/DEIS further recommended that, based on additional science indicating that emissions from oil and gas development may be substantially higher than estimated in the draft RMP/DEIS, "[t]he agency should revise the Draft EIS and supporting documents to ensure that inventories do not underestimate emissions and to ensure potential impacts are adequately analyzed." Supplemental Comments (2012) at 9-10. BLM did not respond directly to this comment and failed to review and update the VOC inventory based on more recent data.

Issue Number: PP-CO-CRV-14-12-41

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The State of Colorado also commented extensively on the need for BLM to conduct an Unmonitored Area Analysis as a critical part of the ozone analysis. Specifically, the State made the following comments: Given that there are no ozone monitors in the CRVO planning area except for the Gothic site, and given that the Rifle and Palisade sites were not included in

the analysis, it is important to conduct the Unmonitored Area Analysis in order to fully disclose estimated ozone concentrations in the study area. The Unmonitored Area Analysis will inform the process where additional monitoring or study may be needed in the planning area. The absence of an Unmonitored Area Analysis is a critical flaw in the analysis. Table 5-5 in the TSD for the July episode shows very good model performance agreement with measured values close to the CRVO planning area at Sunlight Mountain, Gothic, and Dinosaur (within 94–100% of the monitored concentrations which is well within the ± 20 % performance goal). Similar model performance is expected within the CRVO planning area. There is no reason to exclude an Unmonitored Area Analysis especially given the lack of the ozone monitors in the CRVO Planning Area. An Unmonitored Area Analysis should be conducted using EPA Guidance to inform where additional monitors or study may be needed within the study area. BLM did not directly respond to these specific comments in the Proposed RMP/FEIS.

Issue Number: PP-CO-CRV-14-12-43

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The State describes an acceptable method for applying 2008-2010 monitoring data from these monitors to develop a baseline design value for use in the 2006 baseline analysis. BLM failed to amend the ozone analysis to include these monitors. The Proposed RMP/FEIS does not consider any more recent monitoring data. Background ambient air quality concentrations for the Proposed RMP/FEIS continue to be based on data from 2006 and older, except for ozone. Yet even for ozone,

monitoring data from more recent years show background concentrations in and near the planning area that continue to be of concern.

Issue Number: PP-CO-CRV-14-12-45

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM’s decision to not include winter ozone modeling is not supported by evidence that the BLM either cannot obtain the needed information without exorbitant cost or cannot present a credible scientific estimation based on methods generally accepted in the scientific community. See 40 C.F.R. § 1502.22. According to NEPA regulation, if an estimation of reasonably foreseeable significant adverse impacts cannot be obtained because, among other things, the means to obtain it are “not known,” BLM has an obligation to include an evaluation “based upon theoretical approaches or research methods generally accepted in the scientific community,” provided that “the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of

reason.” Id. These methods of dealing with incomplete information are required under NEPA and must be thoroughly exercised before drawing the conclusion that a wintertime ozone analysis cannot be included in the Proposed RMP/FEIS. See id. BLM evaluated the performance of the MM555 modeling in winter months, and while it determined that “winter months generally show poorer model performance, particularly from December through February,” no specific data are provided to be able to assess the relative performance during winter.

Issue Number: PP-CO-CRV-14-12-48

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The Williams Comments on draft RMP/DEIS provided that the CRVFO should look at additional hazardous air pollutant impacts from the proposed development, including the impacts from 1,3-butadiene and secondary formaldehyde that will result from the proposed development. BLM’s response to comments did not address these additional HAPs.

Summary:

The PRMP/FEIS failed to adequately analyze impacts related to air quality. The PRMP/FEIS failed to adequately analyze:

- Impacts from roadway dust suppression; volatile organic compound (VOC) emission control; condensate and produced water treatment; drilling and completion engine; and compressor station requirements.
- Impacts from natural gas processing units;
- Impacts from fugitive dust and tailpipe emissions produced by off-highway vehicle (OHV) travel.
- A comprehensive set of air quality mitigation measures.
- Recent monitoring data for background ambient air quality concentrations.
- 24-hour average particulate matter (PM2.5) concentrations and ozone.

The PRMP/FEIS did not fully disclose modeling outcomes done for PM and mono-nitrogen oxides (NO_x) for all alternatives in the Air Resources Technical Support Document (ARTSD). The PRMP/FEIS did not adequately respond to public comments about impacts related to air quality.

Response:

The BLM gathered the necessary data essential to make a reasoned choice among the alternatives analyzed in the PRMP/FEIS. The BLM analyzed the available data that led to an adequate disclosure of the potential environmental consequences of the Proposed Alternative and other alternatives. As required by NEPA, the BLM has taken a “hard look” at the environmental consequence of the alternatives to make an informed decision.

Roadway Dust Suppression, VOC Emission Control, Condensate and Produced Water Treatment, Drilling and Completion Engine, and Compressor Station Requirements

Based on public comment regarding the feasibility and availability of technologies for certain air quality requirements, the BLM made minor changes to the air quality requirements. Discussed below is the Proposed Alternative—which is a slight variation from Alternative B and which thus would have similar effects:

The Proposed RMP includes a level of development and mitigations scenarios within the range of alternatives in the Draft RMP/Draft EIS ... the Proposed RMP includes stipulations and protective measures for other resources similar to the preferred alternative in the Draft RMP/Draft EIS (Colorado River Valley PRMP/FEIS, p. 4-29).

Given the similarities between the Proposed Alternative and Alternative B, it is not necessary to model the Proposed Alternative in the same manner used for other alternatives in the ARTSD. The BLM modeled a reasonable number of alternatives covering a full spectrum of air quality requirements in the ARTSD. All air quality requirements of the Proposed Alternative are within the range of requirements that was modeled in the ARTSD. Thus, if modeled, the overall results for the Proposed Alternative would be very similar to other alternatives and the results would not meaningfully assist with making a reasoned choice among the alternatives.

Specific responses regarding roadway dust suppression, VOC emission control, condensate and produced water treatment, drilling and completion engine, and compressor station requirements are below.

Roadway Dust Suppression

Under Alternative A, the BLM would require oil and gas operators to implement twice-daily watering to suppress fugitive dust from roadways and construction areas during *construction and drilling*. The Proposed Alternative, as well as Alternatives C and D, have the same requirement for twice-daily watering. The Proposed Alternative, Alternative C, and Alternative D have an additional requirement that operators use gravel, chip seal, asphalt or, other road-surfacing material to minimize fugitive dust for *long-term production and maintenance operations*. Alternative A does not have this requirement for *long-term production and maintenance operations* (Colorado River Valley PRMP/FEIS, p. 2-33, 2-34).

The lack of stringent dust controls for *long-term production and maintenance operations* was one factor in why near-field modeling predicted ambient concentrations of 24-hour average PM10 above the NAAQS for Alternative A. For purposes of comparison, the BLM remodeled a modified Alternative A that included identical dust controls as found in the Proposed Alternative. The model predicted that near-field 24-hour average PM10 would fall below the NAAQS for Alternative A with more stringent dust controls. This difference highlights the effectiveness of the Proposed Alternative's stringent dust controls for reducing PM10 emissions (Colorado River Valley PRMP/FEIS, p. 4-21).

Near-field modeling using AERMOD considers a complex set of atmospheric dynamics and interactions to predict ambient concentrations of pollutants. For example, increasing emission control effectiveness by 50 percent does not mean that the predicted ambient concentration would decrease by 50 percent. Watering and other fugitive dust management practices for unpaved roads have been found to be able to achieve a 50 percent reduction in fugitive dust emissions, while asphalt, chip-seal, or gravel in combination with watering or other dust suppressants have been able to reduce fugitive dust emissions by 94 percent (Colorado River Valley PRMP/FEIS, p. 4-20, 4-28). These percentages represent the effectiveness required by the controls presented in Section 2.7 of the PRMP/FEIS, and are used as assumptions for the analysis contained within Section 4.2.1 of the PRMP/FEIS. Thus, there is no inconsistency between Section 2.7 and Section 4.2.1 of the PRMP/FEIS.

VOC Emission Control

In the ARTSD, the BLM modeled the impacts of zero percent VOC control and 95 percent VOC control (Colorado River Valley PRMP/FEIS, ARTSD, p. A-6). Under the Proposed Alternative, BLM would require 90 percent VOC control, which would result in impacts within the range of impacts already modeled in the ARTSD and disclosed in the DEIS (Colorado River Valley PRMP/FEIS, p. 4-29).

Condensate and Produced Water Treatment

Under the Proposed Alternative, the BLM would require that—where feasible—truck haulage of liquids be reduced by 80 percent. This requirement is very similar to the requirement under Alternative D that at least 80 percent of new federal oil and gas pads use pipelines to transfer produced water and condensate. In the ARTSD, the BLM modeled the impacts of trucking 10, 20 and 60 percent of liquids (Colorado River Valley PRMP/FEIS, ARTSD, p. A-6). Since the Proposed Alternative's requirement is very similar to Alternative D, the BLM reasonably concluded that it would result in impacts within the range of impacts already modeled in the ARTSD and disclosed in the DEIS (Colorado River Valley PRMP/FEIS, p. 4-29).

Drilling and Completion Engines

The impacts analysis for the Proposed Alternative assumes that BLM “will require phased-in use of improved drilling and completion engines that meet or exceed Tier 4 non-road diesel emissions standards (40 CFR 1039)” and that “the conversion to engines that meet or exceed Tier 4 non-road diesel emission standards would be completed when the equivalent of 2,664 wells or the emissions modeled in Alternative A of the ARTSD are exceeded” (Colorado PRMP/FEIS, p. 4-28). The Proposed Alternative would also require that all engines meet or exceed Tier 2 non-road diesel engine emissions standards within one year after the ROD for the

Colorado River Valley RMP is signed. The BLM determined that it was necessary to phase in this requirement after balancing “comments and issues regarding availability and economic and technical feasibility” with anticipated impacts identified by the air quality model (Colorado River Valley PRMP/FEIS, p. V-7).

While the BLM identifies future development rates in the RFD for purposes of comparative analysis, the BLM cannot specify when the equivalent of 2,664 wells or the emissions modeled in Alternative A of the ARTSD may be exceeded. Thus, the BLM cannot specify a date when the “Tier 4 requirement” will begin in the Colorado River Valley planning area.

While the ARTSD did not model the Proposed Alternative’s modified “Tier 4 requirement”, the ARTSD modeled a range of alternatives for drilling and completion engine requirements. The ARTSD modeled:

- 1) Engines that meet Colorado and EPA requirements;
- 2) All new engines to meet Tier 4 non-road diesel emissions standards (immediate requirement upon RMP approval); and
- 3) Engines that meet Tier 2 and, later, Tier 4 non-road diesel emissions standards (phased in requirement upon RMP approval) (Colorado River Valley PRMP/FEIS, ARTSD, p. 2-5).

Thus, the Proposed Alternative represents a blend of the alternatives modeled in the ARTSD and analyzed in the PRMP/FEIS.

Compressor Station Requirements

Under the Proposed Alternative, the BLM may require powering centralized compression facilities with electricity based on implementation of the CARPP, future availability of adequate electricity, and advances in compression technology. In the ARTSD, the BLM modeled the impacts of requiring zero, 50, and 100 percent electrification of centralized compressor facilities (Colorado River Valley PRMP/FEIS, ARTSD, p. A-6). While it is not certain the degree to which BLM will require electrification under the Proposed Alternative, the Proposed Alternative would, nevertheless, result in impacts within the range of impacts already modeled in the ARTSD and disclosed in the DEIS (Colorado River Valley PRMP/FEIS, p. 4-29).

Natural Gas Processing Units

The PRMP/FEIS does not authorize or determine the location of gas processing plants. Therefore, it is not required to analyze a range of alternatives for operating a gas processing plant. Rather, PRMP/FEIS accounts for potential gas processing plants in the impacts analysis because they have the potential to cumulatively affect air quality in the planning area. As stated in the ARTSD, no new gas processing facilities are expected to be built in the Colorado River Valley Field Office area. Rather, for purposes of analysis, the BLM assumed that additional gas produced in the Colorado River Valley Field Office would be processed in the White River Field Office area.

Appendix B of the ARTSD contains detailed emissions calculations regarding additional gas processing that would occur in the White River Field Office as a result of oil and gas development in the Colorado River Valley Field Office. The ARTSD discloses scaling factors used for the different alternatives (Colorado River Valley PRMP/FEIS, ARTSD, p. A-6).

Appendices to the ARTSD contain detailed model results and control files, which describe specifically how the BLM calculated processing plant emissions.

Fugitive Dust and Emissions Produced by OHV Travel

The BLM's consideration of the air quality impacts associated with OHV travel as a result of proposed trails and travel management was adequate. As the BLM explained in the CRVFO PRMP/FEIS:

Travel management was not identified as an issue of concern during the scoping process for air quality impact analysis, and since the CRVFO determined that the potential magnitude of emissions generated by these types of activities were considered to be so much less than the magnitude of emissions from oil and gas activities, the increase in modeled impacts would be virtually undetectable. (Colorado River Valley PRMP/FEIS, p. 4-25).

Further, the BLM concluded that “impacts to air quality from these activities could not reasonably or reliably be quantified,” because “of the transient and varying nature and short-term duration of these types of activities, because emissions data are not reliable, and because impacts from these activities could not be well simulated in the model”(page 4-25 (Impacts from Forestry, Livestock Grazing, and Trails and Travel); 4-26 (Impacts from Lands and Realty, Coal); 4-27 (Impacts from Fluid Minerals). The BLM provided qualitative impacts from these activities in the PRMP/FEIS by specifically disclosing impacts from fugitive dust and tailpipe emissions:

On-road and off-road vehicles generate engine exhaust emissions and fugitive dust. Engine exhaust emissions include emissions of CO, carbon dioxide (CO₂), NO_x, fine particulate matter, SO₂, and organic compounds (including VOCs and HAPs). The impact from increased motorized use, (e.g., full-sized vehicles, motorcycles, and ATVs) as well as, horses and foot traffic, increases the potential for soil disturbance and erosion. Road and trail maintenance is a source of vehicle emissions and fugitive dust generation (Colorado River Valley PRMP/FEIS, p. 4-25).

Therefore, BLM adequately justified its approach of analyzing air quality impacts associated with OHV use in a qualitative manner.

Furthermore, it is not valid to equate air quality impacts from vehicle use related to oil and gas development to air quality impacts from recreational OHV use. Air quality impacts from vehicle use related to oil and gas development are of greater concern due to the larger size of the vehicles, higher frequency of trips, and concentration of truck activity. The BLM included vehicle use related to oil and gas development in the quantitative air modeling due to its higher potential for impact. It is important to remember that “NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail” (40 CFR 1500.1(b)).

Air Quality Mitigation Measures

The BLM adequately analyzed in the PRMP/FEIS a suite of mitigation measures necessary to

protect air quality, while allowing for oil and gas development. These measures include requirements for roadway dust suppression; VOC emission control; condensate and produced water treatment; drilling and completion engines; and compression stations (Colorado River Valley PRMP/FEIS, p. 2-33 to 2-36). By including these mitigation measures, the PRMP/FEIS does not predict exceedances of the NAAQS due to federal actions anticipated under the Proposed Alternative. See the “Clean Air Act” of this protest report for more information.

Incorporation of Recent Monitoring Data into Air Quality Models

The BLM used 2006 data as baseline for ambient concentrations of criteria pollutants because it was the most recent year available at the time the air modeling was performed: “Ambient concentration monitoring data for the CRVFO analysis was available for the year 2006 for the relevant criteria pollutants (NO₂, PM₁₀, PM_{2.5}, and SO₂)” (Colorado River Valley PRMP/FEIS, ARTSD, p. 2-19).

The air quality modeling presented in the ARTSD was not intended to predict impacts on a yearly basis. The purpose of the air quality modeling was to predict the maximum impacts that could occur from the BLM activities under the RMP over the next twenty years. As explained in the ARTSD, “This level [of potential for maximum impact] was assumed to occur in year 2028 based on the 20-year planning horizon” (Colorado River Valley PRMP/FEIS, p. V-8).

Thus, the modeling performed in the ARTSD is not intended to be continually updated with the most recent monitoring data. Moving the baseline year of the air quality model to incorporate more recent data would not substantially change conclusions regarding the maximum level of impact anticipated. As discussed in the PRMP/FEIS:

The pertinent point is that it is the estimated increase in emissions based on the assumed maximum emissions year that result in impacts, *regardless of the actual year or the actual number of wells* where those emissions occur. The air analysis considered and analyzed a range of increases in emissions. These increases could actually come from *any increase in development (including between 2006 and signing of the ROD)* up to the maximum emission rate analyzed. These assumptions are not meant to forecast exact future development timing and intensity (Colorado River Valley PRMP/FEIS, p. V-8) (emphasis added).

24-hour Average Particulate Matter (PM_{2.5}) Concentrations and Ozone

The BLM calculated PM_{2.5} modeled concentrations in the form of the NAAQS (3 year average of the 8th high modeled concentration). The 3 year meteorological dataset used for modeling was described in the modeling protocol and analysis and accepted for use by the EPA (during Protocol review, etc.). The EPA PM_{2.5} modeling guidance suggest using the average of the first highest values for the screening modeling approach and then describes this screening level approach is recommended for “First Tier” cumulative modeling. The BLM conducted the PM_{2.5} analysis for the CRVFO analysis prior to the release of the EPA PM_{2.5} Guidance, but the RMP EIS PM_{2.5} near-field analysis represents a refined modeling (i.e. Second Tier) approach determined appropriate by the BLM Colorado air resource specialists due to the very short-term temporal and varying spatial nature of PM_{2.5} emissions releases from oil and gas related sources.

The PRMP/FEIS discloses that “wintertime ozone formation has occurred in other basins with significant oil and gas development and may be occurring with the planning area. Therefore, management actions for tracking and controlling ozone precursor emissions” have been included in the PRMP/FEIS (Colorado River Valley, PRMP/FEIS, p. V-12). However, “winter ozone formation was not included in the modeling for the air analysis for this RMP because computer model algorithms that simulate winter ozone formation are not currently available” (Colorado River Valley, PRMP/FEIS, p. V-12). Ultimately, wintertime ozone could form to the degree that modeling done for the PRMP/FEIS predicts high levels of ozone precursors in winter.

Disclosure of Modeling Outcomes

The ARTSD fully discloses the results of all air quality modeling done by the BLM. The ARTSD describes all the modeling that was done utilizing the AERMOD to predict near-field ambient concentrations: “Near-field modeling was not performed for each Alternative. Rather, modeling was performed based on reasonable, but conservative, emissions that could conceivably occur under the least restrictive combination of emissions scenarios [i.e. Alternative A] and during early years when more stringent emission reduction requirements would not yet be effective” (Colorado River Valley PRMP/FEIS, ARTSD, p. 3-1).

Even though the BLM did not use AERMOD modeling to predict ambient concentrations of criteria pollutants, the BLM reasonably concluded that Alternatives B, C, D would have lower predicted ambient concentrations of criteria pollutants due to the lower level of emissions anticipated under those alternatives (see Section 2.3.7 of the ARTSD for the BLM-source emission levels under each alternative).

Response to Comments

The BLM adequately responded to substantive comments on the impacts to air quality. Appendix V (in particular Sections 1.1 to 1.11) contains the BLM’s responses. The BLM utilized a comment summary method, in which the BLM summarized similar comments and then responded to the comment summary. Table V-2 of the PRMP/FEIS discloses all the substantive comments.

The BLM considered all comments about the accuracy (i.e. whether it overestimates or underestimates impacts) of the air quality modeling. The BLM responded to these comments in Section 1.1 of Appendix V: “The air quality analysis conducted for the Draft RMP/Draft EIS and reported in the Air Quality Analyses and Technical Document (ARTSD) was based on EPA modeling guidance, and used generally accepted practices for air quality modeling analysis and the current ambient air quality data available at the time of the modeling effort. The analysis protocol was reviewed by an air quality stakeholder group including cooperating agencies, the BLM, and EPA. The general consensus reached by this group is reflected in the protocol and the methodologies presented in the ARTSD and Section 4.2 of the Draft RMP/Draft EIS” (Colorado River Valley PRMP/FEIS, p. V-4).

The BLM considered all comments about the sufficiency of the ozone analysis. See Section 1.11 of Appendix V: “The Air Resources Technical Support Document includes a thorough description of the ozone modeling completed for both project and cumulative impacts and gives a detailed explanation of how to assess impacts from this regional pollutant. Ozone is formed

through a complex series of atmospheric reactions that depend on sunlight and the presence of photochemical reactants. The formation of ozone is influenced by emissions of these reactants from local industrial, mobile, and natural sources, regional transport of ozone from upwind areas, and intrusion of naturally occurring ozone from the upper atmosphere. Cumulative sources of ozone precursor emissions include industrial, mobile, and biogenic sources as well as ozone transport from other regions. Based on future design values, the model did not show readings that exceed the ozone standard at any rural monitors west of the Continental Divide. The modeled impacts from project sources were predicted to be between 0.7 to 2.5 ppb (average daily maximum)” (Colorado River Valley PRMP/FEIS, p. V-11). Since the model did not show readings that exceed the ozone standard at any rural monitors west of the Continental Divide, the BLM determined that it was not necessary to perform an Unmonitored Area Analysis.

Regarding the protest point that the BLM failed to consider additional HAPs, the BLM modeled formaldehyde emissions and impacts as a surrogate for other combustion generated HAPs. Since formaldehyde emissions factor is higher and impact threshold is lower than other combustion generated HAPs then modeling formaldehyde emissions and showing impacts below acceptable levels would suggest impacts for other HAPs would be below those thresholds/reference levels. Currently, there is no EPA or Colorado formal guidance for modeling secondary formaldehyde formation for standard air permit applications and no precedence exist for conducting near-field chemical reaction modeling for NEPA analyses. However, an EPA Study titled “A Simplified Approach for Estimating Secondary Production of HAPs Using the OZIPR Model” uses the SAPRC97 Mechanism chemical reactions for estimating primary and secondary formaldehyde formation for various urban and rural U.S. locations. In the SAPRC Mechanism, 22 reactions lead to the formation (secondary) and 5 reactions lead to the removal of formaldehyde. The EPA Guidance Report suggests adding instantaneous secondary formaldehyde values from the Report to allow adjustments for secondary formation to be applied to dispersion model (such as AERMOD) results. The maximum instantaneous secondary production of formaldehyde as estimated by the OZIPR Model for Denver rural conditions is 3.6 ug/m³. Adding this value to the maximum total 1-hour formaldehyde modeled concentration shown in the CRVFO RMP EIS analysis results in a maximum formaldehyde 1-hour concentration of 29 ug/m³ (25.24 plus 3.6), which is much less than the current 1-hour REL for formaldehyde (54 ug/m³).

Clarifications

194.77 pounds of NO_x for gas processing emissions per well is an annual emission rate. Note that the ARTSD states that the assumption for “operating hours” is 8,760 hours, which is the equivalent of one year (Colorado River Valley DRMP/DEIS, Air Resources Technical Support Document, p. B-37).

NEPA – Climate Change

Issue Number: PP-CO-CRV-14-12-62
Organization: WELC, Wilderness Workshop, NRDC, Sierra Club
Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: [T]he CRVFO attempts to avoid taking serious action to address impacts by providing a long list of excuses in the RMP/FEIS, such as:

- Uncertainty remains about the precise nature, timing, and severity of these effects

in a given area. *Id.* at 3-20.

- Because the climate change models predict shifts in multiple climatic variables ... the precise relationship of these variables may profoundly influence the specific outcomes of climate change. *Id.* at 3-20.

- Quantification of cumulative climate change impacts, such as temperature, precipitation and surface albedo, is beyond the scope of this analysis. *Id.* at 4-56.

- It is not possible at this time to determine whether GHG emissions that would result from the project sources associated with the Proposed RMP would cause significant impacts. *Id.* at 4-52.

- It is not possible to determine the impact that GHG emissions from the Proposed RMP would have on global climate change, and then go on to compare the GHG emission increases from the proposed project with overall Colorado and US GHG emissions. *Id.* At 4-52.

This type of dismissive approach fails to satisfy the guidance outlined in Department of Interior Secretarial Order 3226, discussed below, or the requirements of NEPA.

“Reasonable forecasting and speculation is ... implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labelling any and all discussion of future environmental effects as ‘crystal ball inquiry.’” *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1246 n.9 (9th Cir. 1984 (quoting *Scientists’ Inst. for Pub. Info., Inc. v. Atomic Energy Comm.*, 481 F.2d 1079, 1092 (D.C. Cir. 1973)).

Issue Number: PP-CO-CRV-14-12-64

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: As noted above, NEPA imposes “action forcing procedures ... requir[ing] that agencies take a hard look

at environmental consequences.” *Methow Valley*, 490 U.S. at 350 (citations omitted) (emphasis added). These “environmental consequences” may be direct, indirect, or cumulative. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8. BLM is required to take a hard look at those impacts as they relate to the agency action, and the RMP and FEIS fail to provide this hard look analysis. “Energy-related activities contribute 70% of global GHG emissions; oil and gas together represent 60% of those energy-related emissions through their extraction, processing and subsequent combustion.”⁹⁰ Even if science cannot isolate each additional oil or gas well’s contribution to these overall emissions, this does not obviate BLM’s responsibility to consider oil and gas development in the planning area from the cumulative impacts of the oil and gas sector. In other words, the BLM cannot ignore the larger relationship that oil and gas management decisions have to the broader climate crisis that we face. Here, the Proposed RMP/FEIS failed to include the full scope of GHG emissions into its analysis, and, thus, failed to provide the hard look detailed analysis of impacts that NEPA demands. See *Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1379 (9th Cir. 1998)

Issue Number: PP-CO-CRV-14-12-66

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Agency decision-making – particularly at the RMP stage, where fundamental land use choices are made – must be reflective of this broader reality, and the agency’s failure to account for the full lifecycle of oil and gas production represents a fundamental deficiency in the RMP/FEIS. As discussed more fully below, BLM not only has the

authority, but an obligation to address GHG emissions and methane waste. Furthermore, the CRVFO must consider not only the cumulative impact of the GHG emissions authorized by the RMP, it must also consider those emissions combined with other activity in the area. As noted above, “[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.” *Ctr. for Biological Diversity*, 538 F.3d 1172, 1217. The agency’s failure to assess cumulative impacts, particularly, as here, the cumulative impacts of climate change, “impermissibly subject[s] the decision-making process contemplated by NEPA to ‘the tyranny of small decisions.’ ” *Kern*, 284 F.3d at 1078 (citation omitted).

Issue Number: PP-CO-CRV-14-12-68

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Oil and natural gas systems are the biggest contributor to methane emissions in the United States, accounting for over one quarter of all methane emissions.¹⁰⁸ In light of serious controversy and uncertainties regarding GHG pollution from oil and gas development, as noted above, the agency’s quantitative assessment should account for methane’s long-term (100-year) global warming impact and, also, methane’s short-term (20-year) warming impact using the latest peer-reviewed science to ensure that potentially significant impacts are not underestimated or ignored. See 40 C.F.R. § 1508.27(a) (requiring consideration of “[b]oth short- and long-term effects”).

Issue Number: PP-CO-CRV-14-12-68

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Oil and natural gas systems are the biggest contributor to methane emissions in the United States, accounting for over one quarter of all methane emissions. In light of serious controversy and uncertainties regarding GHG pollution from oil and gas development, as noted above, the agency’s quantitative assessment should account for methane’s long-term (100-year) global warming impact and, also, methane’s short-term (20-year) warming impact using the latest peer-reviewed science to ensure that potentially significant impacts are not underestimated or ignored. See 40 C.F.R. § 1508.27(a) (requiring consideration of “[b]oth short- and long-term effects”).

Issue Number: PP-CO-CRV-14-12-70

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: However, recent peer-reviewed science demonstrates that gas-aerosol interactions amplify methane’s impact such that methane is actually 105 times as potent over a twenty-year time period. This information suggests that the near-term impacts of methane emissions have been significantly underestimated. See 40 C.F.R. § 1508.27(a) (requiring consideration of short and long term effects). Further, by extension, BLM has also significantly underestimated the near-term benefits of keeping methane emissions out of the atmosphere. 40 C.F.R. §§1502.16(e), (f); *id.* at 1508.27. These estimates are important given the noted importance of near term action to ameliorate climate change – near term action that

scientists say should focus, inter alia, on preventing the emission of short-lived but potent GHGs like methane while, at the same time, stemming the ongoing increase in the concentration of carbon dioxide.¹¹⁶ These uncertainties – which,

here, the agency does not address – necessitate analysis in the RMP and FEIS. 40 C.F.R. §§ 1508.27(a), (b)(4)-(5).

Summary:

The climate change analysis is inadequate because:

- The BLM failed to satisfy the guidance outlined in Department of Interior Secretarial Order 3226, or the “Reasonable forecasting and speculation” requirements implicit in NEPA.
- The analysis failed to account for the full lifecycle of oil and gas production on greenhouse gas (GHG) emissions, to consider oil and gas development in the planning area from the cumulative impacts of the oil and gas sector on GHG emissions.
- The BLM failed to address the uncertainties associated with methane’s warming impacts and, as a consequence, failed to ensure that potentially significant impacts are not underestimated or ignored.

Response:

The BLM adequately analyzed the impacts of climate change in accordance with NEPA and the DOI policy. DOI Secretarial Order 3226 (January 19, 2001), which was reinstated by DOI Secretarial Order 3289 (February 22, 2010), calls on each DOI Bureau and office to consider and analyze potential climate change impacts when undertaking long-range planning exercises. The CRVFO PRMP/FEIS analyzed potential climate change impacts on Colorado and Regional Resources in Sections 3.2.2 and 4.2.2, including a discussion of current conditions, trends and predictions. Because specific climate change predictions are not readily available for most of the CRVFO analysis area, climate change trends were summarized for western Colorado (CRVO PRMP/FEIS, 2014, p. 3-19). This PRMP/FEIS met the requirements to analyze climate change in long-range planning exercises.

Section 4.2.2 of the CRVO PRMP/FEIS analyzes the potential impacts on climate change associated with management activities proposed for each of the alternatives. The BLM included qualitative and quantitative evaluations of potential contributing factors to climate change within the planning area where appropriate and practicable. Noting that the primary activities that generate GHG emissions within the planning area are construction and operation of oil and gas facilities, the BLM included a quantitative analysis of GHG emissions from such oil and gas projects (CRVFO PRMP/FEIS, 2014, pp. 4-48 – 4-56).

Furthermore, while the BLM identified the uncertainties and assumptions associated with the analysis and acknowledges that the assessment of climate changing pollutant emissions and climate change is in its formative phase, the analysis stated that methane emissions from oil and gas activities—primarily as fugitive emissions from natural gas production and gas venting during well completion—would have the greatest global warming impact of the three GHGs,

notwithstanding total estimated carbon dioxide emissions being the greatest in absolute quantity of the three GHGs emitted (CRVFO PRMP/FEIS, 2014, pp. 4-46 – 4-49). The BLM provided for best management practices and a Comprehensive Air Resources Protection Protocol (CARPP) for oil and gas development, identified in Appendix G and Appendix L of the CRVFO PRMP/FEIS respectively, as potential measures that may reduce or capture methane and other GHG emissions. The BLM also noted that the continuous implementation of the CARPP would allow for ongoing air quality analysis to ensure that impacts are within the expected range evaluated in this PRMP/FEIS (CRVFO PRMP/FEIS, 2014, p. 4-52).

To put the GHG emissions into context for the public and the decision maker, the analysis presents estimates of national GHG emissions and the contributions to these national emissions by major economic sector, identifies oil and gas development and operations as the primary activities within the planning area that generate GHG emissions, and compares the quantitative estimates of GHG emissions from oil and gas activities under each alternative with state and national GHG emissions estimates (CRVFO PRMP/FEIS, 2014, pp. 4-48 – 4-56). GHG emissions increases associated with the Proposed RMP were estimated to be less than 0.23 percent of the 2007 Colorado GHG emission inventory, and approximately 0.004 percent of the 2008 US GHG emission inventory (CRVFO PRMP/FEIS, 2014, p. 4-52). Cumulative climate change impacts are further discussed on pages 4-56 through 4-58 of the CRVFO PRMP/FEIS.

NEPA – Cultural Resources

Issue Number: PP-CO-CRV-14-11-35

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: Example of the conflicting analysis and total lack of discussion of cultural resources that plagues the FEIS and RMP is available on pg. 3-109 of the FEIS where the summary chart provides a total of 1,290 cultural resources but the analysis below addresses somewhere between 1,389 sites and 1,196 sites. These conclusions also conflict with totals given elsewhere in the FEIS, where a total of 6,250 known cultural resource sites is clearly stated. These totals cannot be reconciled with previous assertions of a total site amount of 3,930 in the CRVO.

Issue Number: PP-CO-CRV-14-11-37

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: The conflicting analysis and complete lack of discussion of cultural sites is not limited to just the total number of sites, as there is significant variation in estimates of cultural sites per mile. Chapter three clearly states there are .65 sites per square mile, while Chapter four of the EIS estimates this average as 11.6 sites per square mile.

Issue Number: PP-CO-CRV-14-11-39

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: As previously addressed 89% of the CRVO simply has never been inventoried and the information

that is obtained from the 11% that has been inventoried is often highly variable and conflicting and precludes any possibility of accurately extrapolating this information into the areas of the CRVO that have not been inventoried.

Issue Number: PP-CO-CRV-14-11-41

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: Rather than provide a review of the significance of various sites and levels of deterioration, the RMP starts with an assertion that is simply fatally flawed, as all sites are immediately found significant and warranting inclusion on the National Register in the site specific management standards. The CRVO RMP's new site specific standards immediately address "all" cultural sites now and in the future and fail to address statutory requirements that a site must be significant to warrant mandatory protection, not significantly deteriorated as follows: "Allocate all cultural resources currently recorded, or projected to occur on the basis of existing data synthesis, to use allocations according to their nature and relative preservation value (BLM Manual Section 8110.42 and Planning Handbook H-1601-1 [Appendix C]). Cultural Use Allocations include:"

Issue Number: PP-CO-CRV-14-11-42

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: While there are 5 categories of usage created for cultural resources, these categories are not defined and are not relied on for a tiered level of management that could address areas or sites that might be less than significant or severely deteriorated. The CRVO decision that all cultural resource are to be protected at the site specific level is reflected in the RMP as follows:

"Identify research opportunities and preserve the nature and value of cultural resources." The Organizations vigorously assert this standard is a facial violation of federal historical protection laws, as management is required for "all" sites now and in the future rather than those that area reviewed and found "significant". The Organizations believe the CRVO has completely erred in its determination that every site now and in the future will satisfy the "significance" factor and permit additional management, when 89% of the CRVO planning area has not been inventoried. The landscape level findings regarding significance of possible sites in the CRVO planning process are deeply inconsistent with the findings of significance by outside reviewers in the State of Colorado.

Summary:

The analysis of cultural resources is inadequate because:

- Conflicting numbers are provided regarding total cultural resources and estimates of cultural sites per mile.
- The conflicting information provided for the inventoried portion of the CRVFO cannot be accurately extrapolated to the remaining portion of the CRVFO.

- The RMP asserts that all cultural sites are significant and warrant inclusion on the National Register, in violation of statutory requirements regarding a review of significance and the level of deterioration.

Response:

The BLM adequately analyzed cultural resources in the CRVFO PRMP/FEIS in accordance with various federal laws, regulations, executive orders, and BLM policies. Section 3.2.8 of the CRVFO PRMP/FEIS discussed the laws, regulations, executive orders, and BLM policies that support managing for the protection of cultural resources. The BLM recognized in the PRMP/FEIS that “[t]he determination of cultural resource site significance is an exceedingly important process within the context of BLM cultural resource protection programs.” (CRVFO PRMP/FEIS, 2014, p. 3-105). In accordance with the BLM’s Land Use Planning Handbook H-1601-1 (Feb. 2005) and BLM Manual 8110, the BLM conducted a Class I inventory to identify the baseline for cultural resources within the CRVFO. BLM Handbook H-1601-1 at Appendix C, p. 8 and BLM Manual 8110 at .21A1. This included the cultural resource inventories conducted with the CRVFO during the last 30 years, which documented and evaluated the identified resources for the National Register significance (CRVFO PRMP/FEIS, 2014, p. 3-109). Further, the BLM provided an estimate of the potential cultural resource site density to assist in generally contemplating the potential impacts associated with management activities. (CRVFO PRMP/FEIS, 2014, p. 3-109).

The CRVFO PRMP/FEIS explained that only a small percentage of the possible total amounts of cultural resources have been identified across the planning area, and fewer have been evaluated for their eligibility for the NRHP or their potential importance to traditional communities (CRVFO PRMP/FEIS, 2014, p. 4-355). Based on current information regarding known site locations and densities, the analysis therefore assumed, for planning purposes, that historic properties and significant traditional properties would be present throughout the planning area (CRVFO PRMP/FEIS, 2014, p. 4-355). Assumptions related to average cultural site density per square mile acknowledged that cultural sites do not occur uniformly across the planning area. (CRVFO PRMP/FEIS, 2014, p. 4-356). Nearly all implementation actions will be subject to further cultural resource review prior to project authorization or implementation in order to identify significant cultural resources at the site-specific level (CRVFO PRMP/FEIS, 2014, p. 4-353).

The BLM’s evaluation of cultural resources and analysis of impacts associated with management activities in the PRMP/FEIS is consistent with applicable cultural resource laws. Section 4.2.8 of the CRVFO PRMP/FEIS presented the assumptions used in the analysis of impacts to cultural resources, and included a definition of historic properties and cultural resources. Historic properties are only a subset of cultural resources. Cultural resources are defined as including archaeological, historic, and Native American traditional cultural property (TCP), religious sites, and sensitive areas, unless otherwise specified in the analysis (CRVFO PRMP/FEIS, 2014, p. 4-354). The cultural use allocations identified for Alternatives B, C, and D of the CRVFO PRMP/FEIS are consistent with BLM Manual Section 8110.42 and Planning Handbook H-1601-1 Appendix C (CRVFO PRMP/FEIS, 2014, p. 2-73). The various cultural use allocation categories were defined and explained on pages 3-107 and 3-108, and as explained on page 2-73

of the CRVFO PRMP/FEIS, cultural use allocations may be revised in response to changing site conditions or as additional data and information are obtained.

The CRVFO PRMP presents desired outcomes, which consist of goals and objectives, for cultural resources. Goals are broad statements of desired outcomes that are usually not quantifiable, while objectives identify specific desired outcomes for resources and may be quantifiable, measurable, or establish timeframes for achievement (CRVFO PRMP/FEIS, 2014, p. 2-23). One of the goals identified in the CRVFO PRMP for cultural resources is to “Identify, preserve, and protect significant cultural resources...” and under this goal several objectives are listed, including the objective to “identify research opportunities and preserve the nature and value of cultural resources” (CRVFO PRMP/FEIS, 2014, p. 2-72). These objectives would be targeted for “significant cultural resources”, as defined by the objectives’ overarching goal. The CRVFO PRMP/FEIS presented a variety of information and analyses associated with cultural resources, and a direct comparison of numbers and totals from one analysis to the next may not be appropriate. For example, page 4-355 of the CRVFO PRMP/FEIS stated that “The cultural resource database as of May 2007 contained 6,250 known sites.” This cultural resource database stores cultural resource data for the entire geographic area within the external administrative boundaries of the CRVFO, including lands not administered by the BLM, as well as lands within the Roan Plateau planning area excluded for the CRVFO PRMP. The total of 6,250 sites queried from this database was used to demonstrate the magnitude of cultural resources managed by the CRVFO. On the other hand, the total of 1,290 sites presented in Table 3.2.8-2 of the CRVFO PRMP/FEIS (p. 3-109) indicated the number of sites classified into “Use Allocation” categories, as defined in BLM Manual Guidance 8110.4. A single site may be classified into more than one category, and sites can only be allocated to a use category if they are located on BLM-administered surface lands.

NEPA – Oil and Gas

Issue Number: PP-CO-CRV-14-06-13
Organization: Western Energy Alliance,
Public Lands Advocacy
Protestor: Kathleen Sgamma/Claire
Moseley

explain whether the condensate to be piped to its final destination was discussed with and agreed to by operators. We protest that this issue was not addressed in the response to comments.

Issue Excerpt Text: In the FEIS, BLM proposed the consolidation of liquids gathering and gas treatment facilities: "Require at least 80 percent of condensate and produced water to be piped from production sites to consolidated facilities for treatment or transfer to trucks for haulage." PLA's comments on the RMP/DEIS expressed concern whether this requirement took into account the data submitted by operators to BLM, i.e., we asked BLM to

Issue Number: PP-CO-CRV-14-06-15
Organization: Western Energy Alliance,
Public Lands Advocacy
Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: “Based on annual review required in the CARPP in Appendix 1 and on the rate of development, require phased-in use of improved drilling and completion engines that meet or exceed Tier

4 non-road diesel emission standards (40 CFR 1039). The conversion to engines that meet or exceed Tier 4 non-road diesel emission standards would be completed when the equivalent of 2,664 wells or the emissions modeled in Alternative A of the ARTSD are exceeded". PLA commented on the proposed requirement for Tier 4 engines but received no response".

Issue Number: PP-CO-CRV-14-06-25

Organization: Western Energy Alliance, Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire Moseley

Issue Excerpt Text: In the Chapter 4 analysis of impacts to oil and natural gas development, and referring to the Niobrara and Mancos shale formations, BLM states that, "(t)o date, use of horizontal drilling in relation to the deep marine shales has been limited and is considered experimental. As a result, the development intensity, timing, and location of development of the deep marine shales was considered too speculative for quantitative impact analysis in connection with this planning process." On the contrary, though development is in its early stages, operators have proven great success developing natural gas resources from these formations, particularly the Niobrara. Excluding this resource from impact analysis in an RMP that will likely be in effect for two decades is extremely short-sighted; therefore, BLM must include an analysis of this potential in the final planning documents.

Issue Number: PP-CO-CRV-14-12-90

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: In the context of economics, BMPs and human health

impacts, the Conservation Groups' comments raised the issue of increased traffic due to oil and gas operations. Draft Comments (2012) at 69-70. The CRVFO's NEPA analyses must include analysis of impacts from increases in vehicle traffic that development authorized under the RMP/FEIS would induce. For example, cases have required NEPA analyses of proposed casino projects to include impacts of increases in vehicle traffic the projects would induce. See Michigan Gambling Opposition v. Kempthorne, 525 F.3d 23, 29 (D.C. Cir. 2008); Taxpayers of Michigan Against Casinos v. Norton, 433 F.3d 852, 863 (D.C. Cir. 2006).

Issue Number: PP-CO-CRV-14-12-92

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text : Specifically, the RMP/FEIS fails to undertake a substantive analysis of the impacts from oil and gas related traffic. Although the RMP/FEIS acknowledges that oil and gas development will result in increased traffic, see e.g., FEIS at 3-210, 4-754, it never goes beyond a general description or listing of impacts. For example, the RMP/FEIS states several times that "[o]n average, 580 round trips by heavy trucks and pickups are associated with each new well." FEIS at 4-173, 216, 291, 333. The CRVFO also calculates that under the Proposed RMP/FEIS –which, as noted, development under the RFD is significantly underestimated – oil and gas development would result in an average of 626 trips per day. FEIS at 4-782 (emphasis added). However, the RMP/FEIS makes no effort to take a meaningful look at the effects from this significant rise in heavy traffic, merely mentioning generalized impacts from delays, noise, dust, and road degradation as potential negative impacts to the area. FEIS

at 4-754, 786. This type of cursory analysis fails to satisfy the CRVFO's hard look obligations. Absent from the RMP/FEIS, for example, is any attempt by the agency to quantify air quality impacts from increased truck traffic, estimate increased maintenance demands, consider safety costs for increased roadway use, increased traffic accidents and associated medical impacts and burdens on local hospitals, burdens on first responders and the criminal justice system, or to even project where or how many miles of access roads will be constructed. Instead, the RMP/FEIS avoids such analyses by pointing to general uncertainty – see FEIS at 4-754 to 755 (“The actual distribution of traffic is hard to predict because the exact rate of drilling, the distribution of the development, the use of multi-well pads, and the use of pipelines for fluids are unknown and likely to vary from year to year.”) – and deferring to the submission of Master Development Plans by operators, see FEIS at 2-116 (“The MDP would be used to plan development of Federal leases within the area to account for well locations, roads, and pipelines, and to identify cumulative environmental effects and appropriate mitigation.”). This type of agency shell-game to avoid performing an actual hard look analysis of traffic impacts cannot be sustained.

Issue Number: PP-CO-CRV-14-12-93

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Moreover, the RMP/FEIS projections of oil and gas related truck trips are based on outdated information that underestimates the likely number of truck trips needed per well associated with the more water-intensive techniques necessary for hydraulic fracturing. The CRVFO states: “[t]raffic effects from oil and gas development are assessed using

available information on vehicle trips per well for all vehicle class types (1,160 trips per well for pickup and larger trucks) over a 30-day period (DOI 2006).” FEIS at 4-765. More recent information indicates that it requires 1,400 one-way truck trips to transport 2-5 million gallons of water to frack one well.

Issue Number: PP-CO-CRV-14-12-95

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The RMP/FEIS is unclear on what pipelines are actually to be required, what pipelines are “feasible,” whether they would be limited in what they transport, how many barrels per day they would transport, and how much truck traffic this would displace (if any, since the pipelines ultimately are transferring product to trucks). There are no specific estimates of how many pipelines will be constructed, how many miles of pipe will be laid, what their diameter would be, how many water-bodies they would cross, or where they will be located. Moreover, and as noted above in regard to road traffic, the RMP/FEIS improperly uses uncertainty as a shell-game to defer to future planning, and thus entirely fails to provide sufficient analysis of pipeline impacts under the chosen Alternative B. In this regard the BLM again has not taken a “hard look” at the subject, and if this information is not available it is incumbent upon BLM to explain what would be required to obtain it and why it cannot collect the information. 40 C.F.R. § 1502.22.

Issue Number: PP-CO-CRV-14-12-96

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Reducing truck traffic through the installation of pipelines introduces different impacts to the environment, but the RMP/FEIS only provides a cursory treatment of these impacts. For example, the RMP/FEIS recognizes the potential risk of pipeline ruptures and states that, according to the U.S. Department of Transportation: “an average of one rupture annually should be expected for every 5,000 miles of pipeline.” FEIS at 3-216 to 217. This statistic is meaningless, however, without any projections in the RMP/FEIS of how many pipeline miles the CRVFO currently has and how many miles the agency expects will be built in the planning area during the life of the RMP. Further, while the RMP/FEIS acknowledges the potential for contamination of soils, surface water, and groundwater as a result of spills, see FEIS at 4-93, there is no discussion of possible spill volumes or consideration of various spill scenarios. The CRVFO does project 5,276 acres of surface disturbance under the Proposed RMP/FEIS, see FEIS at 4-605 – which includes access roads, pipelines, well pads, and offsite facilities. In sum, the

Summary:

The PRMP/FEIS failed to adequately analyze impacts related to oil and gas development. The PRMP/FEIS failed to adequately analyze:

- Impacts to oil and gas development in the Niobrara and Mancos formations.
- Impacts from truck traffic related to oil and gas development.
- Impacts from pipelines related to oil and gas development.
- Impacts from repeated hydraulic fracturing of oil and gas wells.

The PRMP/FEIS did not adequately respond to public comments about impacts related to oil and gas development.

Response:

RMP/FEIS discusses the impacts of pipeline construction, spills, and leaks generally, see, e.g. FEIS at 4-168, but without this further information tied to specific data, the analysis does not – and cannot – quantify any harm, and wrongfully minimizes the direct, indirect and cumulative impacts of pipeline construction, maintenance and operation.

Issue Number: PP-CO-CRV-14-12-98

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The re-fracking impacts analysis appears to be absent from the FEIS and must be conducted for all wells in the field office: private and public, existing and future, existing target formations, and potential new plays. Absent such analysis, BLM has failed to take a hard look at the direct, indirect or cumulative impacts of ongoing and reasonably foreseeable oil and gas development in the CRVFO.

The BLM gathered the necessary data essential to make a reasoned choice among the alternatives analyzed in the RMP/EIS. The BLM analyzed the available data that led to an adequate disclosure of the potential environmental consequences of the Proposed Alternative and other alternatives. As required by NEPA, the BLM has taken a “hard look” at the environmental consequence of the alternatives to enable the decision maker to make an informed decision. Typically, RMP-level impact analyses are broad and qualitative rather than quantitative or focused on site-specific actions. To identify impacts that could potentially occur as a result of oil and gas management decisions in the PMRP/FEIS, the BLM developed a Reasonable Foreseeable Development Scenarios (RFD). By addressing the impacts in context of the overall level of development anticipated in the RFD, the BLM has met the requirements of impact analysis at the broad, RMP level.

In the RFD, the BLM made an assumption about the overall magnitude of development that could occur based on known oil and gas resources and current technologies and economic trends. However, it is not possible to estimate specific locations, times, and the pattern of oil and gas development when writing the PRMP/FEIS. Making assumptions regarding these factors would be speculative and not contribute to a meaningful NEPA analysis.

As part of the process to receive a permit to drill, oil and gas project proponents must submit detailed plans of development that include specific information, such as the location of roads, traffic, and pipelines. Thus, a more quantitative and site-specific analysis could be completed by the BLM when considering whether or not to grant a permit to drill.

Oil and Gas Development in the Niobrara and Mancos Formations

The BLM considered development in the Niobrara and Mancos formations: “In addition to the conventional Mesaverde and Wasatch plays, the RFD analyzed and considered possible unconventional gas plays of the Niobrara, Mancos, and Eagle Basin formations” (Colorado River Valley PRMP/FEIS, p. 4-576). The BLM adequately analyzed impacts to development of the Niobrara and Mancos formations to the extent that information was available: “the development intensity, timing, and location of development of the deep marine shales was considered too speculative for quantitative impact analysis in connection with this planning process” (Colorado River Valley PRMP/FEIS, p. 4-576). Additionally, “information related to potential development of deep tight-gas marine shales of the Niobrara and Mancos formations using horizontal drilling technologies has been mostly treated by the operators as proprietary during the timeframe of the current planning process”, which further prevented the BLM from being able to make quantitative predictions regarding the intensity, timing, and location of development for the Niobrara and Mancos shale formations.

Please see the “Reasonable Foreseeable Development” section of this protest resolution report for further discussion.

Truck Traffic Related to Oil and Gas Development

The PRMP/FEIS does provide quantitative assumptions for the volume of truck traffic based on the overall level of development anticipated (i.e. number of wells) (Colorado River Valley PRMP/FEIS, p. 4-782). The ARTSD made numerous, quantitative assumptions regarding the volume of truck traffic related to oil and gas development under each alternative. The ARTSD

then provided a quantified prediction of the level of emissions that could occur from this traffic (see p. A-31 and A-32 of the ARTSD for an example). It would be speculative to predict the actual distribution of truck traffic (i.e. the location of traffic), since BLM cannot reasonably predict how and where oil and gas development will specifically occur.

The assumptions that BLM made for the volume of truck traffic related to oil and gas were based on professional experience and recent studies, such as a 2006 DOI report (Colorado River Valley PRMP/FEIS, p. 4-765). While other sources of information may provide different assumptions for the volume of truck traffic related to oil and gas development, BLM's assumptions were reasonable and allowed the BLM to compare relative impacts across the range of alternatives. The PRMP/FEIS also quantitatively analyzed the volume of truck traffic related to oil and gas development in context of traffic that already exists in the planning area. The PRMP/FEIS discloses that while truck traffic related to oil and gas development may represent a small percentage of overall traffic, it may still negatively impact some residents and communities: "Regardless, oil and gas related traffic concern would remain for area communities. While this traffic volume may not cause traffic congestion by itself--it could contribute less than 4 percent of current average daily trips along Interstate 70 between Silt and Parachute--it often occurs in rural areas where additional truck traffic, noise, and dust may be easily noticed. Consequently, it could negatively impact the quality of life for those living in the vicinity of the development and those who are accustomed to and value a quiet rural setting. While the level and occurrence of this traffic volume along specific roads is not available, the maximum daily trips across the entire planning area would not exceed 12 percent of traffic along Highway 13 between Rifle and Meeker (CDOT 2009)" (Colorado River Valley PRMP/FEIS, p. 4-786 and 4-787).

Pipelines Related to Oil and Gas Development

The PRMP/FEIS does provide quantitative estimates regarding surface disturbance from oil and gas development where it was reasonable and would meaningfully contribute to well-informed decision making (e.g., Chapter 4 and Appendix R). The BLM estimated the number of well pads, and associated surface disturbance, that would be constructed to accommodate the anticipated number of wells in the planning area. The BLM also estimated acres of surface disturbance from access roads, which includes collocated pipelines (Colorado River Valley PRMP/FEIS, RFD, p. 44). See Section 9 of the RFD for a detailed explanation of quantitative estimates made regarding surface disturbance from oil and gas development. Based on these estimates, the PRMP/FEIS concludes that "the Proposed RMP would result in more development, estimated to total approximately 4,198 federal wells on 525 multi-well pads, with an estimated 5,276 acres of surface disturbance" (Colorado River Valley PRMP/FEIS, p. 4-230). This estimate of acres included a per-pad average road distance. It would be speculative to predict the actual distribution of pipelines (i.e. the location of pipelines) and the expected miles of pipeline anticipated in the planning area, except to note that the large majority of these follow existing or new access roads or existing pipeline corridors. While collocated or new pipeline routes represent a surface disturbance, the entirety of a pipeline alignment is promptly reclaimed and therefore represents a short-term impact compared to permanent road driving surfaces and working areas of pads not reclaimed during the life of the wells.

Also, note that the PRMP/FEIS does discuss the diameter of anticipated pipelines: "After gas is individually treated, separated and measured, it travels through a 4-inch to 8-inch diameter steel

line (line pressures range: 100 psi to 1,000 psi) from the well pad to field compression facilities and then to a buried cross country trunk pipeline. Trunk pipelines in the area have diameters between 12 and 36...After processing, the dry gas is transported to local markets our [sic] out of the Piceance Basin in one of several 24-inch lines” (Colorado River Valley PRMP/FEIS, RFD, p. 29).

Repeated Hydraulic Fracturing of Oil and Gas Wells

Recompletions (including re-fracing) are discussed in two different situations. One is the use of re-fracturing as a type of “workover” operation (Appendix R - Section 9.1 - Existing and Future Net and Gross Surface Disturbance) intended to re-stimulate a well experiencing declining production due to partial closure of the initially induced fractures or some other cause.

Recompletions of this type are of short duration using a truck-mounted rig and occur at irregular frequencies, typically several years into the life of a well, if ever.

The other situation for recompletion (re-fracturing) a well is when an additional gas-bearing zone is brought into production in the same well bore as an existing well. This type of recompletion (Appendix R - Section 3 - Description of Geology) uses a truck-mounted workover rig if the additional zone is shallower and a drill rig if the new zone is deeper. This type of recompletion cannot be predicted in terms of number or location but has been extremely infrequent.

Response to Comments

The BLM adequately responded to substantive comments received on the Draft RMP/Draft EIS. Appendix V (in particular Sections 1.1 to 1.11) contains the BLM’s responses. The BLM utilized a comment summary method, in which the BLM summarized similar comments and then responded to the comment summary. Table V-2 of the PRMP/FEIS discloses all the substantive comments.

The BLM considered all comments regarding air quality mitigation measures that impact oil and gas development. As stated in Appendix V of the PRMP/FEIS: “A range of currently available technologies which reduce air emissions were chosen to be evaluated with the air quality modeling effort presented in the ARTSD and results incorporated in the Draft RMP/Draft EIS. In arriving at a Proposed RMP and preparing a Final EIS, the BLM has considered all substantive comments and issues regarding technical feasibility of air mitigation measures. The Proposed RMP/Final EIS does not require any measures which are technically infeasible or unavailable” (Colorado River Valley PRMP/FEIS, p. V-7).

NEPA – Public Health

Issue Number: PP-CO-CRV-14-12-100

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM did not conduct a health impact assessment, or equivalent

analysis, and, as a result, the agency’s RMP/FEIS does not satisfy NEPA and its implementing regulations. In Conservation Groups’ comments, we stated that BLM must fully consider the potential human health impacts that may be caused by oil and gas operations approved under the CRVFO RMP, as required by NEPA. Congress stated

that "...it is the continuing responsibility of the Federal Government to use all practicable means...to attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences..." 42 U.S.C. § 4331. NEPA implementing regulations direct agencies to consider "the degree to which the proposed action affects public health or safety." 40 C.F.R. § 1508.27(b). These regulations also state: "Federal agencies shall to the fullest extent possible.... Use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." 40 C.F.R. § 1500.2(f).

Issue Number: PP-CO-CRV-14-12-102

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Conservation Groups' stated in our comments that a health impact assessment ("HIA") or equivalent analysis would fulfill the regulations governing NEPA, to examine human health impacts "to the fullest extent possible." A HIA would be forward-looking and attempt to identify all of the potential direct, indirect, and cumulative links between a proposed activity and the health and well-being of affected communities, and to develop mitigation measures to minimize harms and maximize benefits. The final RMP does not include this type of analysis of human health impacts.

Issue Number: PP-CO-CRV-14-12-104

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: In Response to Comments at 26.11, the BLM provides a brief discussion on the Risks of Public Health Associated with Hydraulic Fracturing. It notes commenters objected that BLM's regulations are outdated and inadequate to ensure protection of the public, but disputes that. However, as discussed above in this protest, the BLM's fracking regulations are clearly outdated, as BLM admits in its Federal Register notice on its new proposed rules. The BLM further defends its health analysis based on USGS and COGCC studies that allegedly show BLM's management conduct in the current regulations is sufficient, but this begs the question of the sufficiency of BLM's current regulatory system. Section 26.13 of the Response to Comments regards fracking's effects on human health, and notes the comments stating its risks are unacceptable. BLM's response, again, is a conclusory assertion that USGS and COGCC studies confirm the safety of BLM's management; and that BLM can impose additional measures at the "implementation level." These assertions do not address the comments.

Issue Number: PP-CO-CRV-14-12-106

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM also concluded that ... "no actual, existing health effects of oil and gas activities have been documented for the planning area[.]" which is false and, additionally, does not mean there would be none in the future. This statement is contradicted by published scientific research, as noted below. BLM did not analyze how many people live within a

certain distance of proposed oil and gas facilities or the exposure risk associated with types, amount and distance of the chemicals. Therefore, BLM did not adequately consider health impacts.

Issue Number: PP-CO-CRV-14-12-108

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The BLM's Response to Comments contains a section entitled Review of Current Public Health and Safety Literature. FEIS Appendix V at 63.

However, BLM does not address numerous current studies, as described above.

Moreover, BLM dismisses the studies it does consider on the grounds that "while these additional studies cite potential risks under certain assumptions, none of the studies has demonstrated that significant adverse health effects have occurred or are predicted to occur as a result of actual operations conducted in conformance with BLM and State of Colorado regulations." FEIS at V-63. Therefore, the Conservation Groups submit the following, to demonstrate further the health risks and impacts of fracking and fracking-related activities

Issue Number: PP-CO-CRV-14-12-58

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Summary:

The PRMP/FEIS failed to adequately analyze impacts related to public health. The PRMP/FEIS failed to:

- Conduct a Health Impacts Assessment.
- Adequately analyze potential adverse impacts to public health.
- Consider relevant studies when conducting public health impacts analysis.
- Explain the relationship between air quality and human health.

The BLM failed to adequately respond to comments related to public health, particularly as it pertains to the effects of hydraulic fracturing.

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Entirely absent from the agency's discussion of air quality impacts is the relationship to human health. Although adherence to air quality mitigation and NAAQS standards will have a positive relationship to human health, poor baseline air quality conditions due to direct, indirect and cumulative impacts in the planning area warrants an independent hard look analysis at human health; and, moreover, such analysis is required by NEPA and CEQ implementing regulations.

Issue Number: PP-CO-CRV-14-12-60

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The relationship between air quality and human health must be analyzed in the Proposed RMP/FEIS. The failure of the CRVFO to do so, here, represents a fundamental shortcoming of the agency's analysis, and must be corrected. "The agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" Motor Vehicle Mfrs., 463U.S. at 43 (1983).

Response:

BLM Colorado adequately analyzed impacts to public health and safety, in accordance with the significance criteria outlined in 40 C.F.R. § 1508.27(b). Section 3.6 of the PRMP/FEIS addresses the current condition of public health and safety as it pertains specifically to energy development, hydraulic fracturing, and oil and gas-related air emissions. Section 4.6.1 analyzes impacts of the various alternatives, including specific impacts from decisions related to oil and gas leasing activities on public health and safety. In response to public comments on the DRMP/DEIS, BLM Colorado responded specifically to concerns about existing oil and gas activities' impacts on public health and safety (PRMP/PEIS, Appendix V. *Response to Comments*, Section 26).

While a Health Impact Assessment can inform NEPA analysis, it is not required by NEPA statute, implementing regulation, or policy. BLM Colorado responded to public comments about the adequacy of analysis of impacts of hydraulic fracturing, as summarized at PRMP/PEIS, Appendix V. *Response to Comments*, Section 26.11, by expanding the analysis of the impacts of that technology.

NEPA – Socioeconomic Resources

Issue Number: PP-CO-CRV-14-06-26

Organization: Western Energy Alliance,
Public Lands Advocacy

Protestor: Kathleen Sgamma/Claire
Moseley

Issue Excerpt Text: Failure to Accurately Analyze the Socio-Economic Impacts of Reduced Oil and Natural Gas Development: We protest BLM's failure to analyze the impacts of reduced oil and gas development on the local economy within the CRV planning area and the benefits afforded to the same. In our comment letters, we pointed out that BLM failed to analyze the negative socio-economic impacts that would result from the decrease in oil and natural gas activity due to BLM's increasingly restrictive management policies, such as the loss of jobs, revenues, and other detrimental impacts.

Issue Number: PP-CO-CRV-14-11-10

Organization: COHVCO, Trails
Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall
Miller

Issue Excerpt Text: Application of the USFS NVUM average per day recreational spending conclusions would result in a total recreational spending amount for 338,000 visitor days of \$17 million to \$20 million in recreational spending in the planning area. The CRVO planning process fails to provide sufficient breakdown of recreational visitation by user group to allow for the application of user group specific analysis that is provided as part of the NVUM analysis process.

Issue Number: PP-CO-CRV-14-11-13

Organization: COHVCO, Trails
Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall
Miller

Issue Excerpt Text: NVUM analysis of recreational spending is provided in two basic manners. The USFS provides a single national report with specific information for

each user group and then each forest and region develops forest specific reports that apply the national level recreational spending amounts to the visitation levels of the specific region or forest. The USFS NVUM process provides a wide range of information regarding users and economic information which is divided into 4 national categories for each user group as part of a single national report. These categories are local day use; non-local day usage; local overnight use; and non-local overnight usage. Each group is provided a low, average and high spending amount. The national averages in each category are then adjusted to incorporate comparative local costs for using particular areas of the county, as costs of living and recreation vary significantly throughout the county. These multipliers for local costs are summarized as a below average, average and above average spending area. These localized categories are then multiplied by the visitation to a particular area in each category of user to allow for flexibility of the analysis process and develop site specific total spending conclusions. The CRVO failure to provide this basic information, which should have been developed for the application of the NVUM process has directly prejudiced the Organizations ability to meaningfully discuss errors in conclusions. The Organizations believe the failure to provide this information is a violation of NEPA as a high quality detailed statement of the analysis of the issue under the hard look standard has not been provided.

Issue Number: PP-CO-CRV-14-11-15

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: The US Forest Service recently released new National Visitor Use

Monitoring reports and research for the Rocky Mountain region and many of the USFS lands that are adjacent to the CRVO. The conclusions of this research regarding amounts of average recreational spending per day is totally irreconcilable with CRVO findings regarding recreational spending on public lands. The USFS NVUM data for Region 2 found the average recreational spending for a party on a trip was \$1,059 dollars. The average trip within Region 2 was 5.7 days in length and the average party consisted of 3 people. As a result the average spending can be developed by dividing the average trip total by the average trip length and the average party size. The USFS NVUM region 2 research and analysis concludes that the average daily recreational spending total in R2 is \$61.92 per day including visitors who ski. When similar calculations are applied and exclude skiers an average spending amount of \$51.92 is reached. A copy of the Region 2 NVUM report is included with this appeal for your reference, as a copy of this document was provided to the CRVO when it was released outside the formal comment period and as this document was allegedly relied on in the development of the CRVO analysis. The Organizations vigorously assert this total is utterly irreconcilable with the CRVO conclusion that the average recreational user spends \$16.27 per day, especially given the high levels of motorized usage on the CRVO, which NVUM concludes results in similar daily spending amount to skiing. CRVO conclusions are between 1/3 and 1/4 of the USFS regional NVUM spending amounts.

Issue Number: PP-CO-CRV-14-11-17

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: The Organizations vigorously assert the arbitrary and capricious nature of the CRVO conclusion that the average recreational user spends \$16.27 per day is apparent as the NVUM analysis can find no user group that spends less than \$21. The Organizations must note that the \$21 average is a local user group spending profile that the CRVO asserts has been excluded from analysis in their process. The lowest out of region spending profile that is identified is \$50, further drawing into question any average below that amount. The NVUM analysis concludes the average out of town recreational visitor spends between \$65 and \$366 per night, again directly conflicting with the CRVO conclusions that the average out of region user spends \$16.27 per day. These NVUM conclusions simply are irreconcilable with CRVO conclusions and directly evidence the arbitrary and capricious nature of the CRVO conclusions on average recreational spending of users.

Issue Number: PP-CO-CRV-14-11-19
Organization: COHVCO, Trails Preservation Alliance
Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: However, the conclusions on average recreational spending are anything but reconcilable when the CRVO conclusions and the GRSG conclusions, as GRSG analysis finds the lowest category of recreational spending (nonlocal day trips at \$34.26) is twice the average found on the CRVO. The GRSG analysis concludes that non-local overnight recreational users spend on average \$209.47 (13x the CRVO average) further conflicting with CRVO conclusions and that all recreational usage (local and non-local) results in an average spending amount of \$121.96.

Issue Number: PP-CO-CRV-14-11-2
Organization: COHVCO, Trails Preservation Alliance
Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: The Organizations vigorously assert that the CRVO failure to define such fundamental analysis mechanism as where are visitors to the planning area coming from in a manner that is accurate and consistent has directly contributed to the arbitrary and capricious conclusions that are more specifically addressed in the subsequently in this appeal. The Organizations vigorously assert that the failure to accurately describe the analysis of the origin of recreational visitation has also directly impaired the public's ability to meaningfully comment in the process, as people could easily misunderstand the scales and areas of analysis. These failures of analysis are facial violations of the hard look at economic issues mandated by NEPA.

Issue Number: PP-CO-CRV-14-11-21
Organization: COHVCO, Trails Preservation Alliance
Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: Given that a significant portion of the CRVO planning area has been analyzed as GRSG habitat and this analysis has occurred at basically the same time, using the same model with the same agency as the CRVO RMP has been developed, there should be a high level of consistency with the conclusions on various issues between the two planning actions. There simply is no consistency between the recreational economics in the CRVO and GRSG planning and the Organizations vigorously assert this is direct evidence of the arbitrary and capricious

nature of the analysis provided in the CRVO analysis.

Issue Number: PP-CO-CRV-14-11-23

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: The GRSG LUPA analysis estimates out of region recreational spending ranges from \$34.26 (nonlocal day trips) to \$209.67 (Nonlocal overnight trip). It is significant to note that NONE of these totals are of sufficient low levels to warrant an average daily spend of \$16.27.

Issue Number: PP-CO-CRV-14-11-25

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: The CRVO RMP asserts all recreation accounts for 153 jobs total. The conclusions are completely inconsistent with the conclusions that the BLM has reached as part of the Greater Sage Grouse planning and resource amendment process despite most of the CRVO planning area being designated as GRSG habitat. The BLM GRSG planning estimates that in Eagle, Garfield, Mesa and Rout county planning area 766 jobs are related to hunting and fishing. Estimates for Eagle county were withheld for confidentiality reasons as part of the GRSG planning. The GRSG also estimates that 8,135 jobs result from arts, entertainment and recreational usage of the multi-county planning area. When combined the GRSG analysis finds that 8,901 jobs result from hunting, fishing and recreation in the planning area.

Issue Number: PP-CO-CRV-14-11-4

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: In addition to these reports that provide county level information, both USFS NVUM data and recent planning regarding the Greater Sage Grouse (GRSG) provide average daily spending amounts that can be applied to visitor use estimates in the CRVO to provide accurate estimations of total recreational spending in the planning area. The Organizations vigorously assert there is significant conflict between these total spending amounts and the CRVO conclusions that all recreational spending only accounts for \$5.5 million dollars annually.

Issue Number: PP-CO-CRV-14-11-6

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: Colorado Tourism Office (CTO) found that tourism/travel contributed over \$939 million to Eagle and Garfield County and \$1.9 Billion to the 5 county analysis area identified as the CRVO analysis area. The Organizations must also note that the Colorado Tourism office provided 14 years of county specific analysis as the basis for the current spending amounts, making these conclusions highly credible for the planning area. By comparison, the CRVO planning conclusions represent .3% of the amount that Colorado Tourism found for the 5 county planning area asserted to be relied on for CRVO analysis despite the CRVO managing 19% of these lands.

Issue Number: PP-CO-CRV-14-11-7

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: COHVCO found that the use of registered OHVs for recreation alone provided over \$307 million to the CRVO region.² It is significant to note that the scope of this study included only ATV, snowmobiles and motorcycles with state registrations. The study does not capture the full size 4x4 or jeep usage on the planning area, making this conclusion for total spending exceptionally conservative. Despite the conservative nature of this analysis, the CRVO conclusion of total recreational spending contributing \$5.5 million only represents 1.7% of the total spending that has been identified for a single sector of the recreational market. Again the CRVO spending amount should be significantly higher than this single sector analysis given the diverse scope of recreational activity and that the CRVO manages 19% of all lands in the 5-county CRVO planning area.

Issue Number: PP-CO-CRV-14-11-9

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: Application of Greater Sage Grouse ("GRSG") average recreational per day spending profile of \$121.9629 to the

average recreational visitor days (338,000) would generate \$41 million for total recreational spending, and this comparison is highly relevant as a significant portion of the CRVO is GRSG habitat. As more completely discussed in subsequent portions of the appeal, these process should generate significantly similar conclusions as both apply the same IMPLAN model, over the same geographic area over the same timeframes of analysis. These conclusions are made even more relevant as these totals are entirely based on the visitation amounts reached in the CRVO planning process that are the result of recreational activity on the planning office. The Organizations are unable to reconcile any assertions that 338,000 recreational visits would generate only \$5.5 million annually with the GRSG conclusions that the same recreational usage would generate over \$41 million.

Issue Number: PP-CO-CRV-14-15-10

Organization: Bill Barrett Corporation

Protestor: Bret A. Sumner/Theresa M. Sauer (Attorneys)

Issue Excerpt Text: The absence of analysis of the potential fiscal impacts of each alternative attributable to differences in the number and distribution of new natural gas wells ignores the important role that natural gas property tax revenues play in the financing of local government services and the resultant impacts on quality of life for resident citizens within the counties that will be affected by the land use plan.

Summary:

The socioeconomic impact analysis is inadequate because:

- The BLM failed to effectively analyze the differences in socioeconomic impacts from oil and natural gas activity across the range of alternatives.
- The CRVFO planning process failed to provide sufficient breakdown of recreational visitation by user group to allow for the application of user group specific analysis.

- The CRVFO failed to provide the basic information used in the recreational spending analysis directly prejudiced the ability of reviewers to meaningfully discuss errors in conclusions, in violation of the NEPA hard look standard.
- The CRVFO findings regarding economic contributions from recreation on the public lands are arbitrary and capricious and are irreconcilable with the results of U.S. Forest Service National Visitor Use Monitoring reports, the BLM's Greater Sage Grouse EIS, Colorado Tourism Office statistics, and COHVCO research.

Response:

Socioeconomic Impacts of Oil and Gas Activity

The BLM adequately considered the socio-economic impacts from oil and natural gas activity across the range of alternatives in the CRVFO PRMP/FEIS. As mentioned on multiple pages in Chapter 4 as well as on page 2 of the Reasonable Development Scenario (RDS) Appendix, it is estimated that 99 percent of the future wells will be drilled within the areas mapped as high potential for oil and gas development. Further, as presented in Table 2-1 of the CRVFO PRMP/FEIS (p. 2-9), of the remaining unleased acreage within areas of high potential for oil and gas development, Alternative B would close 2,500 acres to fluid mineral leasing (i.e. 1.7 percent of total acreage with high potential for oil and gas development) and Alternative C would close 6,000 acres (i.e., 4 percent of total acreage with high potential for oil and gas development). Alternatives A and D would close none of the remaining unleased acreage with high potential for oil and gas development. Therefore, given the minimal restrictions on oil and gas development in areas where future wells will be drilled (based on the RFD), there would not be major differences in the socio-economic impacts from oil and gas activity across the range of alternatives.

Section 4.6.2 of the CRVFO PRMP/FEIS discusses the socio-economic impacts of oil and gas development across the range of alternatives, including the impacts on employment and labor income from variances among the alternatives.

Recreational Visitation and Spending

Section 4.6.2 of the CRVFO PRMP/FEIS also discusses the socioeconomic impacts of recreational use across the range of alternatives, and explains the methods and assumptions used for this analysis. Projected recreation visits were distributed among different types of visitors based on the results of National Visitor Use Monitoring (NVUM) surveys and interviews with field office staff (CRVFO PRMP/FEIS, 2014, p. 4-764). The BLM analyzed the economic information for the purpose of comparing the relative impacts of the alternatives, and the conclusions should not be viewed as absolute economic values.

The CRVFO PRMP/FEIS does not analyze the amount of money that the average recreational user spends per day or per year, nor does it conclude that the average recreational user spends about \$16 per day. Rather, Table 4.6.2-3 of the PRMP/FEIS (p. 4-766) presents estimates of the average annual labor income that would be supported by recreation and other programs by each alternative. Where Table 4.6.2-3 indicates that recreation activities will support \$5.471 million in average annual labor income for Alternative A, this cannot be translated to mean that Alternative A would support \$5.471 million in average annual recreational spending, nor can it be used to calculate average daily recreational spending.

Variations in Economic Contributions Estimates

A direct comparison of statistics between the CRVFO PRMP/FEIS and other plans, such as the Northwest Colorado Greater Sage-Grouse Draft Land Use Plan Amendment (NCO GRSG DLUPA), is not appropriate, given the variety of tools and methods used in each analysis. For example, Table M.1 of the NCO GRSG DLUPA/EIS presents overall employment data by sector for each county, and the statistics for employment from “Forestry, fishing, & related activities” combines employment numbers for hunting and fishing in each county with those from forestry, trapping, and agricultural services such as custom tillage in each county (NCO GRSG DLUPA, 2013, p. M-1). By contrast, the employment estimates presented in section 4.6.2.1 of the CRVFO PRMP/FEIS are only based on the economic impacts of the management alternatives proposed in the planning area for CRVFO PRMP/FEIS (CRVFO PRMP/FEIS, 2014, p. 4-763). Employment and labor income estimates developed for the CRVFO PRMP/FEIS include direct, indirect, and induced economic effects based on projected resource outputs from the BLM management actions (Table 4.6.2-1), estimated payments to counties, BLM expenditures, and other externally funded activities on BLM lands (CRVFO PRMP/FEIS, 2014, pp. 4-765 – 4-766).

Section 4.6.2.1 of the CRVFO PRMP/FEIS also discusses potential economic impacts on local governments. “Costs to local governments would remain largely unchanged as a result of planning actions, consequent changes in population, or oil and gas development; demand for services and infrastructure would not significantly change as a result of BLM planning actions. Payments to counties would remain an important portion of local government revenue (ranging from 4 to 6 percent of total revenue in the CRVFO impact area)...Minerals royalty payments in CRVFO counties provide at least 95 percent of BLM-associated payments under all the alternatives. However, impracticalities exist in predicting actual levels of production, market prices, and the resulting royalties paid.” (CRVFO PRMP/FEIS, 2014, p. 4-769) Actual oil and gas development within the planning area will depend on constraints such as physical, economic, geopolitical, and technological constraints (CRVFO PRMP/FEIS, 2014, p. 4-576). Section 4.6.2.2 of the CRVFO PRMP/FEIS discusses the potential social impacts of oil and gas development on county residents across the range of alternatives, and notes that localized change could be greater for individual counties within the CRVFO impact area.

NEPA – Water Resources

Issue Number: PP-CO-CRV-14-12-72

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Here, the CRVFO’s NEPA analysis failed to closely assess the direct, indirect, and cumulative impacts of lease development on water supplies. 40 C.F.R. §§ 1508.7, 1508.8. This analysis

must consider the potential sources of water in the CRVFO that would be used for oil and gas development, and the impacts of these water withdrawals on water availability for drinking, agriculture, and wildlife. The analysis must further address the impacts to water quantity at different annual, seasonal, monthly, and daily time scales because the impacts of such water withdrawals could be more acute during times, months, and seasons of scarcity. For

example, increased withdrawal and irretrievable contamination of waters will be particularly harmful during times – like the present – when much of the state is experiencing drought conditions.

Issue Number: PP-CO-CRV-14-12-73

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The BLM discusses the potential for hydraulic fracturing fluid spills “that could migrate to surface or groundwater.” FEIS 3-29. In response to comments, Appendix V at 4-5, the agency notes that commenters argued the CRVFO failed to adequately analyze potential water impacts, and so BLM added Appendix G to the FEIS. Although Appendix G does contain some best management practices for fluids, the only specific mention of hydraulic fracturing is in MIN-19 (Appendix G at 71), which requires compliance with COGCC disclosure of fracking fluids after fracking. It contains no analysis of impacts. In addition, BLM states it added a monitoring appendix, Appendix S, to the FEIS in response to these comments. However, Appendix S does not mention hydraulic fracturing, and its monitoring provision for fluid minerals appears to be limited to after-the-fact visual site inspections. It contains no analysis of impacts. Essentially, BLM responds simply to Conservation Groups’ concerns by stating that it cooperates with COGCC in the protection of water resources. That may be, but it does not address these concerns, nor does it satisfy the agency’s obligations under NEPA to analyze impacts to these resources.

Issue Number: PP-CO-CRV-14-12-75

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM says harm to groundwater is “not expected” from fracking due to the depth of the drilling and groundwater; that this process occurs at depths below 5,000 feet, while freshwater aquifers are typically less than 2,000 feet deep. FEIS at 3-31. In the same paragraph, however, BLM admits that the “hydraulic fracturing process may inadvertently invade zones in unintended strata, potentially creating a pathway for migration of hydraulic fracturing fluids and produced fluids into shallower groundwater or surface waters.” Id. But later in the FEIS, the agency reasserts that impacts to fresh-water wells “are highly improbable as a result of hydraulic fracturing,” FEIS at 3-218, and later continues, providing that the COGCC has not verified any instances of groundwater contaminated by hydraulic fracturing. FEIS at 3-219. As identified above, there are many documented instances where groundwater contamination has, in fact, resulted from the fracking of oil and gas wells. The CRVFO’s dismissive response and analysis to these concerns fails to satisfy the agency’s obligation under NEPA to take a hard look at these impacts.

Issue Number: PP-CO-CRV-14-12-76

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM’s Response to Comments in Appendix V notes that commenters raised concerns on groundwater impacts. BLM’s response states that it is aware of “the small number” of incidents resulting from “improper construction” of oil and gas wells, citing, for example, one case in Garfield County in 2001, and another

involving a seep along Divide Creek in Garfield County in 2004. See FEIS at V-66. The agency states this led to new measures in casing and cementing bores, and “subsequent investigations have not identified any linkage between hydraulic fracturing and water wells.” Id. The CRVFO fails to identify or cite to what these “subsequent investigations” were, whether this refers to all investigations of groundwater contamination after 2004, or whether these investigations involved just these particular incidents. Regardless, the agency’s response ignores an abundance of evidence, as referenced herein, that demonstrates the issue of contamination is far broader than the two Garfield County incidents, and is a pervasive issue impacting wells throughout the country where fracking techniques are employed.

Issue Number: PP-CO-CRV-14-12-78
Organization: WELC, Wilderness Workshop, NRDC, Sierra Club
Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM’s conclusion that there is no evidence of potential impacts

Summary:

The PRMP/FEIS failed to adequately analyze impacts related to water resources. The PRMP/FEIS failed to adequately analyze:

- The direct, indirect and cumulative impacts of lease development on water supplies for wildlife, agricultural use, and drinking water sources.
- The impacts to well- and ground- water from hydraulic fracturing

Response:

Impacts on Water Supplies

The PRMP/FEIS adequately analyzed and disclosed impacts related to water resources. The document analyzes the impacts from fluid minerals management in section 4.2.4 (Alternative A, page 4-92; Alternative B, 4-101; Alternative C, 4-104; Alternative D, 4-107). This analysis includes disclosure of potential impacts to both water quality and water quantity. While the

to groundwater from fracking is challenged by existing models.

Issue Number: PP-CO-CRV-14-12-80
Organization: WELC, Wilderness Workshop, NRDC, Sierra Club
Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: BLM’s analysis of potential impacts to well-water also is inadequate. BLM’s Response to comments states that the FEIS has expanded information on fracking technology, including, for example, the types of chemicals used, horizontal and vertical spread rates, and the potential for connection between the target strata and groundwater. FEIS at V-66. But BLM asserts that there is no “documented linkages between hydraulic fracturing and water wells.” Id. The BLM repeatedly states that “investigations by COGCC and USGS have not identified any linkage between hydraulic fracturing and water wells.” Id. This overlooks the studies that link the two, and BLM must recognize these and analyze this risk and impacts. In addition to the studies cited in Conservation Groups’ comments, and the health section of this protest.

impacts to wildlife water supplies, agricultural use, and drinking water are not expressly mentioned in this section, the analysis is adequate to inform decision making at the RMP level. More quantified or detailed and specific analysis would be required when specific actions arise that may affect water quantity or quality. At that time, the BLM will conduct subsequent NEPA analyses that will consider the best available information as it relates to the specific proposed action. The public will be offered the opportunity to participate in the analysis process for any site- specific actions, as required by NEPA.

Impacts from Hydraulic Fracturing

The PRMP/FEIS details specific potential impacts of hydraulic fracturing on water resources for Alternative A and subsequently compares other alternatives to that baseline assessment, excerpted here:

The possibility that hydraulic fracturing fluids may migrate to shallow groundwater sources is still speculative based on ongoing studies by the EPA (EPA 2011b). Hydraulic fracturing occurs in the gas producing formations at depths greater than 5,000 feet in the CRVFO. Water, sand, and chemical additives are pumped into the formation at extremely high pressure, to create fractures that allow gas to flow into the well. Theoretically, improperly completed wells or perforations into zones of geological weakness (i.e. faults, folds, or fractures) could create conduits that allow hydro fracturing fluids, produced water, and methane to migrate to groundwater resources. If a groundwater source is contaminated, there are few cost-effective ways to reclaim that water source; thus, the long-term impacts of groundwater contamination are considerable (PRMP/FEIS Page 4-93).

Regarding the claims that BLM provided inconsistent analysis of hydraulic fracturing impacts on groundwater, the CRVFO stated that “although a rare occurrence, the hydraulic fracturing process may inadvertently invade zones in unintended strata,” it also concluded that impacts on groundwater quality are “not expected” (PRMP/FEIS, page 3-31). This caveated conclusion is reasonable.

Finally, the CRVFO summarized how it addressed comments regarding the impacts of hydraulic fracturing on water in section 4.5 of Appendix V, *PUBLIC COMMENTS AND BLM RESPONSES*. This included the addition of BMPs for implementation-level actions and monitoring requirements.

NEPA – Wildlife

Issue Number: PP-CO-CRV-14-11-31

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

New lynx management standards directly conflict with BLM management standards for the management of the species and best

available science. There have been significant changes in the management of the lynx between the release of the draft and final versions of the RMP that have not been included in the RMP analysis of habitat areas for the lynx. These changes were summarized in the 2013 Lynx Conservation Assessment and Strategy (2103 LCAS) that was adopted as part of a multi- agency

process that involved the BLM, conclusions of which were released almost 9 months before the release of the final RMP. A copy of the 2013 LCAS was specifically sent to the CRVO in order to avoid the reliance on out of date information in the planning process. The 2013 LCAS clearly represents best available science and specifically superseded the 2001 LCAS that the RMP was based on, which was highly theoretical on many issues related to recreational activity in lynx habitat areas. Best available

science planning requirements does not mandate application of the most restrictive standards on any issue, and application of lesser restrictive standards for the management of species would reflect integration of economic impacts from public lands usage as part of the planning process. Lynx management is a major issue on the CRVO as reflected by the fact that the RMP recognizes large portions of the planning area are lynx habitat.

Summary:

By not adopting the 2013 Lynx Conservation Strategy in the alternatives analyzed, the BLM implicitly violated the best available science intent of NEPA.

Response:

The nature of the RMP-level allowable uses proposed for the Canada Lynx are broad and qualitative rather than quantitative or focused on site-specific actions. The RMP references to the Lynx Conservation Strategy (LCAS) as a tool for “provid[ing] direction on the types of activities and the amount of habitat that can be modified in lynx habitat” (PRMP/FEIS, pp 4-454, 4-460, 4-464, 4-468).

More quantified or detailed and specific analysis would be required when specific actions arise that may affect Canada Lynx habitat or linkage corridors. At that time, the BLM will conduct subsequent NEPA analyses that will consider the best available information as it relates to the specific proposed action. The public will be offered the opportunity to participate in the analysis process for any site-specific actions, as required by NEPA.

NEPA – Range of Alternatives

Issue Number: PP-CO-CRV-14-12-110

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Conservation Groups’ comments on the Draft EIS asked BLM to consider a “no leasing alternative.” See Draft Comments (2012) at 9-10. BLM did not analyze a no new leasing alternative.

Instead the agency brushed-off our comments by saying most of the high occurrence area has been leased and there is no interest in leasing outside the high occurrence potential area. See FEIS at V-53 (Response to Comments). The agency failed to adequately respond to our comments and the EIS failed to take a hard look at any alternative that would close even a substantial portion of the Field Office to future leasing. BLM neglected to consider

such an alternative despite the fact that the agency's analysis assumes leasing and development are not foreseeable on much of the CRVFO.

Issue Number: PP-CO-CRV-14-12-112

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The current alternatives do not significantly differ with regard to the acres of federal minerals designated as open or closed to fluid mineral leasing, and BLM declined to analyze an alternative that would close all or most of medium and low-potential lands to leasing. The facts do not support BLM's assertion in the Responses to Comments that "[t]he Draft RMP/Draft EIS evaluated a range of future oil and gas leasing scenarios for currently unleased portions of BLM lands within the field office, ranging from closing a majority of unleased areas to making those lands available for leasing." FEIS at V-50. According to the RMP/FEIS, so-called Conservation Alternative C would close only 179,700 acres (25.7% of the FO) to leasing, while leaving 521,500 acres (74.3%) open. Contrary to the FEIS assertion, all alternatives leave approximately three-fourths or more of the CRVFO open to leasing.

Issue Number: PP-CO-CRV-14-12-114

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Here, the CRVFO failed to even consider closing those areas the agency assumes will not see development in the FEIS and Proposed RMP. Instead the agency's Proposed RMP and FEIS assume that leasing will be

allowed on lands where it concludes that development is highly unlikely and where the potential impacts of oil and gas leasing development are essentially dismissed. The agency needs to take a hard look at closing the areas where no future development is expected.

Issue Number: PP-CO-CRV-14-17-5

Organization: Dejour Energy Corporation

Protestor: William E. Sparks/Malinda Morain

Issue Excerpt Text: Secondly, Dejour raised the comment that each and every alternative in the Draft RMP unduly restricts development of oil and gas resources in the planning area. Therefore Draft RMP was in violation of BLM's requirement, under NEPA, to consider a reasonable range of alternatives. 40 C.F.R. § 1502.4. In response to Dejour's concerns regarding the sufficiency of the Alternatives to meet BLM's requirements under FLPMA, NEPA, and BLM's own Handbook to justify its restrictions on leasing of oil and gas, BLM simply stated that "[t]he four alternatives in the Draft RMP/Draft EIS and the Proposed RMP/Final EIS offer a range of management options to address the key scoping issues." BLM's response does not address Dejour's specific comment regarding the adequacy of BLM's analysis of the effect of the detrimental and significant impact of Alternatives B, C, and D on the development of oil and gas resources, nor does it evidence compliance with BLM Handbook H-1601-1, FLPMA, or NEPA. BLM failed to comply with the requirement that it, in explaining why Dejour's comments did not warrant a revision of the Draft RMP, "cite the sources, authorities, or reasons which support the agency's position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response." 40 C.F.R. § 1503.4(a)(5).

As such, BLM's responses to Dejour's comments are inadequate under NEPA and the Director should grant this Protest and

require BLM to fully respond to all of Dejour's comments.

Summary:

The PRMP/FEIS fails to consider an adequate range of alternatives. The PRMP/FEIS does not consider a "no leasing" alternative or an alternative that closes a substantial portion of the field office to oil and gas leasing. The BLM did not adequately respond to public comments on the range of alternatives considered in the PRMP/FEIS.

Response:

The BLM considered a reasonable range of alternatives in the PRMP/FEIS in compliance with NEPA. The CEQ regulations at 40 CFR § 1502.1 require that the BLM consider reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. While there are many possible alternatives or actions, the BLM used the scoping process required under NEPA to identify resource conflicts and issues and determine a reasonable range of alternatives to address resource conflicts and issues. As a result, four alternatives were analyzed in detail in the PRMP/FEIS that best addressed the issues and concerns identified by the affected public.

As described in the CRV PRMP/FEIS, the BLM considered but eliminated from detailed analysis alternatives “that proposed exclusive use or maximum development, production, or protection of one resource at the expense of other resources or resource uses.” Such an alternative would not meet the purpose and need for the proposed action. BLM explained this reasoning stating that “FLPMA mandates the BLM to manage its lands for multiple uses and sustained yield. This mandate eliminated such alternatives as closing all BLM lands to oil and gas leasing, or managing all lands for particular natural resource value to the exclusion of other resource use considerations. In addition, resource conditions did not warrant planning area-wide prohibition of any particular use. Alternatives eliminating traditional uses, where resource conditions did not justify such measures, were not reasonable. Each alternative considered allowed for some level of support, protection, or use of all resources in the planning area. In some instances, the alternatives analyzed in detail included various considerations for eliminating or maximizing individual resource values or uses in specific areas where conflicts existed [including in lands with low potential for oil and gas development].” (Colorado River Valley PRMP/FEIS, p. 2-26). Given BLM’s requirements under FLPMA, this reasoning for eliminating an alternative that would close all BLM lands to oil and gas leasing satisfies the requirements of NEPA.

In addition to analyzing a range of alternatives in terms of lands available for oil and gas leasing, the BLM also analyzed different lease stipulations associated with the range of alternatives as a way to address impacts to resources. For example, in addition to closing 179,700 acres to oil and gas leasing in Alternative C of the Colorado River Valley PRMP/FEIS, the BLM would also

impose a No Surface Occupancy (NSO) lease stipulation to 356,700 acres available for oil and gas leasing in the planning area under Alternative C.

The BLM considered public comments received on the range of alternatives considered in the RMP/EIS, and responded to those comments in Appendix V of the PRMP/FEIS. The BLM provided a reason for why changes to the range of alternatives were not warranted (see Colorado River Valley PRMP/FEIS, p. V-72). Specifically, the RMP/EIS considered a full spectrum of alternatives to address resource conflicts and issues raised through internal and external scoping.

NEPA – No Action Alternative

Issue Number: PP-CO-CRV-14-17-3

Organization: Dejour Energy Corporation

Protestor: William E. Sparks/Malinda Morain

Issue Excerpt Text: The No Action Alternative is inconsistent with Established Legal Precedent The No Action Alternative, Alternative A, is intended as a continuation of the present management direction and current prevailing conditions. PRMP/FEIS at Chapter 2, page 2-2, "No action" means current management practices, based on existing RMPs and other management decision documents, would continue. *Id.* Dejour noted, in its comments on the Draft CRY RMP, that the No Action Alternative in the Draft CRY RMP was not a continuation of the present management, but rather the No Action Alternative interpreted several of the currently governing stipulations as more restrictive than they actually are. As a specific example, the PRMP takes on a new, more restrictive interpretation of the NSO stipulations governing the Garfield Creek SW A. Specifically, the PRMP states that under Alternative A, all land within the Garfield Creek SW A is governed by the GS-NSO-4, no surface occupancy stipulation. The definition of GSNSO- 4 in the PRMP still erroneously stipulates to "[p]rohibit surface occupancy and surface disturbing activities in all" of the Garfield

Creek State Wildlife Area. PRMP/FEIS at Appendix B, page B-52. However as BLM is fully aware, in 2010, the IBLA's decision in Dejour Energy, IBLA 20 I 0-175 , found no support for the imposition of blanket GS-NSO-4 stipulation on the entire Garfield Creek SWA. See also *infra*, page 5-6. Therefore, as Dejour requested in its comments, BLM must adhere to the IBLA decision, which found that under the previous RMP (which the IBLA fully considered) only certain delineated and discrete areas within the Garfield Creek SWA were designated NSO. See Dejour", IBLA Order at 2-3, 12-14, 16. As such, BLM was required to revise the No Action Alternative in the PRMP to reflect the current regulations on current leases within the Garfield Creek SWA. Unfortunately, BLM failed to respond to Dejour's comments in any way or revise the No Action Alternative in conformance with the IBLA's Order. In light of the still-invalid definition of GS-NSO-4, BLM's response simply creates an ambiguity as to Dejour's valid lease rights. As BLM perpetuated rather than resolved this ambiguity, it failed to adequately respond to Dejour's comment under 40 C.F.R. § 1503.4.

Issue Number: PP-CO-CRV-14-17-9

Organization: Dejour Energy Corporation

Protestor: William E. Sparks/Malinda Morain

Issue Excerpt Text: The PRMP Incorrectly Describes Alternative A (No Action Alternative) In the PRMP, BLM erroneously concludes that under Alternative A, the Garfield Creek SW A is governed by NSO stipulations to protect wildlife habitat values from unnecessary surface occupancy. See PRMP/FEIS Chapter 2 at page I; Chapter 3 at page 343; Chapter 4 at pages 217, 230, 338 and 479. As BLM is aware, the No Action Alternative (Alternative A) is a continuation of the present management direction and current prevailing conditions and is based on existing planning decisions and amendments. PRMP/FEIS Chapter 2 at pages 2-2. The IBLA's Decision in Dejour, IBLA 20 I 0-175 specifically found that all lands encompassed within the Garfield Creek SW A are not subject to a blanket NSO. See Exhibit 2. The IBLA fully considered the previous Glenwood Springs RMP (Colorado Oil and Gas Leasing EIS and ROD and the ROD for the 1999 Amendment of the Glenwood Springs RMP)

and found that the Garfield Creek SW A is not fully encumbered by NSO stipulations in these documents. Id. at 14. The IBLA further held that only those specific lands which values for which BLM identified and included in a lease stipulation at the time of lease issuance could be considered for NSO. Id at 17. ...Since the IBLA issued its Order in 2011 , the BLM has provided no documentation that the previous Glenwood Springs RMP and amendments required a blanket NSO for all lands in the Garfield Creek SW A. In the CRV PRMP, BLM likewise provides no documentation or basis to apply a blanket NSO for all lands in the Garfield Creek SW A. The assumption that under Alternative A, all lands within Garfield Creek are subject to an NSO stipulation is clearly erroneous and in direct contradiction to the Order of the IBLA. Dejour requests that BLM amend and redraft the sections of the PRMP that err in failing to recognize that, under Alternative A, the Garfield Creek SW A is not entirely subject to GSNSO stipulations 4 and 11.

Summary:

The PRMP/FEIS does not accurately describe the No Action Alternative with regard to leasing in the Garfield Creek State Wildlife Area (SWA).

Response:

Under the No Action Alternative, the PRMP/FEIS attributes NSO-4 to Garfield Creek: “Protect wildlife habitat values for which these areas were acquired by the state, including crucial big game and upland game winter habitat, concentration areas, and riparian values” (PRMP/FEIS, pp. 2-53 – 2-54). The Interior Board of Land Appeals (IBLA) case referenced (2010-175) remanded the BLM’s decision to apply NSO-4 to a lease the BLM had issued eight years earlier. The BLM argued that it had inadvertently sold the lease in 2001 without including this stipulation, and that the 1999 RMP Amendment identified the stipulation as covering the lease area. Contrary to the protester’s assertion, the IBLA decision did not invalidate the NSO stipulation from the 1999 RMP Amendment to the current RMP, nor did it remand the RMP decision to the BLM. In fact, the IBLA lacks authority to rule on RMP decisions, since they represent the final decision of the Secretary of the Interior. Since the IBLA did not nullify the stipulation in the RMP and has no authority to rule on RMPs, the stipulation is still a valid part of the previous RMP. As such, the No Action alternative, as described in the PRMP/FEIS, is accurate.

NEPA – Significant New Information

Issue Number: PP-CO-CRV-14-16-8

Organization: WPX Energy

Protestor: Chad E. Odegard

Issue Excerpt Text: As previously stated, some of the appendices in the PRMP/FEIS were not provided or written in the draft EIS/RMP, and therefore were not available for comment at that time. Appendix G is one

such appendix, and WPX believes it is appropriate for any new significant additions to the PRMP/FEIS be allowed for comment (beyond just the 30-day protest period) as this is the first time these significant portions of the document have been made available.

Summary:

In adding Appendix G *Best Management Practices and Conservation Measures* to the PRMP/FEIS, the CRVFO added significant new information that was not subject to public review and comment.

Response:

The addition of Appendix G - *Best Management Practices and Conservation Measures* to the PRMP/FEIS is not considered significant new information that requires BLM to publish a supplemental EIS in accordance with NEPA's regulations. As described in the PRMP/FEIS, "Appendix G was added to describe best management practices (BMPs) that can be applied at the time of project implementation to eliminate or reduce potential impacts to soils, vegetation, and fish and wildlife species" (PRMP/FEIS, Appendix T *Changes from the Draft RMP/Draft EIS*, p. T-11). Appendix G reiterates the implementation-level intent of the BMPs, stating that they are "state-of-the-art mitigation measures that may be applied on a site-specific basis to avoid, minimize, reduce, rectify, or compensate for adverse environmental or social impacts of land use activities" (PRMP/FEIS, Appendix G *Best Management Practices and Conservation Measures*, p. 2).

Additionally, in the response to public comments on the DRMP/DEIS, the CRVFO states the following:

BMPs are a snapshot in time of the best available techniques to reduce and mitigate possible environmental impacts of development. Since BMPs are site-specific recommendations and are constantly changing, the list in the Proposed RMP/Final EIS is neither exhaustive nor required across the board. Specific BMPs are applied to development on an individual basis through cooperative planning efforts with the lessee and COAs (PRMP/FEIS Appendix *Response to Comments*, p. V-51).

BLM Planning Policy defines Best Management Practices as the following:

Best management practices (BMPs) [are] a suite of techniques that guide, or may be applied to, management actions to aid in achieving desired outcomes. BMPs are often developed in conjunction with land use plans, but they are not considered a land use plan

decision unless the land use plan specifies that they are mandatory. They may be updated or modified without a plan amendment if they are not mandatory (H-1610-1 *Land Use Planning Handbook*).

Accordingly, the Best Management Practices do not meet the significant new information criteria defined at 43 CFR 1502.9(c)(1)(i), for the following reasons:

- Best Management Practices are designed for consideration at the project level, as clearly articulated in BLM policy.
- The RMP conforms to BLM Planning Policy by clearly articulating that the BMPs are not mandatory and are meant to inform implementation-level decision

At such time that a specific project would be proposed and considered, the BMPs would be analyzed under NEPA.

Areas of Critical Environmental Concern Policy

Issue Number: PP-CO-CRV-14-11-33

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: BLM guidelines specify the need for this discussion as follows: "Relation to Wilderness Study Areas. ACEC's may be designated within wilderness areas. ACEC designation shall not to be used as a substitute for a wilderness suitability recommendation. If an ACEC is proposed within or adjacent to a Wilderness Study Area (WSA), the RMP or plan amendment shall provide a clear description of the relationship of the ACEC to the recommendation being made for the WSA. The relationship shall be described to the level of detail required to avoid misunderstanding or misinterpretation by the public." A review of the RMP reveals there is almost no discussion of why there is such a significant correlation of the areas to be designated as Wilderness Characteristics areas and ACEC designations.

Issue Number: PP-CO-CRV-14-14-6

Organization: Wilderness Workshop, The Wilderness Society, Sierra Club,

Conservation Colorado, Rocky Mountain Wild

Protestor: Nada Culver/Peter Hart/Eric Huber/Luke Schafer/Megan Mueller

Issue Excerpt Text: Protections for the Grand Hogback are further diminished by the Proposed RMP designating only 4,300 acres of the considered 14,000-acre Grand Hogback ACEC, which under the proposed plan would not overlap with the Grand Hogback LWC unit at all. The Proposed RMP indicates that this significant reduction in the ACEC was to "address concerns regarding potential management conflicts with the (1) development of fluid minerals in an area with a high potential for oil and natural gas and (2) the ability of proposed NSO and CSU stipulations to adequately protect resource values (e.g., scenic, geologic, cultural, wildlife) without requiring a special management designation (Proposed RMP, p. 1-32). This contravenes FLPMA's mandate that BLM "give priority to the designation and protection of areas of critical environmental concern." 43 U.S.C. § 1712(c)(3).

Issue Number: PP-CO-CRV-14-16-6

Organization: WPX Energy

Protestor: Chad E. Odegard

Issue Excerpt Text: Although a sub-occurrence of Parachute penstemon is found within the polygon proposed for ACEC designation, this designation is not necessary for protection of the occurrence because the USFWS has already designated the Parachute penstemon as threatened species along with its critical habitat unit. The evaluation of this proposed ACEC provided as Appendix E to the PRMP/FEIS did not include the required demonstration of a need for special management, only an analysis of

importance and relevance. Had the evaluation included an analysis of the need for special management that took designated critical habitat into account, the proposed ACEC would not have met the requirements described in BLM Manual 1613, which provides direction for identifying, analyzing, designing, monitoring and managing ACECs.

Summary:

The treatment of ACECs is flawed because:

- There is little discussion of why there is such a significant correlation of the areas to be managed for wilderness characteristics and ACEC designations, in violation of BLM guidelines related to ACECs within or next to Wilderness Study Areas (WSA).
- The reasons provided in the PRMP for the reduced acreage of the Grand Hogback ACEC contravene the FLPMA's mandate that BLM give priority to ACECs.
- The evaluation of the ACEC nominated for protection of Parachute penstemon did not include the required demonstration of a need for special management.

Response:

Lands Managed for Wilderness Characteristics and ACEC Correlation

The protester alleging violation of BLM Manual 1613's requirements related to WSAs is inaccurately referencing the manual. The BLM Manual 1613 on Areas of Environmental Concerns states in Section .33D that "ACEC's may be designated within wilderness areas. ACEC designation shall not to be used as a substitute for a wilderness suitability recommendation. If an ACEC is proposed within or adjacent to a Wilderness Study Area (WSA), the RMP or plan amendment shall provide a clear description of the relationship of the ACEC to the recommendations being made for the WSA. The relationship shall be described to the level of detail required to avoid misunderstanding or misinterpretation by the public."

WSAs are different from land areas that possess wilderness characteristics areas. As the CRVFO PRMP/FEIS explains, designation of additional WSAs was not considered in the alternatives because the BLM's authority for establishing WSAs ended in 1993. The BLM has the ability to determine if wilderness characteristics are present outside existing WSAs. Appendix D - Lands with Wilderness Characteristics Assessment for the Colorado River Valley Field Office, includes results of the BLM's inventory of these non-WSA lands for wilderness character (CRVFO PRMP/FEIS, 2014, p. 2-27).

Grand Hogback ACEC

In compliance with 43 CFR 1610.7-2, the Grand Hogback proposed ACEC was adequately considered during the CRVFO resource management planning process. Alternative C of the CRVFO PRMP would include all 14,000 acres for designation as an ACEC. The Proposed RMP would include 4,300 acres, rather than 14,000 acres, for designation as an ACEC. This boundary modification was based on cooperating agency comments and Tribal consultation (CRVFO PRMP/FEIS, 2014, pp. 4-645 – 4-646). FLPMA requires that the BLM “coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located... and of or for Indian tribes...” (43 USC 1712(c)(9)).

The portion of the 14,000 acres that falls outside the 4,300 acres included for designation in the Proposed RMP would carry NSO and CSU stipulations that would adequately protect the relevant and important resource values (e.g., scenic, geologic, cultural, wildlife) without requiring a special management designation (CRVFO PRMP/FEIS, 2014, p. 1-32). NSO-20 for Heritage Areas would prohibit surface occupancy and surface-disturbing activities within 0.25-mile of traditional cultural properties or Native American areas of concern. NSO-21 would prohibit surface occupancy and surface-disturbing activities within 100 meters (328 feet) of historic properties (CRVFO PRMP/FEIS, 2014, p. B-25). Stipulation NSO-22 and CSU-9 protect the scenic values within the Grand Hogback ACEC (CRVFO PRMP/FEIS, 2014, p. B-25 and B-34).

Parachute Penstemon Special Management

The BLM did not err when it did not demonstrate need for special management for the Parachute penstemon. BLM Manual 1613 Section .21 states, “All areas which meet the relevance and importance criteria must be identified as potential ACEC's and fully considered for designation and management in resource management planning.” The need for special management is not a determinant of whether an area meets the relevance and importance criteria. As Appendix E of the CRVFO PRMP/FEIS explains, “The determinations in this report [i.e. Appendix E] deal strictly with the relevance and importance criteria, and not special management attention.” (CRVFO PRMP/FEIS, Appendix E, p. 8).

Fluid Minerals Policy – Valid Existing Rights

Issue Number: PP-CO-CRV-14-07-10

Organization: Encana

Protestor: Jason Oates

Issue Excerpt Text: The proposed addition of municipal watershed NSOs is impermissible because it exceeds the BLM's legal authority under FLPMA. By failing to make clear that these NSOs will not apply to existing leases, the BLM is potentially proposing to modify Encana's existing lease

rights through the land use planning process, an impermissible result under FLPMA. The authority conferred to the BLM under FLPMA is expressly made subject to valid existing rights. Pursuant to FLPMA, all BLM actions, including authorization of Resource Management Plans, are "subject to valid existing rights." 43 U.S.C. § 1701 note (h) (2012); see also 43 C.F.R. § 1610.5-3(b) (2013) (BLM is required to recognize valid existing rights). Thus, under clear federal

statute and regulations, the BLM cannot terminate, modify, or alter any valid or existing property rights, such as Encana's existing lease rights. 43 U.S.C. § 1701 note (h) (2012); see also 43 C.F.R. § 1610.5-3(b) (2013). Encana previously commented on the BLM's inability to modify existing lease rights through the land use planning process. Encana Comments, pgs. 4 -5.

Issue Number: PP-CO-CRV-14-07-12

Organization: Encana

Protestor: Jason Oates

Issue Excerpt Text: Similarly, BLM Instruction Memorandum 92-67 states that "[t]he lease contract conveys certain rights which must be honored through its term, regardless of the age of the lease, a change in surface management conditions, or the availability of new data or information. The contract was validly entered based upon the environmental standards and information current at the time of the lease issuance." As noted in the BLM's Instruction Memorandum, the lease constitutes a contract between the federal government and the lessee which cannot be unilaterally altered or modified by the BLM. Similarly, Encana's existing leases throughout the planning area, including leases partially or wholly within municipal watersheds, constitute valid existing contract rights, which cannot be unilaterally altered or modified by BLM through NSO constraints that did not exist at the time of leasing.

Issue Number: PP-CO-CRV-14-07-15

Organization: Encana

Protestor: Jason Oates

Issue Excerpt Text: In addition, as explained above, Encana protests the BLM's failure to clearly state any intention to honor existing lease rights with respect to these

riparian setbacks. As described in Part II of this Protest, the BLM may not impose these new stipulations on existing leases, because doing so would interfere with valid existing rights. These setbacks did not exist when Encana originally obtained its leases, and consequently may not be applied to Encana's leases, through COAs or otherwise.

Issue Number: PP-CO-CRV-14-07-17

Organization: Encana

Protestor: Jason Oates

Issue Excerpt Text: The Proposed RMP attempts to establish the Mount Logan Foothills Area of Critical Environmental Concern ("Mount Logan ACEC"). Colorado River Valley Proposed RMP, pg. 2-118. One of the management actions within the Mount Logan ACEC is a total NSO stipulation. *Id.* at 2-133, app. B at B-28. Despite acknowledging that most of the Mount Logan ACEC is currently leased and undergoing development, Colorado River Valley RMP, pg. 4-671, the BLM fails to make exceptions to this draconian measure for valid existing rights of current operators, such as Encana's Mount Logan Unit. Instead, the BLM states that it "can develop COAs on APDs or voluntary mitigation" on existing leases to mitigate for impacts on special status species within the Mount Logan ACEC. Colorado River Valley Proposed RMP, pg. 4-671. This explanation is unacceptable. As explained in Part II of this protest, the BLM cannot deprive Encana of its valid existing rights, either directly or indirectly (through COAs, for example).

Issue Number: PP-CO-CRV-14-07-9

Organization: Encana

Protestor: Jason Oates

Issue Excerpt Text: In addition, the BLM must clearly state that it will not attempt to apply this NSO to existing leases, because doing so would modify and interfere with

valid existing rights. Although the BLM acknowledges that 95 percent of the high potential lands in the planning area are already leased and that various stipulations from the 1999 Oil and Gas Leasing EIS may already apply to these leases, see Colorado River Valley Proposed RMP at 4-92, the BLM nevertheless fails to clearly state that the additional NSO stipulations under the Proposed RMP will not apply to existing leases. See Colorado River Valley Proposed RMP at 4-10 1. Instead, the BLM implies that it's new "[g]reater constraints" may apply regardless of valid existing rights. Moreover, the BLM suggests that, for the purpose of achieving the goals of all stipulations listed throughout the Proposed RMP on existing leases, it will "seek voluntary compliance or would develop conditions of approval (COAs) for applications for permits to drill (APDs) or other authorizations, consistent with valid existing rights, to achieve resource objectives of lease stipulations contained in this RMP." Colorado River Valley Proposed RMP app. B, at B-2. This statement suggests that the BLM will ask existing leaseholders to comply with the municipal watershed NSOs and other stipulations at the APD stage, and if they decline, will simply impose these setbacks as COAs. The BLM's failure to clearly explain that its new stipulations will not apply to valid existing leases is unacceptable.

Issue Number: PP-CO-CRV-14-15-2
Organization: Bill Barrett Corporation
Protestor: Bret A. Sumner/Theresa M. Sauer (Attorneys)

Issue Excerpt Text: Importantly, through the RMP, BLM cannot revise or restrict valid existing lease rights through imposition of Conditions of Approval for drilling permits or through imposition of lease stipulation provisions from adjacent leases. Colorado Environmental Coalition,

165 IBLA 221 , 228 (2005). In reviewing the CRV RMP/FEIS, BBC notes that despite BBC and others' comments regarding valid existing rights, BLM continues to include management prescriptions that may impair, block access to, or otherwise render uneconomic, leased federal oil and gas resources. BLM has failed to analyze potential impacts on oil and gas resources to ensure that valid existing leases are not imposed upon or otherwise provide for exception, waiver and modification criteria to afford both regulatory flexibility for BLM, and operational flexibility for operators.

Issue Number: PP-CO-CRV-14-17-2
Organization: Dejour Energy Corporation
Protestor: William E. Sparks/Malinda Morain

Issue Excerpt Text: 1. CRV RMP's Unlawful and Undue Burden on Valid, Existing Lease Rights, Dejour's comments to the Draft CRV RMP appropriately noted that BLM's approval of the RMP cannot infringe on Dejour's valid existing lease rights. 43 U.S.C. § 1701 note (h); see also 43 C.F.R. § 161 0.5-3(b). Based on these legal requirements, BLM cannot approve management prescriptions that may impair, block access to, render uneconomic, or otherwise cause waste or unduly burden Dejour's federal oil and gas leases. See *id.* BLM, rather than revising the text of the PRMP to ensure that it does not impose on existing rights, responds to the comments that "BLM will honor valid and existing rights." PRMP/FEIS Appendix V at page V-52 . This is not a sufficient response. As described below regarding the GS-NSO-4 stipulation, the text of the PRMP and its comments create several ambiguities regarding the general management of federal lands and minerals through the PRMP and the statement that BLM will honor existing

leases. BLM is restricted in the form of its response to comments. 40 C.F.R. §1504.3. BLM has the option to: (1) modify the alternatives; (2) develop new alternatives; (3) supplement or modify its analysis; (4) make factual corrections; or (5) explain why the comments do not warrant further agency response. 40 C.F.R. § 1504.3(a)(1-5). If BLM chooses to explain why comments do not warrant a further response, it must

provide authorities or reasons which support its position. *Id.* None of these listed options allow BLM to explain away or "revise" an inaccuracy within the text of the PRMP by a note in the comments. See *Id.* Therefore, its response to Dejour's comment regarding the RMP's unlawful and undue burden on existing lease rights is insufficient and the text of the PRMP should be revised.

Summary:

The PRMP/FEIS violates valid existing rights by proposing to modify stipulations on existing oil and gas leases. The BLM did not adequately respond to public comments about valid existing rights.

Response:

An oil and gas lease is a valid, existing right, which cannot be modified through the land use planning process. The CRV PRMP/FEIS clearly states that the PRMP/FEIS will not modify or add stipulations to existing oil and gas leases: "The proposed stipulations would not be applied to existing leases because BLM will honor valid and existing rights" (CRV PRMP/FEIS, p. V-52).

The BLM may restrict development of an existing oil and gas lease through Conditions of Approval (COA). However, the application of COAs is outside the scope of the land use planning process; rather, the BLM analyzes and develops COAs at a site-specific level once a project is proposed. The CRV PRMP/FEIS is clear that COAs are not applied through approval of an RMP:

When making a decision regarding discrete surface-disturbing activities (e.g., Application for Permit to Drill) following site-specific environmental review, BLM has the authority to impose reasonable measures (e.g. COA) to minimize impacts on other resource values, including restricting the siting or timing of lease activities (43 CFR 3100; 43 CFR 3160; IBLA 2006-213, 2006-226; IBLA 2008-197, 2008-200). Site-specific mitigation measures supported by NEPA analysis are added during the implementation phase as conditions of approvals to the project (Colorado River Valley PRMP/FEIS, p. V-52).

The PRMP/FEIS fully responded to public comments made about the application of new stipulations to existing oil and gas leases (see Colorado River Valley PRMP/FEIS, Appendix V, Section 19.9).

Fluid Minerals Policy – Reasonable Foreseeable Development

Issue Number: PP-CO-CRV-14-12-10

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The CRVFO RFD is outdated and inadequate due to the failure to take account of new information. The RFD thus does not allow the agency to take a hard look at reasonably foreseeable future direct, indirect, and cumulative impacts from oil and gas leasing and development within the planning area. Accordingly, the RFD cannot serve its intended purpose and the FEIS violates NEPA.

Issue Number: PP-CO-CRV-14-12-12

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The RMP/FEIS did not analyze the potentially significant and unique impacts of developing the Niobrara or Mancos formations. The RFD was prepared in 2006-08 and contained minimal discussion of these formations, which are now emerging as plays that could rival or surpass the Mesa Verde across the CRVFO.

Issue Number: PP-CO-CRV-14-12-14

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The horizontal component of these early Niobrara completions is approximately 2-10 times the reaches analyzed by the RFD. For the Mesa Verde, the RFD states: “most of the directional drilling within the GSFO has a

horizontal reach of less than 2,500 feet.” FEIS Appendix R at R-24. Regarding the Williams Fork, the RFD states: “the typical size of the Williams Fork sandstone reservoirs is small, with typical lateral extents of 500 to 800 feet.” *Id.* at 11. The RFD projects: “Most wells will continue to be directionally drilled with the majority of horizontal displacements being less than 2500 feet.” *Id.* at 41.

Issue Number: PP-CO-CRV-14-12-15

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Recorded drilling times of 52-92 days per well are significantly greater than those for existing development of the Mesa Verde or Williams Fork formations in the Field Office. The average Mesa Verde well drilling time is 15 days according to the RFD at 39. Thus, Mancos/Niobrara wells could take 3-6 times as many days to drill. Longer drilling times mean longer disturbance periods for wildlife, and greater direct and indirect impacts for a suite of resource values. Drilling 12 or more wells from a pad could take from 600 to 1,000 days – or almost three years at the higher end of 92 per bore. That level of impacts has yet to be disclosed and analyzed by BLM.

Issue Number: PP-CO-CRV-14-12-17

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: In sum, the existing RFD written in 2006-08 failed to consider or analyze the potential for an enormous new play developing the Mancos/Niobrara.

Mancos and Niobrara wells are characterized by significantly greater vertical and horizontal distances, significantly longer drilling times; significantly more fracturing jobs per completion, greater use of resources including water and chemicals; overwhelmingly greater production, pressure, and associated engineering challenges; and significantly greater truck traffic and infrastructure requirements. Among the preliminary issues requiring analysis are water quality; multiple fracturing of extensive horizontal bores; associated dangers from transportation, storage, and use of fracturing chemicals; frequency, intensity, and duration of drilling operations; land impacts; infrastructure requirements and build-out; wellpad size, associated land impacts, and reclamation; wildlife impacts; socio-economics; and potential public health impacts associated with impacts to water and air. This leads to the inescapable conclusion that the existing RFD is inadequate to inform the CRVFO RMP/FEIS regarding impacts and risks associated with developing that formation over the life of the plan. Further analysis is required before leasing, exploration, and development of these formations can proceed.

Issue Number: PP-CO-CRV-14-12-2

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The RFD relies on outdated and inadequate information and, thus, fails to provide a sufficient basis for the agency's analysis of resource impacts – including impacts to air quality, climate change, water resources, and other values, as well as impacts from hydraulic fracturing (or “fracking”). Specific issues

relating to the insufficient RFD are referenced throughout this protest. Based on the RFD, BLM estimates that 15,644 fee and Federal wells will be drilled over the next twenty years. See Appendix R at 44. It estimates total net acres disturbed by oil and gas activity would be 19,622. *Id.* at 48.

Issue Number: PP-CO-CRV-14-12-4

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Drilling in the Mancos and Niobrara formations has been increasing for some time. Forty-three federal wells and federally supervised fee wells have been drilled into the Mancos and Niobrara shales within the CRVFO since 2001. While only eight of those were drilled before 2007 when BLM was preparing the RFD, at least thirty-two were drilled before the CRVFO released its Draft EIS for public comment. Neither the RFD nor the FEIS discuss this information. Conservation Groups raised concerns about the BLM's failure to take a hard look at reasonably foreseeable development from these shale formations in our comments on the Draft EIS. See Draft Comments (2012) at 17-18. Nonetheless, BLM made no attempt to revise the RFD or the analysis that relies upon it. As a result, the BLM has neglected to incorporate a wealth of information relevant to development of these formations into its NEPA analysis and Proposed RMP.

Issue Number: PP-CO-CRV-14-12-52

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text:

As discussed in the Conservation Groups' Draft Comments (2012) at 41-43, BLM's air quality analysis fails to adequately account for the extent of recent development in the field office. In particular, the agency ignores APDs approved between its baseline year of 2006 and the decision adopting the revised RMP. BLM specifically acknowledged this seven-year void in an August 2013 settlement agreement with conservation groups in which it committed to track those APDs and count them against its RFD well estimate. Yet the RMP/FEIS fails to account for the fact that BLM is poised to render its air quality analysis outdated in only a few years.

Issue Number: PP-CO-CRV-14-12-6

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Development of the Mancos and Niobrara formations differ significantly with regard to a wide range of operational and engineering issues. These differences translate into distinct impacts and new management challenges. Because of the potential for unique impacts, BLM cannot dispose of this issue by asserting: "any development of Mancos or Niobrara wells would be applied against the assumed well numbers in the RMP." FEIS at V-49. Because they lack specific and accurate information regarding the significant extent of exploration that has already occurred, the current documents also lack any analysis to support the apparent assumption that the impacts are indistinguishable from those associated with exploring, drilling, or producing the Mesaverde and Wasatch. NEPA requires more.

Issue Number: PP-CO-CRV-14-12-8

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The existing RFD and RMP/FEIS essentially omit any references to information after 2008 regarding the Mancos and Niobrara plays. The RFD simply states that: "There is also a small number of Niobrara wells forecasted." FEIS Appendix R at R-37. On-the-ground realities are already proving BLM's assumption wrong. Successful drilling in these formations suggests that development of shale formations may reasonably be expected to dominate drilling activities in the CRVFO in the next two decades. Nonetheless, the existing RMP/FEIS and RFD are bereft of any actual analysis of these potentially massive plays.

Issue Number: PP-CO-CRV-14-12-82

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protestor: Kyle Tisdel/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: As detailed above, there are significant flaws with the CRVFO's RFD which undermine validity of the agency's analysis of resource impacts, and here, impacts due to fracking. The RFD only marginally discusses hydraulic fracturing and limits analysis of fracking to statements of speculation about the potential for future techniques to unlock gas in undeveloped plays. For example, the RFD notes: "high-energy gas fracturing and new methods of well stimulation are currently being used within the GSFO and may play a part in an increased number of wells being drilled." See FEIS Appendix R at 31. However, the RFD does not go on to consider this potential contribution from hydraulic fracturing into its projections of future development.

Issue Number: PP-CO-CRV-14-12-83

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club
Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Furthermore, although the RFD was prepared and released in 2008, it uses data and references authorities that are even older. See FEIS Appendix R at 57-59. Because the RFD fails to properly and consistently cite references, there is often no way to identify the origin of certain data and estimates contained therein. It is clear, however, that the RFD uses data on past and present oil and gas activities that only covers the years leading up to 2006. See Appendix R at 24-30 (e.g., at 30: “As of September 2006, there are approximately 3,500 wells within the GSFO boundary.”). This is problematic because the RFD uses this data to conclude that 99% of drilling will occur in high potential areas, and 1% of drilling will occur in medium to low potential areas, which the RMP/FEIS then cites no fewer than four times in its impacts analysis. See Appendix R at 43-44; FEIS 3-183, 4-393, 575, 605. In short, the RMP/FEIS assumes 99% of future oil and gas development will be located in the same areas where drilling occurred before and during 2006. This does not constitute the “best available information” and fails to satisfy the agency’s obligations under NEPA. See FEIS at 4-15.

Issue Number: PP-CO-CRV-14-12-84
Organization: WELC, Wilderness Workshop, NRDC, Sierra Club
Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The RMP/FEIS fails to consider the full potential of recent hydraulic fracturing techniques and in doing so, vastly underestimates the extent of oil and gas development and its impacts on the environment. For example, BLM estimates that 4,198 wells would be developed under

the Proposed RMP, FEIS at 4-605; fewer than the 5,768 wells projected under the RFD. Appendix R at 47. Neither of these estimates allows for the likely scenario that advances in hydraulic fracturing technology will increase the number of drilled wells. The RMP/FEIS even concedes this point: Information related to potential development of deep tight-gas marine shales of the Niobrara and Mancos formations using horizontal drilling technologies has been mostly treated by the operators as proprietary during the timeframe of the current planning process. To date, use of horizontal drilling in relation to the deep marine shales has been limited and is considered experimental. As a result, the development intensity, timing, and location of development of the deep marine shales was considered too speculative for quantitative impact analysis in connection with this planning process. FEIS at 4-576 (emphasis added). BLM’s rationale for omitting the analysis of potential deep shale fracking is indefensible. Other sources for obtaining the relevant information are available to the BLM, including but not limited to: existing data on drilling geologically similar deep tight-gas marine shales, existing data on drilling parts of the Niobrara and Mancos formations not within the CRVFO boundaries, industry experts on hydraulic fracturing practices, and scientific studies on the development of deep tight-gas marine shales.

Issue Number: PP-CO-CRV-14-12-85
Organization: WELC, Wilderness Workshop, NRDC, Sierra Club
Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: Conservation Groups’ comments stated the RFD underestimates the number of potential wells, and that it is outdated. See Draft Comments at 17-18. Since the RFD is six years old, and

based on older data, it fails to consider the full extent of current and future development. For example, the BLM/FEIS states there is no Niobrara production at this time within the GSFO (citing the GSFO RFD at 16).

Issue Number: PP-CO-CRV-14-12-87

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: While this statement acknowledges that there “may” be increased production due to fracking, there is no quantification of the increase in the number of wells, acres impacted, or infrastructure that will be required to support it, as noted above. Further, there is no discussion of the increased adverse impacts to human health or the environment. Thus, this statement, which implicitly recognizes that the RFD may not account for the full extent of production, provides little in terms of analysis of fracking impacts. Such a void of analysis and consideration of a widely employed technology that not only has the potential, but, in all likelihood, will drastically alter the foreseeable development within the planning area, fails to satisfy the CRVFO’s obligations under NEPA.

Issue Number: PP-CO-CRV-14-12-89

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: The Conservation Groups specifically asked for an update of the RFD to account for this, see Draft Comments at 37-38, but BLM did not do this and consequently has failed to account for reasonable foreseeable development.

Issue Number: PP-CO-CRV-14-12-9

Organization: WELC, Wilderness Workshop, NRDC, Sierra Club

Protector: Kyle Tisdell/Peter Hart/Amy Mall/Eric Huber/Rein van West

Issue Excerpt Text: A great wealth of data on these new formations was available to the agency prior to issuance of a Draft EIS when various parties, including the Conservation Groups, raised this issue in comments. A great deal more has become available since then. By issuing an RMP now, the CRVFO’s analysis turns a blind eye to development of the Mancos and Niobrara. Indeed, wells within the CRVFO targeting those formations prove to be among the most productive in the nation, and the agency’s failure to consider such development does not satisfy NEPA’s hard look mandate. It is incumbent on BLM to analyze this data and apply it to the long-term management decisions in the RMP.

Issue Number: PP-CO-CRV-14-15-4

Organization: Bill Barrett Corporation

Protector: Bret A. Sumner/Theresa M. Sauer (Attorneys)

Issue Excerpt Text: The CRY RMP/FEIS is Based upon an Incomplete and Outdated Reasonable Foreseeable Development Analysis. The CRV RMP/FEIS is premised upon an incomplete and out-of-date Reasonably Foreseeable Development (RFD) scenario. In particular, the CRY RMP/FEIS must be revised and updated to reflect exploration and development of the Mancos and Niobrara Shale Formations. Although the CRY RMP/FEIS recognizes the potential for new geologic horizons to be developed, it does not recognize the potential for full exploration and development activities from existing producing formations, as well as the Mancos and Niobrara Formations, which are now accessible for development due to

advancements in technology and engineering practices.

Summary:

The PRMP/FEIS relies on an inadequate Reasonable Foreseeable Development (RFD) scenario. Specifically, the RFD does not adequately consider:

- Recent development, including the horizontal reach, drilling times, and number of wells drilled, in the Niobrara and Mancos formations.
- Hydraulic fracturing in its projection of future development.

Response:

Recent Niobrara and Mancos Development

BLM relies on an adequate RFD scenario that supports the potential development within the CRVFO. As stated in Washington Office Instruction Memorandum 2004-089: “The RFD projects a baseline scenario of activity...The baseline RFD scenario provides the mechanism to analyze the effects that discretionary management decisions have on oil and gas” (Washington Office Instruction Memorandum 2004-089, Attachment 1, p. 1-1). The fundamental purpose of the RFD is to make a reasonable determination of the overall level of development anticipated (i.e. number of wells) over a specified time horizon, as opposed to predicting the actual number of wells in a given future year, since the overall level of development is the basis for comparing relative impacts across the alternatives. Thus, the RFD is not meant to be continually updated as new development occurs; the RFD is valid as long as the overall level of development assumed is still valid.

At this time it is speculative to assume that the well numbers (and associated surface disturbance) from the RFD, analyzed in the PRMP/FEIS, are no longer valid. One reason is that future development in the Mancos and Niobrara formations could displace development that was predicted to occur in other formations. For example, “to date, operators indicate that these deeper shale plays may reduce the number of future Mesa Verde wells” (Colorado River Valley PRMP/FEIS, p. V-49). The BLM has verified that the overall level of development contemplated in the RFD remains valid: “During the past 3 years (FY10 – FY12), the CRVFO processed an average of 266 APDs per year from 2010 through 2012, similar in scale to the level presented in the RFD and used in the impact analysis of the Proposed RMP/Final EIS” (Colorado River Valley PRMP/FEIS, p. 4-576).

BLM guidance states that RFDs should be “based on a reasonable, technical, and scientific estimate of anticipated oil and gas activity based on the best available information and data at the time of the study” (Washington Office Instruction Memorandum 2004-089). The BLM relied on the best available information at the time the CRV RFD was prepared. In particular, the BLM analyzed and accepted information from fourteen oil and gas operators within the CRV which was provided when creating industry development scenarios. According to information provided by these operators, “virtually all of the wells will be targeting natural gas, including coal bed gas, within the Mesa Verde Group. Two exceptions are the Niobrara play discussed previously and the Wasatch Formation” (Colorado River Valley PRMP/FEIS, RFD, p. 42).

The RFD identifies “the Mancos Shale and the Niobrara [as] formations that hold promise for future oil and gas discoveries” (Colorado River Valley PRMP/FEIS, p. 35). However, the BLM was limited in predicting reasonable foreseeable development for these formations as “data related to potential horizontal gas plays within the Niobrara and Mancos formations have been mostly proprietary within the oil and gas community. In addition, the potential development in relation to horizontal gas plays is still in the exploratory stage” (Colorado River Valley PRMP/FEIS, p. V-49).

Even if Mancos and Niobrara development outpaces the level anticipated in the RFD, “any development of Mancos or Niobrara wells would be applied against the assumed well numbers in the RMP...If and when total well numbers approach those analyzed in the RMP, the CRVFO would evaluate the need for supplemental analysis” (Colorado River Valley PRMP/FEIS, p. V-49).

The RFD documents current drilling times and the reach of horizontal wells in order to assess the drilling capacity present in the field office at the time the RFD was developed. As mentioned by the protester, the specific aspects of development in the Niobrara and Mancos formations are not the same as in the Wasatch and Mesaverde formations. Both drilling times and horizontal reach may change as different formations are developed and technologies change. However, this does not mean that the overall level contemplated in the RFD is no longer valid. For example, if drilling times increase, oil and gas operators could bring more drill rigs to the area to maintain capacity.

Consideration of Hydraulic Fracturing

“The RFD is based on a review of geological factors that control the potential for oil and gas resource occurrence and *past and present technological factors* that control the type and level of oil and gas activity” (Washington Office Instruction Memorandum 2004-089, Attachment 1, p. 1-3) (emphasis added). The RFD considered current hydraulic fracturing techniques as a present technological factor. For example, with regard to the Mesaverde Continuous Gas Assessment Unit (AU), the RFD states: “Many attempts to produce this vast basin-centered resource were unsuccessful until modern hydraulic-fracturing technology made it possible to produce wells at economic rates...Areas within the Mesaverde Continuous Gas AU that contain gas resources but have little natural fracturing may not be economic to produce even with current hydraulic fracturing techniques” (Colorado River Valley PRMP/FEIS, RFD, p. 11).

The RFD briefly discusses how new technologies for “high-energy fracturing” and other “new methods of well stimulation” may play a part in an increased number of wells being drilled in the planning area. The RFD also acknowledges that hydraulic fracturing and other technologies will make it more practical to explore in moderate- to high-risk wildcat areas (Colorado River Valley PRMP/FEIS, RFD, pp. 24-25). Information regarding the potential of these new technologies is to limited at this time to reasonably predict their impacts on the future level of oil and gas development in the planning area.

Thus, the RFD properly places a greater emphasis on present technological factors, rather than speculating on possible future technological factors, when determining the level of reasonable

foreseeable development. If future technological factors enable a substantially higher level of development than what is anticipated in the RFD, the BLM would assess the need for supplemental analysis.

Planning Policy

Issue Number: PP-CO-CRV-14-11-29

Organization: COHVCO, Trails Preservation Alliance

Protestor: Scott Jones/Don Riggle/Randall Miller

Issue Excerpt Text: The Organizations membership has been involved in meetings with CRVO planning personnel since the release of initial notice documentation relative to the DRMP. While our members are actively involved, none can any public meetings regarding economic contribution analysis. A review of the RMP, EIS and CRVO website yields no additional information regarding such a workshop. Economic Strategies Workshops are required under BLM planning standards as follows: "B. Economic Strategies Workshop The public involvement effort on all new RMPs, RMP revisions, and RMP amendments accompanied by EISs must include at least one economic strategies workshop. Such workshops provide an opportunity for local government officials, community leaders, and other citizens to discuss regional economic conditions,

trends, and strategies with BLM managers and staff."

Summary:

The BLM did not conduct an economic strategies workshop, in violation of its planning policy.

Response:

The BLM Colorado engaged sufficiently with interested stakeholders when conducting economic analysis for the CRV RMP.

BLM Planning policy requires that "public involvement effort on all new RMPs, RMP revisions, and RMP amendments accompanied by EISs must include at least one economic strategies workshop" in order to "provide an opportunity for local government officials, community leaders, and other citizens to discuss regional economic conditions, trends, and strategies with BLM managers and staff" (BLM H-1601-1 *BLM Land Use Planning Handbook*, Appendix D, pp. 10-11).

As described in Chapter 5 of the PRMP/FEIS, the CRVFO held seven scoping meetings (PRMP/FEIS, p. 5-2) to—among other objectives—solicit comments from the public. Additionally, the CRVFO held 21 cooperating agency meetings to focus on—among other subjects—social and economic analysis (PRMP/FEIS, p. 5-5). The CRVFO met the objectives of the Economic Strategies Workshop with all of the meetings held, in addition to:

- Providing skills on analyzing local and regional economic, social conditions and trends.
- Assisting community members to identify desired economic and social conditions.

- Collaborating with the BLM staff to identify opportunities to advance local economic and social goals through planning and policy decisions within the authority of the BLM, its cooperating agencies, or other partners.

Lands with Wilderness Characteristics Policy

Issue Number: PP-CO-CRV-14-14-10

Organization: Wilderness Workshop, The Wilderness Society, Sierra Club, Conservation Colorado, Rocky Mountain Wild

Issue Excerpt Text: Additionally, as we stated in our January 2014 letter regarding the Colorado River Valley Field Office's updated lands with wilderness characteristics inventory, the eastern boundary for this unit [Thompson Creek area] may not qualify as a wilderness inventory road. The road is unmaintained and is used predominately by ranchers on horseback. The rancher who grazes his cattle on that allotment believes the road has not been maintained since it was initially constructed in the 1940s.

Issue Number: PP-CO-CRV-14-14-2

Organization: Wilderness Workshop, The Wilderness Society, Sierra Club, Conservation Colorado, Rocky Mountain Wild

Issue Excerpt Text: We also noted that boundaries for many of the inventory units, including those found to possess wilderness characteristics and considered for protection in the RMP, do not appear to comply with Manual 6310 for delineating boundaries and/or are based on routes that do not meet the definition of a wilderness inventory road. For example, the Castle Peak Addition unit's eastern boundary follows no discernible on-the-ground features or other qualifying boundary delineation feature.

Issue Number: PP-CO-CRV-14-14-4

Organization: Wilderness Workshop, The Wilderness Society, Sierra Club, Conservation Colorado, Rocky Mountain Wild

Issue Excerpt Text: The presence of undeveloped leases, especially on such a small scale, should not affect BLM's decision to manage the area [Grant Hogback] to protect its wilderness characteristics. BLM Manual 6310 specifically states that " undeveloped ROWs and similar undeveloped possessory interests (e.g., mineral leases) are not treated as impacts to wilderness characteristics because these rights may never be developed" (BLM Manual 6310 at §.06(C)(3)(d) (emphasis added)).

Issue Number: PP-CO-CRV-14-14-8

Organization: Wilderness Workshop, The Wilderness Society, Sierra Club, Conservation Colorado, Rocky Mountain Wild

Issue Excerpt Text: Additionally, as we stated in our January 2014 letter regarding the Colorado River Valley Field Office's updated lands with wilderness characteristics inventory, the southeastern and northwest boundaries for the Grand Hogback unit appear to follow no existing on-the-ground features or other qualifying impacts for boundary delineation as defined by Manual 6310.

Summary:

The BLM failed to comply with Manual 6310 for delineating boundaries of areas containing wilderness characteristics by:

- Inaccurately applying wilderness inventory road definition.
- Inaccurately applying other boundary delineations.
- Precluding management of areas with existing unexercised leases/ROWs.

Response:

The BLM Colorado accurately interpreted lands with wilderness characteristics policy. Wilderness characteristics inventory may be based on “available information (e.g., existing maps, photos, records related to range projects, monitoring data)” (BLM Manual 6310.05.B). The policy further states that its “inventory process directive does not mean that the BLM must conduct a completely new inventory and disregard the inventory information that it already has for a particular area. Rather, the BLM must ensure that its inventory is maintained” (BLM Manual 6310.05.B). The Colorado River Valley RMP properly analyzed this inventory as part of the land use planning process, and identified decisions that would protect or preserve the wilderness characteristics within the area (BLM Land Use Planning Handbook H-1601-1, Appendix C, p. 12).

With respect to the Grand Hogback unit, the BLM protest point is correct in its assertion that the BLM should not consider undeveloped ROWs or mineral leases as impacts to wilderness characteristics. In its analysis, the BLM determined that the “Grand Hogback contains wilderness characteristics on the entire 11,360 acres” (PRMP/FEIS, Appendix D, *Lands with Wilderness Characteristics Assessment for the Colorado River Valley Field Office*, p. 34). Further, this unit was considered for management of wilderness characteristics in alternative C of the PRMP/FEIS (PRMP/FEIS, pp. 2-4). When making determinations whether or not to manage lands possessing wilderness character for that character, the BLM is given discretion to consider both the effective manageability of the unit and other resources/resource-values that may be present (BLM Manual 6320.06.A.1.a).

In all cases, the determination to emphasize other multiple uses as a priority over protecting some areas that possess wilderness characteristics does not preclude the BLM from analyzing impacts to wilderness characteristics in subsequent implementation-level analysis, as required by NEPA.

Wild and Scenic Rivers Policy

Issue Number: PP-CO-CRV-14-14-14
Organization: Wilderness Workshop, The
Wilderness Society, Sierra Club,

Conservation Colorado, Rocky Mountain
Wild

Issue Excerpt Text: In finding that Thompson Creek is not suitable for protection as a Wild and Scenic River, the agency largely relies on an assumption that any federal reserve water right would be junior to conditional upstream water rights and "is unlikely to be able to guarantee sufficient flows to support the ORV." (BLM Kremmling and Colorado River Valley Field Offices Final Wild and Scenic River Suitability Report, p. 3-175). This

completely overlooks the possibility that conditional upstream water rights are abandoned or reduced in size, as so many other conditional water rights in the area have been in recent years. In the event that those conditional water rights are abandoned or reduced, a federal reserve water right would add a level of protection for flow-related ORVs that the ACEC does not provide. .

Summary:

The CRVFO overlooked the possibility that conditional upstream water rights could be abandoned or reduced and therefore erroneously removed Thompson Creek from consideration as being suitable for protection as a Wild and Scenic River.

Response:

The BLM Colorado correctly interpreted the Wild and Scenic River policy, with respect to consideration of existing water rights. The *Final Wild and Scenic Rivers Suitability Report* acknowledges that existing absolute and conditional water rights are currently not exercised but could be at any time, concluding that "Congressional designation of this stream segment . . . would not necessarily insure adequate flows because the federal water right would be junior to existing conditional water rights" (PRMP/FEIS, Appendix C, page 3-172). The CRVFO did not overlook the possibility that upstream water rights could be abandoned but made its suitability determination based on existing water rights scenarios, a decision not precluded by BLM policy.

Wilderness Study Areas Policy

Issue Number: PP-CO-CRV-14-14-12
Organization: Wilderness Workshop, The Wilderness Society, Sierra Club, Conservation Colorado, Rocky Mountain Wild

Issue Excerpt Text:

The Colorado River Valley Proposed RMP does not recommend withdrawal from appropriation under the mining laws for Wilderness Study Areas (WSA), as was proposed in the Draft RMP. The Proposed RMP explains that: "WSAs were included in the list of areas to be petitioned for

withdrawal from locatable exploration or development in the Draft EIS but were removed from the Final EIS because of guidance found in BLM Manual 6330 - Management of BLM Wilderness Study Areas, which addresses lands and realty actions within WSAs" (Proposed RMP, p. 1-31). Manual 6330 was released in July 2012, after the Colorado River Valley Draft RMP was released, and supersedes BLM Handbook H-8SS0-1, Interim Management Policy for Lands under Wilderness Review. The Proposed RMP cites Manual 6330, which states: Unless a WSA or portion of a

WSA was "previously withdrawn from appropriation under the mining laws, such lands shall continue to be subject to such appropriation during the period of review unless withdrawn by the Secretary under the procedures of section 204 of... [FLPMA] ...for reasons other than preservation of their wilderness character." Existing withdrawals may be renewed if the withdrawal is still serving its purpose. No new withdrawals may be made except withdrawals that can satisfy the non-impairment criteria. BLM Manual 6330 at §1.6(D)(4)(e). citing FLPMA. The Colorado River Valley Field Office misinterprets this policy, and FLPMA, to determine that BLM does not have authority to recommend WSAs for withdrawal. In fact, as stated in Manual 6330, "preserving wilderness character" is different than "non-impairment."

"Preserving wilderness character" applies to designated Wilderness Areas, while "non-impairment" applies to WSAs. Manual 6330 clarifies this difference: Designated wilderness is managed pursuant to the Wilderness Act, which states that these areas shall be administered to "preserve wilderness character." For WSAs, FLPMA mandates that the BLM "not impair the suitability" of areas we have identified as "having wilderness characteristics." There is a difference between these two mandates. As a result of this difference, the varying legal mandates of FLPMA and the Wilderness Act, and the history of the BLM's management of WSAs, this manual differs in both content and form from BLM Manual 6340, Management of Designated Wilderness Areas. BLM Manual 6330 at §1.6(A)(3).

Summary:

By removing WSAs from the potential to be petitioned for withdrawal from locatable exploration or development, the CRVFO misinterprets BLM Manual 6330 as well as FLPMA mandates to "not impair the suitability" of areas identified as having wilderness characteristics.

Response:

The BLM correctly removed a WSA from consideration for withdrawal from mineral entry. As stated in the PRMP/FEIS, BLM Colorado removed from the proposed plan the recommendation to petition for withdrawal from mineral entry the Wilderness Study Areas. This removal was based on guidance in BLM Manual 6330, which prohibits the withdrawal of WSAs unless the area "could satisfy the non-impairment criteria" (Manual 6630, p. 1-21). The guidance outlined in Manual 6330 and the direction provided by the PRMP/FEIS is consistent with the governing statute, which states:

The Secretary shall continue to manage [Wilderness Study Areas] according to his authority under this Act and other applicable law in a manner so as not to impair the suitability of such areas for preservation as wilderness, subject, however, to the continuation of existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on October 21, 1976: Provided, That, in managing the public lands the Secretary shall by regulation or otherwise take any action required to prevent unnecessary or undue degradation of the lands and their resources or to afford environmental protection. (43 U.S.C. 1782, Section 603(c)).